PHASE II ENVIRONMENTAL SITE ASSESSMENT



FOR: 2020 RIVER ROAD WHEATFIELD, NEW YORK



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PHASE II ENVIRONMENTAL SITE ASSESSMENT

2020 RIVER ROAD

TOWN OF WHEATFIELD, NEW YORK

PROGRAM: EPA HAZARDOUS ASSESSMENT

BROWNFIELD COOPERATIVE AGREEMENT

GRANT NUMBER: BF96265617-1

PREPARED FOR:

NIAGARA COUNTY DEPARTMENT OF ECONOMIC DEVELOPMENT
6311 INDUCON CORPORATE DRIVE
SANBORN, NEW YORK 14132-9099

PREPARED BY:

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PROJECT No.905.001

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EXECUTIVE SUMMARY

Leader Consulting Services, Inc. ("Leader") was retained by the Niagara County Department of Economic Development ("NCDED") to conduct a Phase II Environmental Site Assessment ("ESA") at the property located at 2020 River Road, Town of Wheatfield, Niagara County, New York, which is hereinafter referred to as "the Site". This study involved: 1) radiological testing; 2) near surface soil sampling and testing; 3) subsurface soil sampling and testing; and 4) eighteen (18) test pit excavations throughout the Site. The 4.59 acre Site is currently undeveloped land and the future intended use of the Site is for a Passive Recreational Park. The ESA was conducted under the EPA Hazardous Brownfield Cooperative Agreement program, Grant Number BF96265617-1.

Prior to the current Leader study, a Phase II ESA was performed at the Site in July 2013 by LaBella Associates. The purpose of that study was to evaluate the potential presence of buried drums by a geophysical survey, complete a Site survey to mark property boundaries, conduct surface soil screening and analysis to characterize the chemistry of materials exposed at the surface of the Site, and to characterize the nature and extent of fill materials on the Site. No buried drums were encountered and radiological levels were at background concentrations. Metals concentrations were detected in surface soil and subsurface soil above applicable soil cleanup levels.

Leader developed its test pitting and soil sampling program based on review of the LaBella study. Each test pit was advanced to a depth of approximately eight (8) feet below the ground surface utilizing an excavator. Leader collected 2 soil samples from each test pit, one near the surface and one from the subsurface based on visual observations of discoloration or staining. The following conclusions were developed from the results of this study:

- Fill material was observed in all of the test pit locations ranging in depth from zero to eight feet below the ground surface. The fill materials included but were not limited to glass, brick, slag, ash, foundry sands, grinding stones, red clay tiles, mulch, concrete and asphalt pieces, and miscellaneous debris. Silty clay was encountered around 8 feet below ground surface ("bgs").
- The results of the current study were generally consistent with the 2013 LaBella Study. Metals concentrations above Soil Cleanup Objectives ("SCOs") were present in surface and subsurface soils at certain locations; however, the majority of the soils sampled at the Site contained metals below applicable SCOs.
- Radiological levels were detected near or at background levels during the previous and current study.
- Although some minor contraventions of the Restricted-Residential and Commercial SCOs were identified, Organics (i.e., volatile organic compounds ("VOCs") and semi-volatile organic compounds ("SVOC"s)) do not appear to be a significant concern at the Site.
- Drums or Under Ground Storage Tanks ("USTs") were not encountered during the previous or current study.

- The presence of metals at concentrations above the Restricted-Residential Use SCOs indicates that development of the Site for a public park may require some level of remediation.
- The presence of Arsenic at TP-13, Lead at TP-15 and Arsenic at TP-17 above Restricted-Commercial use SCOs indicates that these areas may require future assessment and cleanup.

Based on the presence of soil/fill at the Site and some areas of elevated metals concentration in the soils, institutional controls should be developed for the Site including a Site Management Plan ("SMP"). The Institutional Controls may include Deed restrictions limiting excavation and groundwater use. Additionally, potential measures to mitigate exposure to impacted soil would include the remedial alternatives summarized below:

Area	Remedial Alternative	Description	Estimated Time to Completion	"Ball Park" Cost Estimates
Overall Site	SMP and institutional controls	Development of SMP and Legal Institutional Control filings.	8 weeks	\$10,000 to 20,000
Surface Soil/Fill	Delineation and removal of surface soils	Additional Sampling and excavation and removal of near surface soils with metals concentrations above SCOs.	8 weeks	\$20,000 to 50,000
	Clean cover select areas	Grade Site and cover specific areas with clean topsoil.	4 weeks	\$10,000 to 20,000
	Pathways/Restricted Areas	Create elevated pathways above metals contaminated soil areas.	4 weeks	\$10,000 to 30,000
	Clean cover all areas	Grade Site and cover with 6" of clay and 2" of Topsoil.	10 weeks	\$50,000 to 75,000
Subsurface Soil/Fill	Delineation of lead impacted soil and groundwater near TP15	Soil and groundwater study in area of TP15.	4 weeks	\$10,000 to 20,000
Subsurface Soil/Fill	Soil Excavation and Disposal	Excavation and removal of impacted soil near TP15	4 weeks	\$25,000 to 50,000

1. INTRODUCTION AND BACKGROUND

1.1 INTRODUCTION

Leader was retained by the NCDED to conduct a Phase II ESA at the property located at 2020 River Road, Town of Wheatfield, Niagara County, New York, which is hereinafter referred to as "the Site". Figure 1 shows the location of the Site while Figure 2 identifies the boundaries of the Site in addition to Test Pit Locations. The 4.59 acre Site is undeveloped land and is adjacent to the Niagara River. The future intended use of the Site is for a Passive Recreational Park.

1.2 BACKGROUND

Empire Geo-Services, Inc. ("Empire") conducted a Modified Phase I/II ESA at the Site in 2004. The results of this ESA indicated that heavy metals, VOCs and "SVOC"s were present in the soil at concentrations that exceeded the New York State SCOs. The ESA also indicated that lead was present in the Site's groundwater at a concentration that exceeded the New York State Department of Environmental Conservation ("NYSDEC") Drinking Water Maximum Contaminant Level ("MCL") criteria according to the Technical and Operation Guidance Standards ("TOGS") 1.1.1.

A Phase I ESA was completed at the Site in October 2006 by CRA. The CRA Phase I ESA report stated that there were no RECs, with the exception of historical Site use and impacts from surrounding properties. A Phase II ESA was performed at the Site in December 2006 by CRA. The purpose of the Phase II ESA was to investigate the RECs identified in the October 2006 Phase I ESA. Eight (8) borings were completed from 15 to 20 feet bgs. The borings were located throughout the Site in areas that may have had off-Site fill utilized and/or areas where contamination may have impacted the Site as identified by CRA's Phase I ESA. Temporary monitoring wells were installed in four of the eight soil borings. The Phase II ESA subsurface investigation revealed that elevated levels of contaminant concentrations in the soil and groundwater. VOCs, SVOCs, metals and polychlorinated biphenyls ("PCBs") were detected above the NYSDEC 6NYCRR Subpart 357-6 criteria at the boring locations. Groundwater samples also exceeded the NYSDEC TOGS 1.1.1 water quality standards for VOCs, SVOCs and metals.

A Phase II ESA was performed at the Site in July 2013 by LaBella. The purpose of the Phase II was to evaluate the potential presence of buried drums by a geophysical survey, complete a Site survey to mark property boundaries, conduct surface soil screening and analysis to characterize the chemistry of materials exposed at the surface of the Site, and to characterize the nature and extent of fill materials on the Site. According to the LaBella Phase II ESA report, drums were not encountered. However, during the geophysical survey, a large metallic object was observed six feet bgs which had the appearance of a 275-gallon storage tank. LaBella stated that more investigation is needed to determine the presence of a potential storage tank.

Based on the results of these prior studies, the NCDED developed a Request For Quotation ("RFQ") and subsequently retained Leader to complete a Phase II ESA at the Site.

1.3 PHASE II OBJECTIVES

This Phase II ESA was designed to compare previous and current concentration levels to applicable commercial SCOs, further assess areas where contaminated soils were encountered and to assess the future use of the Site as a passive recreational park.

Leader generated this Phase II ESA Report which includes an assessment of methods and findings, and comparison of laboratory analytical results to appropriate NYSDEC standards. Based on the results of the assessment, this report includes:

- 1) Contamination (i.e., analyte concentrations above NYSDEC standards) of the soil at the Site and whether these contaminants may have resulted from off-Site sources.
- 2) Recommendations concerning future studies that may be necessary at the Site, and a general cost estimate of those activities; and
- 3) "Ballpark" cost estimates for remedial options and step by step directions for preparing the Site for Passive Park development.

2. FIELD INVESTIGATION SUMMARY

This Phase II ESA was completed in general accordance with the American Society for Testing and Material ("ASTM") *Standard E1903-11*, *Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process* and the objectives and recommendations identified within the RFQ. The following sections summarize the field activities conducted on June 30 and July 1, 2020.

2.1 RADIOLOGICAL SURVEY

Leader conducted radiological screening of test pit samples along with a gamma walkover survey of accessible areas of the Site utilizing a Ludlum 2241-2 RK Digital Rate-meter/Scaler. Additionally, each soil sample collected from the test pits was screened.

2.2 TEST PIT EXCAVATION PROGRAM

Soil Sampling

Leader developed the soil sampling program based on review of the previous Phase II ESAs. Leader retained Nature's Way contracting to complete eighteen (18) test pits within the Site in the areas where the LaBella study detected metal concentrations above SCOs. Each test pit was advanced to a depth of approximately eight (8) feet below the ground surface utilizing an excavator. Leader collected 2 soil samples from each test pit, one near the surface and one from the subsurface based on visual observations of discoloration or staining.

The LaBella 2013 Phase II ESA indicated that barium and arsenic exceeded the Commercial SCOs at surface soil SS-1 and SS-6 (see Figure 3). Additional samples with elevated metals concentrations were detected in SS-18, TP-12, TP-1 and TP-24. The focus of the analytical testing program was to assess these areas for the potential presence of RCRA Metals USEPA method (6010/6020/7471). Additionally, one sample from six (6) of the test pits was tested for TCL VOCs & STARS method 8260 and TCL SVOCs method 8270. Because the previous Phase II ESA addressed the perimeter of the Site, the eighteen (18) test pits were generally located in the interior portions of the Site near the areas identified above (see Figure 2).

The USEPA-approved QAPP required comprehensive Quality Assurance/Quality Control ("QA/QC") measures that comply with 2 CFR 1500.11 requirements. Therefore, in addition to analysis of the field samples, the appropriate QA/QC samples associated with the investigation were analyzed as outlined below.

Soil Sample Analysis

36 soil samples for RCRA Metals 6 Soil samples for TCL VOCs & STARS and TCL SVOCs

QA/QC Sample Analysis

- 2 field duplicate soil sample for RCRA Metals
- 2 split soil sample for RCRA Metals
- 2 matrix spike/matrix spike duplicate soil sample for RCRA Metals
- 1 field duplicate for TCL VOCs & STARS
- 1 field duplicate for TCL SVOCs

Soil samples were analyzed by Paradigm Environmental Services, Inc., a NYSDOH-certified laboratory, under appropriate chain-of-custody protocols. The two (2) split samples for RCRA metals were analyzed at Alpha Analytical Laboratories, a NYSDOH – Certified laboratory, under appropriate chain-of-custody protocols. Table 1(see Appendix C) includes a summary of the soil sampling program.

2.3 POTENTIAL UST EVALUATION

The Labella Phase II ESA addressed the potential presence of buried drums by a geophysical survey. According to the LaBella Phase II ESA report, drums were not encountered. However, during the geophysical survey, a large metallic object (near Leader TP-15) was observed six feet bgs which had the appearance of a 275-gallon storage tank. LaBella stated that more investigation was needed to determine the presence of a potential storage tank. Leader identified the approximate location of the buried object using the geological survey map and completed a Large (30'by30') excavation in the area near TP-15. A large 3'by6' object containing wood and metal was excavated. No USTs were encountered.

2.4 SITE SURVEY

Leader completed a test pit location survey. The latitude and longitude locations are included on Table 2 and Figure 2.

3. RESULTS

Leader submitted 18 near surface soil/fill samples and 18 test pit subsurface soil/fill samples for laboratory analysis to evaluate the surface and subsurface conditions in the areas previously identified. The soil results were compared to the NYSDEC Part 375-6.8 Unrestricted Use, Restricted-Residential Use, Restricted-Commercial Use, Protection of Groundwater, and Protection of Ecological Resources SCOs. The locations where soil concentrations, from the LaBella Phase II ESA and the current study exceeded SCOs, are shown on Figure 3.

The NYSDEC requires varying levels of soil cleanup objectives depending on the intended use. For active recreation, Restricted-Residential SCOs apply. For passive recreation parks, Restricted-Commercial SCOs are used.

Active recreational uses are public uses with a reasonable potential for soil contact, such as:

- Designated picnic areas;
- Playgrounds; and
- Natural grass sports playing fields, including surrounding unpaved spectator areas.

Passive recreational uses involve limited potential for soil contact, such as:

- Artificial surface fields:
- Outdoor tennis or basketball courts;
- Other paved recreational facilities used for roller hockey, roller skating, shuffle board, etc.;
- Outdoor pools;
- Indoor sports or recreational facilities;
- Golf courses; and
- Paved (raised) bike or walking paths.

The design, future use, and management of the proposed park at the Site has not been finalized, so the results for the soil sampling program have been compared to both Restricted-Residential Use SCOs (i.e., for active recreation) and Restricted-Commercial Use SCOs (i.e., for passive recreation parks) in the evaluation of the detected analytes.

3.1 SITE GEOLOGY AND HYDROGEOLOGY

The test pits were advanced eight (8) feet bgs and typically encountered what appeared to be grey native silty clay around the six to eight foot depth. Fill material was observed in all of the test pit locations ranging in depth from zero to eight feet below the ground surface. The fill materials included but were not limited to glass, brick, slag, ash, foundry sands, grinding stones, drums of various sizes, red clay tiles, mulch, concrete, asphalt pieces, and miscellaneous debris.

The majority of the Site consists of miscellaneous fill from ground surface to a depth of 6 to 8 feet. There was a darker layer of fill material (e.g., cinders) at a depth ranging from 4 feet to 6 feet. The fill consisted of brown sand, silt, and clay with varying amounts of the construction and demolition materials listed above. The underlying native soils at the Site consisted primarily of silt and clay with some sand and gravel identified in a few test pits.

The following observations were made during excavation of the 18 test pits:

- No elevated PID measurements were encountered in the majority of the test pit locations. There was a slight PID detection above background levels in TP15;
- Dark staining was observed in several of the test pits indicating cinder or petroleum staining;
- A large metallic object was observed at approximately six feet below the ground surface in TP15. This object was excavated and consisted of wood and metal; and
- Groundwater seepage was observed and accumulated in TP2, TP4, TP13, TP14, and TP16.

3.2 SURFACE SOIL/FILL

The eighteen (18) near surface soil sample locations and eighteen (18) subsurface soil samples were screened for gamma radiation. The depth of the samples were between 0 and 2 feet bgs. These samples were not analyzed for VOC or SVOCs, because there were no visual or other indications of contamination.

The gamma radiation screening results for the surface soil sample locations are shown in Table 2. The samples analyzed did not demonstrate radiation levels above the background level of 1 C/m established for the surface soils at the Site. The results showed the gamma radiation levels at 1 C/m or not detected.

The analytical surface soil results for the eighteen (18) samples are summarized in Tables 3A and 3B for metal content and are summarized below.

Arsenic concentrations were detected below the Restricted-Residential (16ppm) and Commercial SCOs (16 ppm).

Barium concentrations were detected below the Restricted-Residential and Commercial Use SCOs (400 ppm).

Cadmium concentrations were detected below the Restricted-Residential (4.3ppm) and Commercial SCOs (9.3 ppm).

Chromium concentrations were detected below the Restricted-Residential (180ppm) and Commercial SCOs (1,500 ppm).

Lead concentrations were detected below the Restricted-Residential (400ppm) and Commercial SCOs (1,000 ppm).

Mercury was detected in one (1) sample (TP2) at a concentration slightly above the Restricted-Residential Use SCO (0.81 ppm) but below the Restricted-Commercial Use SCO (2.8 ppm).

Selenium concentrations were detected below the Restricted-Residential (180 ppm) and Commercial SCOs (1,500 ppm).

Silver concentrations were detected below the Restricted-Residential (180ppm) and Commercial SCOs (1,500 ppm).

3.3 SUBSURFACE SOIL/FILL

A total of 18 test pits were excavated and the excavated material was screened for gamma radiation. A total of 18 samples were also analyzed in the laboratory for metals and 6 samples were analyzed for VOCs and SVOCs. The depth of the samples were between 4 and 6 feet. The following sections describe the results.

The gamma radiation screening results for the subsurface soil sample locations are shown in Table 2B. The samples analyzed did not demonstrate radiation levels above the background level of 1 C/m established for the soils at the Site. The results showed the gamma radiation levels at 1 C/m or not detected.

The analytical results for subsurface soil samples, presented in Table 3A, 3B, and 4, are summarized below.

- Only one (1) VOC (Acetone) was detected and no VOC concentration exceeded the applicable SCOs.
- Only one (1) SVOC (Indeno (1,2,3-cd) pyrene) was detected in two (2) samples (TP15 and TP18) at a concentration above the Restricted-Residential SCOs (500 ppb). The detected concentration for this SVOC was below the Restricted-Commercial Use SCO (5,600 ppb).
- Metals results are summarized below.

Arsenic was detected in two (2) samples (TP13 and TP17) at a concentration above the Restricted-Residential and Commercial SCOs of 16 ppm.

Barium concentrations were found below the Restricted-Residential (400 ppm) and Commercial Use SCOs (400 ppm).

Cadmium was detected in two (2) samples (TP13 and TP17) above the Restricted-Residential SCO (4.3 ppm) but all concentrations were well below the Restricted-Commercial Use SCO (9.3 ppm).

Chromium concentrations were found below the Restricted-Residential (180 ppm) and Commercial SCOs (1,500 ppm).

Lead was detected in two (2) samples (TP15 and TP17) at concentrations above the Restricted-Residential SCO (400 ppm) and one (1) sample (TP17) was significantly above the Restricted-Commercial Use SCO (1,000 ppm).

Mercury was detected in three (3) samples (TP2, TP17 and TP18) at concentrations slightly above the Restricted-Residential Use SCO (0.81 ppm) but below the Restricted-Commercial Use SCO (2.8 ppm).

Selenium concentrations were found below the Restricted-Residential (180 ppm) and Commercial SCOs (1,500 ppm).

Silver concentrations were found below the Restricted-Residential (180 ppm) and Commercial SCOs (1,500 ppm).

4. DISCUSSION OF FINDINGS

Based on the results of the Phase II ESA, the following conclusions have been developed:

- The test pits were advanced eight (8) feet below the ground surface ("bgs") and typically encountered what appeared to be grey native silty clay around the six to eight foot depth.
- Fill material was observed in all of the test pit locations ranging in depth from zero to eight feet below the ground surface. The fill materials included but were not limited to glass, brick, slag, ash, foundry sands, grinding stones, red clay tiles, mulch, concrete and asphalt pieces, and miscellaneous debris.
- Gamma radiation levels at the Site appear to be at background levels.
- Groundwater seepage was observed in TP2, TP4, TP13, TP14 and TP16.
- The results of the current study are generally consistent with the 2013 LaBella Study. Metals concentrations above SCOs are present in surface and subsurface soils at certain locations; however, the majority of the soils sampled at the Site contained metals below applicable SCOs.
- A dark layer of fill material, indicating cinder or petroleum staining, was encountered in the majority of the test pits at the 4 to 6 foot interval.
- Although petroleum odors and staining were observed in a few test pits, the analytical results indicate that petroleum-related compounds do not constitute a significant concern at the Site.
- Although some minor contraventions of the Restricted-Residential and Commercial SCOs were identified, Organics (i.e., VOCs. and SVOCs) do not appear to be a significant concern at the Site.
- Metals in near surface soils (i.e., 0-2 feet bgs) do not appear to be significant concern in the samples collected during the current study. Metals were detected in some surface soil samples during the LaBella 2013 study (see Figure 3) in the central portion of the Site.
- Subsurface soils in specific test pits (i.e., TP13, TP15, and TP18) contain metals that exceed SCOs and may require remediation.
- Drums were not encountered during the current study.
- A large metallic and wood object was observed and removed at approximately six feet below the ground surface in TP15. This may have been the object identified as a

potential UST during the LaBella 2013 study. No USTs were encountered during the current study.

• The presence of metals at concentrations above the Restricted-Residential Use SCOs indicates that development of the Site for a public park may require some level of remediation. Under the proposed future use scenarios, absent a soil cover, users of the public park could be exposed to contaminants in the surface soil through the inhalation of airborne particles and the incidental ingestion of, or dermal contact, with the contaminated fill. Additionally, excavation for utilities or foundations could result in exposure during construction.

5. RECOMMENDATIONS

Based on the findings of this Phase II ESA, as well as previous studies at the Site, it appears that a majority of the Site consists of non-native fill material ranging in depth from ground surface to eight feet below ground surface. The analytical testing data related to this fill material indicate that one or more of the remedial alternatives summarized below may be required by the regulatory agencies prior to the development of a public park at the Site.

Overall Site

NYSDEC requires various soil cleanup objectives depending on the type of park. For active recreation, Restricted-Residential SCOs apply, while for passive recreation, Commercial SCOs are typically used. Based on the presence of soil/fill at the Site, institutional controls should be developed for the Site including a SMP. This SMP would include: 1) a Soil/Fill Management Plan for the safe excavation and disposal of specific areas of soil/fill at the Site; 2) a prohibition on groundwater usage; and 3) a description of accepted uses of the Site. Institutional controls should be filed to ensure that the property is not used for residential purposes and that development activities undertaken at the Site are protective of human health and the environment. The estimated costs associated with this action are \$10,000 to \$20,000 and include attorney and environmental consultant fees.

Surface Soil/Fill

Due to the presence of metals in a few LaBella 2013 surface soil samples at concentrations above Unrestricted and Restricted-Residential SCOs, the NYSDEC may require additional sampling and the implementation of some mitigation measures to reduce or eliminate the potential for exposure to the surface soil/fill. The first step in the process would be to meet with the NYSDEC to assess whether remedial actions are necessary, and if so, create a plan to identify and evaluate the most cost-effective approach to reduce or eliminate the potential for exposure. Potential mitigation measures would include the following:

- 1) Delineation and removal of surface soil areas with elevated concentrations of metals (see Figure 3);
- 2) Placement of clean cover material over select areas of the Site:
- 3) Creation of covered paths such as boardwalks that limit contact with certain areas and eliminate direct contact with soil/fill; or
- 4) Placement of clean cover material over the entire Site.

The approximate costs and duration of these remedial actions are summarized in the below table.

Subsurface Soil/Fill

Based on the proposed use of the Site as a public park and the metals levels detected in the subsurface soil/fill, direct exposure to contamination from this material is not expected. However, if excavation is necessary to prepare the Site for use as a public park, excavated materials must be properly handled in accordance with the SMP that may include off-Site disposal of the excavated soil/fill material.

The primary concern identified during the current study was the lead concentration of 39,000 ppm detected in TP15. This area may contain an isolated fill deposit that has the potential to impact groundwater and the Niagara River in the area near the shoreline. It is recommended that the groundwater and soil in this area be further evaluated to assess the extent of contamination. The approximate cost and duration to conduct this study and to remediate the soil is summarized in the table below.

Area	Remedial Alternative	Description	Estimated Time to Completion	Tentative Schedule	"Ball Park" Cost Estimates
Overall Site	SMP and institutional controls	Development of SMP and Legal Institutional Control filings.	8 weeks	1/1/21 – 2/28/21	\$10,000 to 20,000
Surface Soil/Fill	Delineation and removal of surface soils	Additional Sampling and excavation and removal of near surface soils with metals concentrations above SCOs.	8 weeks	1/1/21 – 2/28/21	\$20,000 to 50,000
	Clean cover select areas	Grade Site and cover specific areas with clean topsoil.	4 weeks	3/1/21 – 3/31/21	\$10,000 to 20,000
	Pathways/Restricted Areas	Create elevated pathways above metals contaminated soil areas.	4 weeks	4/1/21 – 4/30/21	\$10,000 to 30,000
	Clean cover all areas	Grade Site and cover with 6" of clay and 2" of Topsoil.	10 weeks	4/1/21 – 6/15/21	\$50,000 to 75,000
Subsurface Soil/Fill	Delineation of lead impacted soil and groundwater near TP15	Soil and groundwater study in area of TP15.	4 weeks	1/1/21 – 1/30/21	\$10,000 to 20,000
Subsurface Soil/fill	Soil Excavation and Disposal	Excavation and removal of impacted soil near TP15	4 weeks	2/1/21 – 2/28/21	\$25,000 to 50,000

Depending on the final determination of the need for and the extent of remedial actions, Niagara Greenway, NYSDEC and USEPA brownfield grants, or other sources of funding may be pursued to facilitate the development of the Site.

APPENDIX A PHASE II ESA LIMITATIONS

Limitations

The services described in this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, expressed or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

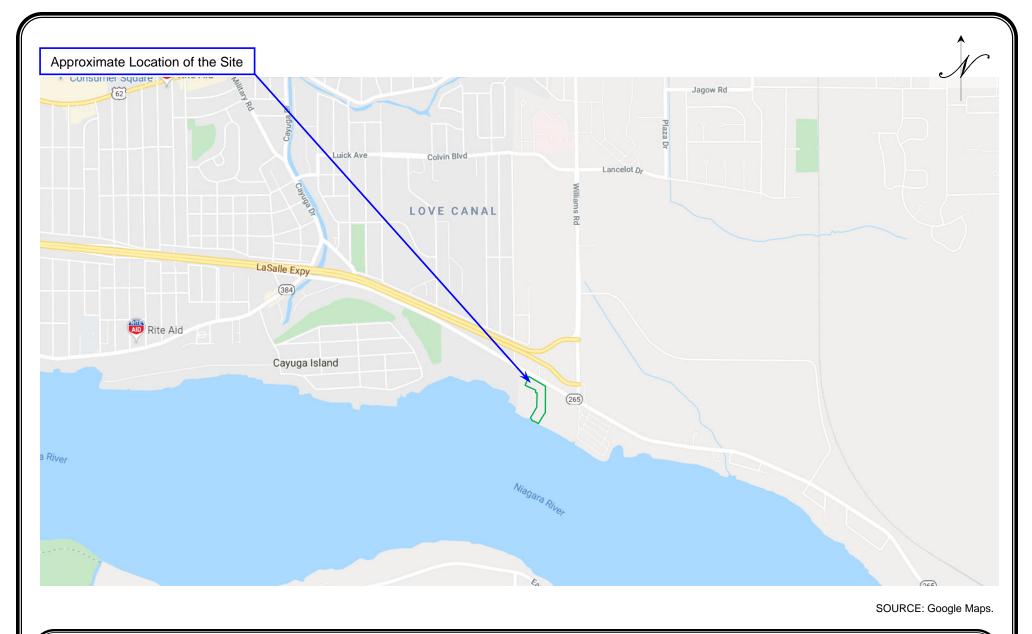
Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, nor the use of segregated portions of this report.

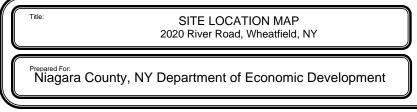
The purpose of an environmental assessment is to reasonably evaluate the potential for or actual impact of past practices on a given site area. In performing an environmental assessment, it is understood that a balance must be struck between a reasonable inquiry into the environmental issues and an exhaustive analysis of each conceivable issue of potential concern. The following paragraphs discuss the assumptions and parameters under which such an opinion is rendered.

No investigation is thorough enough to exclude the presence of hazardous materials at a given site. If hazardous conditions have not been identified during the assessment, such a finding should not therefore be construed as a guarantee of the absence of such materials on the site, but rather as the result of the services performed within the scope, limitations, and cost of the work performed.

Environmental conditions may exist at the site that cannot be identified by visual observation. Where subsurface work was performed, our professional opinions are based in part on interpretation of data from discrete sampling locations that may not represent actual conditions at unsampled locations.

Except where there is express concern of our client, or where specific environmental contaminants have been previously reported by others, naturally occurring toxic substances, potential environmental contaminants inside buildings, or contaminant concentrations that are not of current environmental concern may not be reflected in this document.







Leader Consulting Services, Inc. 2813 Wehrle Drive, Suite #1 Williamsville, New York (716) 565-0963 (716) 565-0964 (fax) Project: 908.001

Date: 10/2019

Scale: N.T.S.

Drawn:
HDK
Checked:
JAW
File Name:

Test Pit No.	Latitude	Longitude
1	43° 04.345' N	-78° 56.614' W
2	43° 04.329' N	-78° 56.632' W
3	43° 04.317' N	-78° 56.642' W
4	43° 04.302' N	-78° 56.592' W
5	43° 04.299' N	-78° 56.591' W
6	43° 04.284' N	-78° 56.624' W
7	43° 04.281' N	-78° 56.613' W
8	43° 04.281' N	-78° 56.613' W
9	43° 04.242' N	-78° 56.610' W
10	43° 04.283' N	-78° 56.565' W
11	43° 04.282' N	-78° 56.633' W
12	43° 04.286' N	-78° 56.593' W
13	43° 04.260' N	-78° 56.588' W
14	43° 04.260' N	-78° 56.588' W
15	43° 04.252' N	-78° 56.611' W
16	43° 04.252' N	-78° 56.611' W
17	43° 04.346' N	-78° 56.637' W
18	43° 04.303' N	-78° 56.640' W



LEGEND

- Labella 2013 Phase II ESA Test Pit Locations
- Leader Phase II ESA Test Pit Locations

NOTE:

- 1) Figure Provided by Niagara County
- 2) Locations shown are approximate.

TEST PIT LOCATION PLAN 2020 River Road, Wheatfield, New York

Prepared For:

Niagara County, NY Department of Economic Development



CONSULTING SERVICES
Leader Consulting Services, Inc.
2813 Wehrle Drive, Suite 1
Williamsville, New York 14221
(716) 565-0963
(718) 565-0964 (fax)

Project:	908.001	
Date:	10/2019	
Scale:	N.T.S.	

Drawn: HDK
Shecked: JAW
iile Name:

re:





LEGEND

- △ LaBella 2013 Phase II ESA Surface Soil Locations where soil exceeded SCOs
- LaBella 2013 Phase II ESA Test Pit Locations where soil exceeded SCOs
- Leader Phase II ESA Test Pit Locations where soil exceeded SCOs

NOTE:

- 1) Figure Provided by NCDED
- 2) Locations shown are approximate.

SOIL CONCENTRATIONS ABOVE SCOS 2020 River Road, Wheatfield, New York

Prepared For:

Niagara County, NY Department of Economic Development



CONSULTING SERVICES
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Project:		
roject.	908.001	
Date:	8/2020	
Scale:	N.T.S.	

Drawn: HDK
Checked: JAW
File Name:

-igure:

3

Table 1
2020 River Road Phase II ESA Sampling Summary

Test Pit No.	Depth (FT.)	RAD Reading (C/MIN.)	RCRA Metals	RCRA DUP.	RCRA Split	RCRA MS/MSD	voc	VOC DUP	svoc	SVOC DUP
1	0-2	ND	Х		Х					
	5-6	ND	Х							
2	0-2	ND	X	X						
	5-6	ND	X			X				
3	0-2	ND	X		X					
	5-6	ND	X							
4		ND	X							
		ND	X							
5		ND	X							
		ND	X							
6	0-2	ND	X			X				
	5-6	ND	Х							
7		ND	X							
		ND	X							
8		ND	X							
		ND	X							
9		ND	X							
		ND	X							
10		ND	Х							
		ND	X							
11		ND	X							
		ND	X							
12		ND	X							
		ND	X							
13	0-2	ND	X	Χ						
	4-6	ND	X				Х		Х	
14	0-2	ND	Х							
	5-6	ND	X				Х		Х	
15	0-2	ND	X							
	5-6	ND	X				Х		Х	
16	0-2	ND	X							
	5-6	ND	X				Х		X	
17	0-2	ND	Х							
	5-6	ND	Х				Х		Х	
18	0-2	ND	Х							
	5-6	ND	Х				Х	Х	Х	Х

Table 2A

2020 River Road, Niagara Falls, NY

Phase II Environmental Site Assessment

Surface Soil Screening Results-Gamma Radiation

Sample ID	SS1	SS2	SS3	SS4	SS5	SS6	SS7	SS8	SS9	SS10	SS11	SS12	SS13	SS14	SS15	SS16	SS17	SS18
Gamma	ND	ND	1	1	1	ND	1	1	ND	1	1	1	1	1	1	ND	1	1

Table 2B

Samp	le ID	TP1	TP2	TP3	TP4	TP5	TP6	TP7	TP8	TP9	TP10	TP11	TP12	TP13	TP14	TP15	TP16	TP17	TP18
Gam	ma	ND	1	ND	ND	ND	1	1	1	1	1	1	1	1	ND	1	1	1	1

Notes:

- 1) All samples in coounts per minute (C/m)
- 2) Background concentration at 2.6 kC/m
- 3) Samples collected an screened on July 1, 2020

Table 3A 2020 River Road, Niagara Falls, NY Phase II Environmental Site Assessment Surface Soil Results-RCRA Metals

Sample ID	TP1 0-2ft	TP1 0-2 ft Split Alpha Labs	TP1 4-5 ft	TP2 0-2 ft	TP2 0-2 ft DUP	TP2 5-6 ft	TP3 0-2 ft	TP3 0-2 ft Split Alpha Labs	TP3 5-6 ft	TP4 0-2 ft	TP4 5-6 ft	TP5 0-2 ft	TP5 5-6 ft	TP6 0-2 ft	TP6 5-6 ft	TP7 0-2 ft	TP7 4-5 ft	TP8 0-2 ft	TP8 4-5 ft	TP9 0-2 ft	TP9 5-6 ft	Part 375 Unrestricted Soil Cleanup Objectives	Part 375 Restricted-Residential Soil Cleanup Objectives	Part 375 Restricted- Commercial Soil Cleanup Objectives	Part 375 Protection of Ecological Resources Soil Cleanup Objectives	Part 375 Protection of Groundwater Soil Cleanup Objectives
Sample Date	6/30/2020	6/30/2020	6/30/2020	6/30/2020	6/30/2020	6/30/2020	6/30/2020	6/30/2020	6/30/2020	6/30/2020	6/30/2020	6/30/2020	6/30/2020	6/30/2020	6/30/2020	6/30/2020	6/30/2020	6/30/2020	6/30/2020	6/30/2020	6/30/2020					
Arsenic	2.54	2.25	3.6	7.06	7.31	5.98	2.37	2.62	3.5	3.77	4.82	8.73	5.22	4.86	3.99	2.34	4.98	3.89	4.13	3.04	4.18	13	16	16	13	16
Barium	34.1	32.7	37.4	40.7	35.6	76.1	35.5	29.8	167	24.1	103	335	104	102	63.3	53.3	86.5	40	85.1	45.9	65.3	350	400	400	433	820
Cadmium	0.415	< 0.434	<0.282	1.16	1.29	0.77	0.37	< 0.444	0.759	0.486	4.98	0.629	1.58	1.52	0.456	0.568	0.626	0.674	1.38	0.632	0.834	2.5	4.3	9.3	4	7.5
Chromium	10.2	11.1	9.31	16.6	14.5	41.8	9.61	6.63	17.5	4.65	18.9	30.1	25.4	15.2	13.5	14.4	18.8	3.18	20.1	11.3	13.9	30	180	1,500	41	NS
Lead	5.36	6.2	22	32.7	24.5	55.4	4.75	6	71	30.2	190	275	240	47.6	32.4	6.13	12.9	37.3	35.5	15.7	17.4	63	400	1,000	63	450
Mercury	0.0311	< 0.071	0.0783	1.13	1.15	1.15	0.0255	< 0.073	0.0632	0.0205	0.0273	0.0415	0.122	0.166	0.0605	0.0405	0.06	0.0427	0.0623	0.0571	0.0417	0.18	0.81	2.8	0.18	0.73
Selenium	<1.12	<0.868	<1.13	<1.02	<1.08	3.61	<1.15	<0.887	3.33	<5.18	<1.09	<1.08	3.88	<1.10	1.61	<1.10	1.43	<5.45	<1.25	<1.16	<1.38	3.9	180	1,500	3.9	4
Silver	<0.561	<0.434	<0.564	<0.508	<0.538	< 0.734	<0.575	<0.0444	<0.644	0.879	<0.544	0.89	2.89	<0.550	<0.593	<0.588	<0.683	<0.545	<0.626	<0.581	<0.688	2	180	1,500	2	8.3

Table 3B

Sample ID	TP10 0-3 ft	TP10 3-4 ft	TP11 0-2 ft	TP11 4-5 ft	TP12 0-2 ft	TP12 4-5 ft	TP13 0-2 ft	TP13 4-5 ft	TP14 0-2 ft	TP14 5-6 ft	TP15 0-2 ft	TP15 5-6 ft	TP16 0-2 ft	TP16 4-5 ft	TP17 0-2 ft	TP17 4-5 ft	TP18 0-2 ft	TP18 4-5 ft	Part 375 Unrestricted Soil Cleanup Objectives	Part 375 Restricted- Residential Soil Cleanup Objectives	Part 375 Restricted- Commercial Soil Cleanup Objectives	Part 375 Protection of Ecological Resources Soil Cleanup Objectives	Part 375 Protection of Groundwater Soil Cleanup Objectives
Sample Date	6/30/2020	6/30/2020	6/30/2020	6/30/2020	6/30/2020	6/30/2020	7/1/2020	7/1/2020	7/1/2020	7/1/2020	7/1/2020	7/1/2020	7/1/2020	7/1/2020	7/1/2020	7/1/2020	7/1/2020	7/1/2020					
Arsenic	2.38	5.1	5.57	4.5	2.84	2.38	3.46	28.3	8.33	7.83	6.64	8.97	3.33	2.91	5.17	18.8	3.19	7.1	13	16	16	13	16
Barium	27.6	88	133	84.8	37.3	120	232	117	79.9	70.7	106	47.2	194	65.3	112	70.2	115	154	350	400	400	433	820
Cadmium	0.799	1.54	1.92	0.92	1.01	1.64	1.49	5.93	3	1.94	1.84	1.8	1.4	0.768	1.87	4.32	2.04	1.55	2.5	4.3	9.3	4	7.5
Chromium	8.1	19.6	50.6	30.2	10.4	20.9	14.1	33.8	102	132	70.8	65.6	12.5	8.46	27.9	35.5	25.4	16.6	30	180	1,500	41	NS
Lead	9.26	15.1	218	69.2	14.1	13.1	285	96.6	215	133	39,400	262	46.2	20.4	47.4	499	17.5	62.2	63	400	1,000	63	450
Mercury	0.0313	0.0452	0.232	0.166	0.0562	0.0323	0.0461	0.0518	0.0664	0.0667	0.227	0.106	0.0163	0.0114	0.257	1.49	0.0246	1.62	0.18	0.81	2.8	0.18	0.73
Selenium	<1.05	<1.36	4.71	3.25	<1.10	<1.21	<1.28	1.65	4.8	9.1	5.15	4.83	<1.16	<1.27	<1.12	<1.35	<1.10	<1.38	3.9	180	1,500	3.9	4
Silver	<0.523	<0.681	<0.538	<0.685	<0.548	<0.607	<0.641	<0.604	<0.623	<0.673	3.01	<0.635	<0.578	<0.637	<0.562	<0.677	<0.552	<0.689	2	180	1,500	2	8.3

Notes:

1) ND = Not detected

2) All measurements in parts per million ("ppm")

3) Samples collected an screened on June 30 or July 1, 2020

Yellow highlight - Analyte detected above Part 375 Restricted Resdiental SCOs
 Red bold around results - Analyte detected above the 375 Restricted Commercial SCOs

Table 4 2020 River Road, Niagara Falls, NY Phase II Environmental Site Assessment Summary of Surface Soil Analytical Results (Detected Compounds Only)

	TP13 4-5 ft	TP14 5-6 ft	TP14 5-6 ft DUP Semi-VOCs	TP15 5-6 ft	TP16 4-5 ft	TP17 4-5 ft	TP18 4-5 ft	TP18 4-5 ft DUP VOCs	Part 375 Unrestricted Soil Cleanup Objectives	Part 375 Restricted- Residential Soil Cleanup Objectives	Part 375 Restricted- Commercial Soil Cleanup Objectives	Part 375 Protection of Ecological Resources	Part 375 Protection of Groundwate r Soil Cleanup
Sample ID	7/4/2020	7/4/2020	7/4/2020	7/4/2020	7/4/2020	7/4/2020	7/4/2020	7/4/2020		Objectives	Objectives	Objectives	Objectives
Sample Date	7/1/2020	7/1/2020	7/1/2020	7/1/2020	7/1/2020	7/1/2020	7/1/2020	7/1/2020				Objectives	Objectives
Volatile Organic Compounds	(ug/kg)		1		I		I	1	1		1		1
Acetone	12.3	U	U	15.4	U	U	U	U	50	100,000	500,000	2200	50
Semi-Volutile Organic Compo	ounds (ug/kg)												
1-Biphenyl	U	U	U	U	U	649	U	Not Analzyed	NL	NL	NL	NL	NL
1,4-Dichlorobenzene	U	U	U	758	U	U	U	Not Analzyed	1,800	13,000	130,000	20,000	1800
2,4-Dimethylphenol	U	981	781	1,310	U	U	U	Not Analzyed	NL	NL	NL	NL	NL
3&4-Methylphenol	U	1,400	1,550	928	U	U	U	Not Analzyed	NL	NL	NL	NL	NL
2-Methylnaphthalene	U	U	U	U	U	8,370	U	Not Analzyed	NL	NL	NL	NL	NL
4-Methylnapthalene	U	U	U	670	U	U	U	Not Analzyed	NL	NL	NL	NL	NL
Benzo(a)anthracene	U	U	U	561	U	470	814	Not Analzyed	1,000	1,000	5,600	NL	1,000
Benzo(a)pyrene	U	U	U	683	U	U	836	Not Analzyed	1,000	1,000	1,000	2,600	22,000
Benzo(b)fluoranthene	U	U	U	623	U	U	954	Not Analzyed	800	1,000	2,600	NL	1,700
Benzo(g,h,I)perylene	U	U	U	859	U	U	535	Not Analzyed	100,000	100,000	500,000	NL	1,000,000
Benzo(k)fluoranthene	U	U	U	U	U	U	665	Not Analzyed	800	3,900	56,000	NL	1,700
Bis(2-ethylhexyl) phthalate	U	1,530	<346	756	U	U	U	Not Analzyed	NL	NL	NL	NL	NL
Chrysene	U	U	U	U	U	442	1,303	Not Analzyed	1,000	3,900	56,000	NL	1,000
Dibenzofuran	U	U	U	U	U	1,590	U	Not Analzyed	NL	NL	NL	NL	NL
Di-n-butyl phthalate	U	786	427	390	U	U	U	Not Analzyed	NL	NL	NL	NL	NL
Fluoranthene	U	U	U	485	U	410	1,650	Not Analzyed	100,000	100,000	500,000	NL	1,000,000
Indeno(1,2,3-cd)pyrene	U	U	U	581	U	U	897	Not Analzyed	500	500	5,600	NL	8,200
Naphthalene	U	U	U	383	U	7,020	U	Not Analzyed	12,000	100,000	500,000	NS	1,200
Phenanthrene	U	U	U	476	U	3,240	1,040	Not Analzyed	100,000	100,000	500,000	NL	1,000,000
Phenol	U	6,160	4,650	6,830	U	U	· U	Not Analzyed	100,000	100,000	500,000	30,000	330
Pyrene	U	U	U	501	U	425	1,440	Not Analzyed	100,000	100,000	500,000	NL	1,000,000

Notes:

- 1) NL=Not listed
- 2) U= The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.
- 3) J= The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
- 4) D= The reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range.
- 5) Yellow highlight Analyte detected above Part 375 Restricted Residential SCOs
- 6)) Red bold around results Analyte detected above the 375 Restricted Commercial SCOs





Photo No. 1: View of Test Pit 1.



Photo No. 3: View of Test Pit 3.



Photo No. 5: View of Test Pit 5.



Photo No. 2: View of Test Pit 2.



Photo No. 4: View of Test Pit 4.



Photo No. 6: View of Test Pit 6.



Photo No. 7: View of Test Pit 7.



Photo No. 8: View of Test Pit 8.



Photo No. 9: View of Test Pit 9.



Photo No. 10: View of Test Pit 10.



Photo No. 11: View of Test Pit 11.



Photo No. 12: View of Test Pit 12.



Photo No. 13: View of Test Pit 13.



Photo No. 15: View of Test Pit 15.



Photo No. 14: View of Test Pit 14.



Photo No. 16: View of Test Pit 15.



Photo No. 17: View of Test Pit 15.



Photo No. 19: View of Test Pit 17.



Photo No. 18: View of Test Pit 16.



Photo No. 20: View of Test Pit 18.

APPENDIX D TEST PIT LOGS



LEADER CONSULTING SERVICES, INC.

2813 Wehrle Drive, Suite No. 1 Williamsville, New York 14221

TEST PIT LOG:			TEST PIT	Г# 1
CLIENT:	Niagara County, New York Department of Econom	ic Development		
LOCATION:	6311 Inducon Corporate Drive, Sanborn, NY 1413	2		
PROJECT NO.:	908.001			
PROJECT MANAGER:	Jeffrey Wittlinger			
PROJECT GEOLOGIST:	Jeffrey Wittlinger			
DRILLING COMPANY:	Natures Way Contracting	SCREEN DIAMETER:	NA	
EXCAVATION METHOD:	Backhoe	SCREEN LENGTH:	NA	
OPERATOR:	Bret Landsman	SCREEN TYPE:	NA	
TOTAL DEPTH:	8 feet	CASING DIAMETER:	NA	
LENGTH OF TEST PIT	10 feet	CASING LENGTH:	NA	
TEST PIT ORIENTATION	E-W	CASING TYPE:	NA	
GROUND SURFACE ELEV:	NA	SAMPLING METHOD:	NA	·

TEST PIT # 1			
DEPTH			
BELOW FILL	DID		
AREA GRADE	PID READING	RAD READING	
(FEET)	(PPM)	(C/MIN.)	TEST PIT DESCRIPTION
(1 == 1)	ND	ND	MISCELLANEOUS BROWN FILL. SAND, SILT AND CLAY. SOME STAINING AT 4 FEET.
1			
2			
3			
4			
5			
	ND	ND	GREY SANDY CLAY
6			
7			
8			
			BOTTOM OF HOLE AT 8'
9			
10			
11			
12			
13			
13			
14			
15			
16			
17			
18			
40			
19			



LEADER CONSULTING SERVICES, INC.

2813 Wehrle Drive, Suite No. 1 Williamsville, New York 14221

TEST PIT LOG:				TEST PIT#	2
CLIENT	Niagara County, New York Department of Economi	c Development			
LOCATION	6311 Inducon Corporate Drive, Sanborn, NY 14132	2			
PROJECT NO.:	908.001				
PROJECT MANAGER:	Jeffrey Wittlinger				
PROJECT GEOLOGIST	Jeffrey Wittlinger				
DRILLING COMPANY:	Natures Way Contracting	SCREEN DIAMETER:	NA		
EXCAVATION METHOD:	Backhoe	SCREEN LENGTH:	NA		
OPERATOR:	Bret Landsman	SCREEN TYPE:	NA		
TOTAL DEPTH	8 feet	CASING DIAMETER:	NA		
LENGTH OF TEST PIT	10 feet	CASING LENGTH:	NA		
TEST PIT ORIENTATION	N-S	CASING TYPE:	NA		
GROUND SURFACE ELEV	NA	SAMPLING METHOD:	NA		

TEST PIT # 2			
DEPTH			
BELOW FILL AREA	PID		
GRADE	READING	RAD READING	
(FEET)	(PPM)	(C/MIN.)	TEST PIT DESCRIPTION
	ND	ND	MISCELLANEOUS BROWN FILL. SAND, SILT AND CLAY.
1			SOME CINDERS
2			
3			
4			
4			
5			
	ND	ND	GREY SAND, SILT AND CLAY
6	ND	ND	GROUNDWATER SEEPAGE AT 6'
7			
8			
			BOTTOM OF HOLE AT 8'
9			
- 10			
10			
11			
11			
12			
13			
14			
15			
16			
47			
17			
18			
10			
19			
		<u> </u>	



LEADER CONSULTING SERVICES, INC.

2813 Wehrle Drive, Suite No. 1 Williamsville, New York 14221

TEST PIT LOG:				TEST PIT# 3
CLIENT:	Niagara County, New York Department	of Economic Development		
LOCATION:	6311 Inducon Corporate Drive, Sanborn	n, NY 14132		
PROJECT NO.:	908.001			
PROJECT MANAGER:	Jeffrey Wittlinger			
PROJECT GEOLOGIST:	Jeffrey Wittlinger			
DRILLING COMPANY:	Natures Way Contracting	SCREEN DIAMETER:	NA	
EXCAVATION METHOD:	Backhoe	SCREEN LENGTH:	NA	
OPERATOR:	Bret Landsman	SCREEN TYPE:	NA	
TOTAL DEPTH:	8 feet	CASING DIAMETER:	NA	
LENGTH OF TEST PIT	10 feet	CASING LENGTH:	NA	·
TEST PIT ORIENTATION	N-S	CASING TYPE:	NA	
GROUND SURFACE ELEV:	NA	SAMPLING METHOD:	NA	

TEST PIT # 3			
DEPTH			
BELOW FILL			
AREA	PID	DAD DEADING	
GRADE (FEET)		RAD READING	
(FEET)	(PPM) ND	(C/MIN.) ND	TEST PIT DESCRIPTION MISCELLANEOUS BROWN FILL. SAND, SILT AND CLAY.
1	ND	ND	WIGGELLANEOUS BROWN FILE. SAND, SILT AND GLAT.
<u>'</u>			
2			
_			
3			
4			BLACK CINDERS AT 4'
5			
	ND	ND	GREY SANDY CLAY
6			
7			
8			
			BOTTOM OF HOLE AT 8'
9			
10			
11			
12			
40			
13			
14			
17			
15			
16			
17			
18			
19			
		ļ	
L			



TEST PIT LOG:				TEST PIT#	4
	Niagara County, New York Department of Economic	Development			
LOCATION:	6311 Inducon Corporate Drive, Sanborn, NY 14132				
PROJECT NO.:	908.001				
PROJECT MANAGER:					
PROJECT GEOLOGIST:	Jeffrey Wittlinger				
DRILLING COMPANY:	Natures Way Contracting	SCREEN DIAMETER:	NA		
EXCAVATION METHOD:	Backhoe	SCREEN LENGTH:	NA		
OPERATOR:	Bret Landsman	SCREEN TYPE:	NA		
TOTAL DEPTH:	8 feet	CASING DIAMETER:	NA		
LENGTH OF TEST PIT	10 feet	CASING LENGTH:	NA		
TEST PIT ORIENTATION	N-S	CASING TYPE:	NA	·	
GROUND SURFACE ELEV:	NA	SAMPLING METHOD:	NA		

	TEST PIT # 4		
DEPTH			
BELOW FILL AREA	DID		
GRADE	PID READING	RAD READING	
(FEET)	(PPM)	(C/MIN.)	TEST PIT DESCRIPTION
(' == ')	ND	ND ND	MISCELLANEOUS BROWN FILL. SAND, SILT AND CLAY.
1			SOME GRAY CINDERS
2			
3			
			ODOUNDWATED OFFICE AT 41
4			GROUNDWATER SEEPAGE AT 4'
5			BLACK CINDERS AT 4'
5	ND	ND	GREY SAND, SILT AND CLAY
6	ND	ND	ORET OTHER SERT
7			
8			
			BOTTOM OF HOLE AT 8'
9			
40			
10			
11			
- ''			
12			
13			
14			
15			
16			
10			
17			
11			
18			
19			



TEST PIT LOG:				TEST PIT#
CLIENT:	Niagara County, New York Department of Econom	nic Development		
LOCATION:	6311 Inducon Corporate Drive, Sanborn, NY 1413	32		
PROJECT NO.:	908.001			
PROJECT MANAGER:	Jeffrey Wittlinger			
PROJECT GEOLOGIST:	Jeffrey Wittlinger			
DRILLING COMPANY:	Natures Way Contracting	SCREEN DIAMETER:	NA	
EXCAVATION METHOD:	Backhoe	SCREEN LENGTH:	NA	
OPERATOR:	Bret Landsman	SCREEN TYPE:	NA	
TOTAL DEPTH:	8 feet	CASING DIAMETER:	NA	
LENGTH OF TEST PIT	10 feet	CASING LENGTH:	NA	·
TEST PIT ORIENTATION	E-W	CASING TYPE:	NA	
GROUND SURFACE ELEV	NA	SAMPLING METHOD:	NA	·

TEST PIT	# 5		
DEPTH			
BELOW FILL AREA	DID		
GRADE	PID READING	RAD READING	
(FEET)	(PPM)	(C/MIN.)	TEST PIT DESCRIPTION
(1 LL1)	ND	ND	MISCELLANEOUS BROWN FILL. SAND, SILT AND CLAY.
1	ND	ND	MIGGELLANEGGG BROWN FIEL. GAND, GIET AND GEAT.
-			
2			
_			ROAD BED AT 2.5'
3			
4	ND	ND	BLACK SILTY CLAY
5			
	ND	ND	GREY SANDY CLAY AND SILT
6			
7			
8			BOTTOM OF HOLE AT 8'
9			BOTTOM OF HOLE AT 8
10			
11			
12			
13			
14			
45			
15			
16			
10			
17			
18			
19			



TEST PIT LOG:				TEST PIT# 6
CLIENT:	Niagara County, New York Department of	of Economic Development		
LOCATION:	6311 Inducon Corporate Drive, Sanborn,	, NY 14132		
PROJECT NO.:	908.001			
PROJECT MANAGER:		<u> </u>		*
PROJECT GEOLOGIST:	Jeffrey Wittlinger			
DRILLING COMPANY:	Natures Way Contracting	SCREEN DIAMETER:	NA	
EXCAVATION METHOD:	Backhoe	SCREEN LENGTH:	NA	
OPERATOR:	Bret Landsman	SCREEN TYPE:	NA	
TOTAL DEPTH:	8 feet	CASING DIAMETER:	NA	
LENGTH OF TEST PIT	10 feet	CASING LENGTH:	NA	
TEST PIT ORIENTATION	E-W	CASING TYPE:	NA	
GROUND SURFACE ELEV:	NA	SAMPLING METHOD:	NA	

TEST PIT	# 6		
DEPTH			
BELOW FILL AREA	DID		
GRADE	PID READING	RAD READING	
(FEET)	(PPM)	(C/MIN.)	TEST PIT DESCRIPTION
(- == -)	ND	ND	MISCELLANEOUS BROWN FILL. SAND, SILT AND CLAY.
1			CONCRETE AND C&D DEBRIS
2			
3			
			DI ACIVOAND CILT AND CLAVEIU
4	ND	ND	BLACK SAND, SILT AND CLAY FILL
5			
5	ND	ND	GREY SANDY CLAY
6	ND	ND	ONET ONIND FOEM
7			
8			
			BOTTOM OF HOLE AT 8'
9			
40			
10			
11			
- ''			
12			
13			
14			
15			
16			
16			
17			
11			
18			
19			



TEST PIT LOG:				TEST PIT# 7
CLIENT	Niagara County, New York Department of I	Economic Development		
LOCATION	6311 Inducon Corporate Drive, Sanborn, N	IY 14132		
PROJECT NO.:	908.001			
PROJECT MANAGER:	Jeffrey Wittlinger			
PROJECT GEOLOGIST	Jeffrey Wittlinger			
DRILLING COMPANY:	Natures Way Contracting	SCREEN DIAMETER:	NA	
EXCAVATION METHOD:	Backhoe	SCREEN LENGTH:	NA	
OPERATOR:	Bret Landsman	SCREEN TYPE:	NA	
TOTAL DEPTH	8 feet	CASING DIAMETER:	NA	
LENGTH OF TEST PIT	10 feet	CASING LENGTH:	NA	
TEST PIT ORIENTATION	E-W	CASING TYPE:	NA	
GROUND SURFACE FLEV	NA	SAMPLING METHOD:	NA	·

TEST PIT	#7		
DEPTH			
BELOW FILL AREA	DID		
GRADE	PID READING	RAD READING	
(FEET)	(PPM)	(C/MIN.)	TEST PIT DESCRIPTION
(1 == 1)	ND	ND	MISCELLANEOUS BROWN FILL. SAND, SILT AND CLAY.
1	.,,2		
2			
3			
4	ND	ND	MISCELLANEOUS BLACK SAND, SILT, AND CLAY FILL
5			
	ND	ND	GREY SANDY CLAY
6			
7			
8			
Ü			BOTTOM OF HOLE AT 8'
9			
10			
11			
12			
40			
13			
14			
14			
15			
16			
17			
18			
19			



TEST PIT LOG:				TEST PIT#	8
	Niagara County, New York Department of Economic 6311 Inducon Corporate Drive, Sanborn, NY 14132	Development			
PROJECT NO.: PROJECT MANAGER: PROJECT GEOLOGIST:	Jeffrey Wittlinger				
DRILLING COMPANY:	Natures Way Contracting	SCREEN DIAMETER:	NA		-
EXCAVATION METHOD:	Backhoe	SCREEN LENGTH:	NA		
OPERATOR:	Bret Landsman	SCREEN TYPE:	NA		
TOTAL DEPTH:	8 feet	CASING DIAMETER:	NA		
LENGTH OF TEST PIT	10 feet	CASING LENGTH: _	NA		
TEST PIT ORIENTATION	E-W	CASING TYPE:	NA	·	
GROUND SURFACE ELEV:	NA	SAMPLING METHOD:	NA	·	

TEST PIT	#8		
DEPTH			
BELOW FILL	DID.		
AREA GRADE	PID	RAD READING	
(FEET)	READING (PPM)	(C/MIN.)	
(FEEI)	ND	ND	TEST PIT DESCRIPTION MISCELLANEOUS BROWN FILL. SAND, SILT AND CLAY.
1	ND	ND	WIGGELLANEOUS BROWN FILE. SAND, SILT AND GLAT.
'			
2			
3			
4	ND	ND	MISCELLANEOUS BLACK SAND, SILT, AND CLAY FILL
5			
	ND	ND	GREY SANDY CLAY
6			
7			
8			
			BOTTOM OF HOLE AT 8'
9			
10			
10			
11			
12			
13			
14			
15			
16			
17			
40			
18			
19			
19			
		<u> </u>	



TEST PIT LOG:			TEST PIT#	9
CLIENT:	Niagara County, New York Department of Econo	omic Development		
LOCATION:	6311 Inducon Corporate Drive, Sanborn, NY 14	132		
PROJECT NO.:	908.001			
PROJECT MANAGER:	Jeffrey Wittlinger			
PROJECT GEOLOGIST:	Jeffrey Wittlinger			
DRILLING COMPANY:	Natures Way Contracting	SCREEN DIAMETER:	NA	
EXCAVATION METHOD:	Backhoe	SCREEN LENGTH:	NA	
OPERATOR:	Bret Landsman	SCREEN TYPE:	NA	
TOTAL DEPTH:	8 feet	CASING DIAMETER:	NA	
LENGTH OF TEST PIT	10 feet	CASING LENGTH:	NA	
TEST PIT ORIENTATION	E-W	CASING TYPE:	NA	
GROUND SURFACE ELEV:	NA	SAMPLING METHOD:	NA	

TEST PIT	# Q		
DEPTH	πЭ		
BELOW FILL			
AREA	PID	D 4 D DE 4 D 11 O	
GRADE (FEET)	READING (PPM)	RAD READING (C/MIN.)	TEST PIT DESCRIPTION
(FEEI)	ND	ND	MISCELLANEOUS BROWN FILL. SAND, SILT AND CLAY.
1	ND	ND	WIGOLLET WEGGO BROWN FILE. GRAD, GILL FRAD GERT.
2			
3			
	ND	ND	MISCELLANEOUS BLACK SAND SILT AND CLAY FILL
4			
5			
	ND	ND	GREY SANDY CLAY
6			
7			
8			BOTTOM OF HOLE AT 8'
9			BOTTOM OF FIGLE AT 0
10			
11			
12			
12			
13			
14			
45			
15			
16			
17			
18			
19			
19			



TEST PIT LOG:				TEST PIT#	10
CLIENT	Niagara County, New York Department of Economic	Development			
LOCATION	6311 Inducon Corporate Drive, Sanborn, NY 14132				
PROJECT NO.:	908.001				
PROJECT MANAGER:	Jeffrey Wittlinger				
PROJECT GEOLOGIST	Jeffrey Wittlinger				
DRILLING COMPANY	Natures Way Contracting	SCREEN DIAMETER:	NA		
EXCAVATION METHOD:	: Backhoe	SCREEN LENGTH:	NA		
OPERATOR:	Bret Landsman	SCREEN TYPE:	NA		
TOTAL DEPTH	8 feet	CASING DIAMETER:	NA		
LENGTH OF TEST PIT	10 feet	CASING LENGTH:	NA		
TEST PIT ORIENTATION	N-S	CASING TYPE:	NA		
GROUND SURFACE ELEV	NA .	SAMPLING METHOD:	NA	·	

	TEST PIT # 10		
DEPTH			
BELOW FILL AREA	DID		
GRADE	PID READING	RAD READING	
(FEET)	(PPM)	(C/MIN.)	TEST PIT DESCRIPTION
(. == .)	ND	ND ND	MISCELLANEOUS BROWN FILL. SAND, SILT AND CLAY.
1			
2			
3	ND	ND	MISCELLANEOUS BLACK SAND, SILT AND CLAY FILL
4			
5			
3	ND	ND	GREY SANDY CLAY
6	112	112	51121 511151 5211
7			
8			
			BOTTOM OF HOLE AT 8'
9			
10			
10			
11			
12			
13			
14			
14			
15			
16			
17			
40			
18			
19			
10			



TEST PIT LOG:				TEST PIT#	11
CLIENT:	Niagara County, New York Department of Economic	Development	_		
LOCATION:	6311 Inducon Corporate Drive, Sanborn, NY 14132				
PROJECT NO.:	908.001				
PROJECT MANAGER:	Jeffrey Wittlinger				
PROJECT GEOLOGIST:	Jeffrey Wittlinger				
DRILLING COMPANY:	Natures Way Contracting	SCREEN DIAMETER:	NA		
EXCAVATION METHOD:	Backhoe	SCREEN LENGTH:	NA		
OPERATOR:	Bret Landsman	SCREEN TYPE:	NA		
TOTAL DEPTH:	8 feet	CASING DIAMETER:	NA		
LENGTH OF TEST PIT	10 feet	CASING LENGTH:	NA		
TEST PIT ORIENTATION	E-W	CASING TYPE:	NA		
GROUND SURFACE ELEV	ΝΔ	SAMPLING METHOD:	NΔ	-	

TEST PIT	# 11		
DEPTH			
BELOW FILL AREA	PID		
GRADE	READING	RAD READING	
(FEET)	(PPM)	(C/MIN.)	TEST PIT DESCRIPTION
,	ND	ND	MISCELLANEOUS BROWN FILL. SAND, SILT AND CLAY.
1			CONCRETE BLOCK
2			
3			
4	ND	ND	MISCELLANEOUS BLACK SAND, SILT, AND CLAY FILL
5			ODEN ON DE CLAN
	ND	ND	GREY SAND CLAY
6			
7			
'			
8			
			BOTTOM OF HOLE AT 8'
9			
10			
11			
- 10			
12			
13			
13			
14			
15			
16			
17			
18			
19			
19			
		<u> </u>	



TEST PIT LOG:				TEST PIT#	12
CLIENT:	Niagara County, New York Department of Economic	Development			
LOCATION:	6311 Inducon Corporate Drive, Sanborn, NY 14132				
PROJECT NO.:	908.001				
PROJECT MANAGER:	Jeffrey Wittlinger				
PROJECT GEOLOGIST:	Jeffrey Wittlinger				
DRILLING COMPANY:	Natures Way Contracting	SCREEN DIAMETER:	NA		
EXCAVATION METHOD:	Backhoe	SCREEN LENGTH:	NA		
OPERATOR:	Bret Landsman	SCREEN TYPE:	NA		
TOTAL DEPTH:	8 feet	CASING DIAMETER:	NA		
LENGTH OF TEST PIT	10 feet	CASING LENGTH:	NA		
TEST PIT ORIENTATION	E-W	CASING TYPE:	NA		•
GROUND SURFACE ELEV:	NA	SAMPLING METHOD:	NA		•

TEST PIT	# 12		
DEPTH			
BELOW FILL AREA	PID		
GRADE		RAD READING	
(FEET)	(PPM)	(C/MIN.)	TEST PIT DESCRIPTION
,	ND	ND	MISCELLANEOUS BROWN FILL. SAND, SILT AND CLAY. SOME STAINING AT 4 FEET.
1			CONCRETE BLOCK
2			
3			
4			MISCELLANEOUS BLACK SAND, SILT AND CLAY FILL
5			MISOLLLAINEOUS BLACK SAIND, SILT AIND GLATTILL
	ND	ND	GREY SANDY CLAY
6			
7			
8			
9			BOTTOM OF HOLE AT 8'
9			
10			
10			
11			
12			
13			
14			
15			
15			
16			
17			
18			
19			



TEST PIT LOG:				TEST PIT#	13
	Niagara County, New York Department of Economic	Development			
LOCATION:	6311 Inducon Corporate Drive, Sanborn, NY 14132				
PROJECT NO.:	908.001				
PROJECT MANAGER:					
PROJECT GEOLOGIST:	Jeffrey Wittlinger				
DRILLING COMPANY:	Natures Way Contracting	SCREEN DIAMETER:	NA		
EXCAVATION METHOD:	Backhoe	SCREEN LENGTH:	NA		
OPERATOR:	Bret Landsman	SCREEN TYPE:	NA		
TOTAL DEPTH:	8 feet	CASING DIAMETER:	NA		
LENGTH OF TEST PIT	10 feet	CASING LENGTH:	NA		
TEST PIT ORIENTATION	E-W	CASING TYPE:	NA	_	
GROUND SURFACE ELEV:	NA .	SAMPLING METHOD:	NA		

	TEST PIT # 13		
DEPTH			
BELOW FILL AREA	PID		
GRADE		RAD READING	
(FEET)	(PPM)	(C/MIN.)	TEST PIT DESCRIPTION
,	ND	ND	MISCELLANEOUS BROWN FILL. SAND, SILT AND CLAY.
1			CINDERS, WOOD AND PIPE
2			
3			
			CDOUNDMATER OFFRACE AT 41
4	ND	ND	GROUNDWATER SEEPAGE AT 4' MISCELLANEOUS BLACK SAND, SILT AND CLAY FILL.
5	ND	ND	WOOD AND PIPE
3	ND	ND	GREY SANDY CLAY
6	ND	IND	SKET SKIDT SEKT
7			
8			
9			
40			
10			
11			
- ''			
12			
13			
14			
15			
16			
16			
17			
.,			
18			
19			



TEST PIT LOG:				TEST PIT#	14
CLIENT:	Niagara County, New York Department of Economic	Development			
LOCATION:	6311 Inducon Corporate Drive, Sanborn, NY 14132				
PROJECT NO.:	908.001				
PROJECT MANAGER:					
PROJECT GEOLOGIST:	Jeffrey Wittlinger				
DRILLING COMPANY:	Natures Way Contracting	SCREEN DIAMETER:	NA		
EXCAVATION METHOD:	Backhoe	SCREEN LENGTH:	NA		
OPERATOR:	Bret Landsman	SCREEN TYPE:	NA		
TOTAL DEPTH:	8 feet	CASING DIAMETER:	NA		
LENGTH OF TEST PIT	10 feet	CASING LENGTH:	NA		
TEST PIT ORIENTATION	E-W	CASING TYPE:	NA	·	
GROUND SURFACE ELEV:	NA	SAMPLING METHOD:	NA		

mpom pym #44			
	TEST PIT # 14		
DEPTH			
BELOW FILL AREA	PID		
GRADE		RAD READING	
(FEET)	(PPM)	(C/MIN.)	TEST PIT DESCRIPTION
, ,	ND	ND	MISCELLANEOUS BROWN FILL. SAND, SILT AND CLAY.
1			BRICK, WOOD AND METAL
2			
3			
4			
5			GROUNDDWATER SEEPAGE AT 5'
	ND	ND	BLACK MISCELLANEOUS, SILT AND CLAY FILL
6			
7	ND	ND	GREY SANDY CLAY
	ND	ND	GRET SAINDT CLAT
8			
9			
10			
11			
12			
13			
14			
14			
15			
15			
16			
17			
18			
19			



TEST PIT LOG:				TEST PIT#	15
CLIENT	Niagara County, New York Department of Economic	: Development			
LOCATION	6311 Inducon Corporate Drive, Sanborn, NY 14132	·	·		
PROJECT NO.:	908.001				
PROJECT MANAGER:	Jeffrey Wittlinger				
PROJECT GEOLOGIST	Jeffrey Wittlinger				
DRILLING COMPANY:	Natures Way Contracting	SCREEN DIAMETER:	NA		
EXCAVATION METHOD:	Backhoe	SCREEN LENGTH:	NA		
OPERATOR:	Bret Landsman	SCREEN TYPE:	NA		
TOTAL DEPTH	8 feet	CASING DIAMETER:	NA		
LENGTH OF TEST PIT	20 FEET X 20 FEET	CASING LENGTH:	NA		
TEST PIT ORIENTATION	E-W	CASING TYPE:	NA		
GROUND SURFACE ELEV	NA	SAMPLING METHOD:	NA		

TEST PIT	# 15		
DEPTH			
BELOW FILL AREA	DID		
GRADE	PID READING	RAD READING	
(FEET)	(PPM)	(C/MIN.)	TEST PIT DESCRIPTION
(: ==:)	ND	ND	MISCELLANEOUS BROWN FILL. SAND, SILT AND CLAY.
1			METAL GRINDING WHEELS
			3'X6' WOOD AND METAL OBJECT AT 4'
2			
3			
4			
5			SLIGHT PETROLEUM ODOR (1PPM ABOVE BG)
	ND	ND	MISCELLANEOUS BLACK SAND, SILT AND CLAY FILL
6			
7	ND	ND	GREY SANDY CLAY
8			
9			
9			
10			
10			
11			
12			
13			
14			
15			
16			
47			
17			
18			
10			
19			
13			
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TEST PIT LOG:				TEST PIT#	16
CLIENT	Niagara County, New York Department of Economi	c Development			
LOCATION	6311 Inducon Corporate Drive, Sanborn, NY 14132	!			
PROJECT NO.:	908.001				
PROJECT MANAGER:	Jeffrey Wittlinger				
PROJECT GEOLOGIST	Jeffrey Wittlinger				
DRILLING COMPANY	Natures Way Contracting	SCREEN DIAMETER:	NA		
EXCAVATION METHOD:	Backhoe	SCREEN LENGTH:	NA		
OPERATOR:	Bret Landsman	SCREEN TYPE:	NA		
TOTAL DEPTH	8 feet	CASING DIAMETER:	NA		
LENGTH OF TEST PIT	10 feet	CASING LENGTH:	NA		
TEST PIT ORIENTATION	N-S	CASING TYPE:	NA		
GROUND SURFACE ELEV	NA	SAMPLING METHOD:	NA	_	

TEST PIT	# 16		
DEPTH			
BELOW FILL AREA	PID		
GRADE	READING	RAD READING	
(FEET)	(PPM)	(C/MIN.)	TEST PIT DESCRIPTION
,	ND	ND	MISCELLANEOUS BROWN FILL. SAND, SILT AND CLAY.
1			BRICK, STONE AND CINDERS
2			
3			
4			
5			GROUNDWATER SEEPAGE AND 5'
	ND	ND	DARK GREY SANDY CLAY
6	ND	ND	GREY SANDY CLAY
7	ND	ND	GREY SANDY CLAY
8			
9			
10			
11			
12			
13			
44			
14			
15			
15			
16			
10			
17			
18			
-			
19			



TEST PIT LOG:				TEST PIT#	17
CLIENT:	Niagara County, New York Department of Eco	onomic Development	·		
LOCATION:	6311 Inducon Corporate Drive, Sanborn, NY	14132			
PROJECT NO.:	908.001				
PROJECT MANAGER:	Jeffrey Wittlinger				
PROJECT GEOLOGIST:	Jeffrey Wittlinger				
DRILLING COMPANY:	Natures Way Contracting	SCREEN DIAMETER:	NA		
EXCAVATION METHOD:	Backhoe	SCREEN LENGTH:	NA		
OPERATOR:	Bret Landsman	SCREEN TYPE:	NA		
TOTAL DEPTH:	8 feet	CASING DIAMETER:	NA		
LENGTH OF TEST PIT	10 feet	CASING LENGTH:	NA	·	
TEST PIT ORIENTATION	E-W	CASING TYPE:	NA		
GROUND SURFACE FLEV	NA	SAMPLING METHOD:	NA	_	

TEST PIT	# 17		
DEPTH			
BELOW FILL AREA	PID		
GRADE	READING	RAD READING	
(FEET)	(PPM)	(C/MIN.)	TEST PIT DESCRIPTION
(1 == 1)	ND	ND	MISCELLANEOUS BROWN FILL. SAND, SILT AND CLAY.
1			WOOD
2			
3			
4			
	ND	ND	BLACK CINDERS
5			
	ND	ND	MISCELLANEOUS BROWN FILL, SAND, SILT AND CLAY
6			
7			
8			
9			
10			
11			
12			
13			
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10			
16			
47			
17			
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10			
19			
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TEST PIT LOG:				TEST PIT#	18
	Niagara County, New York Department of Economic 6311 Inducon Corporate Drive, Sanborn, NY 14132 908,001	Development			
PROJECT MANAGER: PROJECT GEOLOGIST:	Jeffrey Wittlinger				
DRILLING COMPANY:	Natures Way Contracting	SCREEN DIAMETER:	NA		
EXCAVATION METHOD:	Backhoe	SCREEN LENGTH:	NA		
OPERATOR:	Bret Landsman	SCREEN TYPE:	NA		
TOTAL DEPTH:	8 feet	CASING DIAMETER:	NA		
LENGTH OF TEST PIT	10 feet	CASING LENGTH:	NA		
TEST PIT ORIENTATION	E-W	CASING TYPE:	NA		
GROUND SURFACE ELEV:	NA .	SAMPLING METHOD:	NA		

TEST PIT	# 18		
DEPTH			
BELOW FILL AREA	PID		
GRADE	READING	RAD READING	
(FEET)	(PPM)	(C/MIN.)	TEST PIT DESCRIPTION
(1 == 1)	ND	ND	MISCELLANEOUS BROWN FILL. SAND, SILT AND CLAY.
1	.,,2		
2			
3			
4	ND	ND	BLACK CINDERS
5			
	ND	ND	GREY SANDY CLAY
6			
7			
8			
9			
10			
11			
12			
13			
13			
14			
15			
16			
17			
18			
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19			
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APPENDIX E ANALYTICAL RESULTS

APPENDIX F PARADIGM ANALYTICAL REPORT



Analytical Report For

Leader Consulting Services, Inc.

For Lab Project ID

203031

Referencing

2020 River Rd

Prepared

Thursday, July 16, 2020

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

A high percent difference on sample moisture duplicate value indicates a non-homogeneous sample.

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

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



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP1 0-2

Lab Sample ID: 203031-01 **Date Sampled:** 6/30/2020

Matrix: Soil Date Received: 7/6/2020

Mercury

Analyte Result Units Qualifier Date Analyzed

Mercury 0.0311 mg/Kg 7/13/2020 10:25

Method Reference(s):EPA 7471BPreparation Date:7/10/2020Data File:QC200713B

RCRA Metals (ICP)

Analyte Result **Units Oualifier Date Analyzed** Arsenic 2.54 mg/Kg 7/14/2020 15:05 Barium 34.1 7/10/2020 18:22 mg/Kg Cadmium 0.415 7/10/2020 18:22 mg/Kg Chromium 10.2 mg/Kg 7/10/2020 18:22 Lead 5.36 7/10/2020 18:22 mg/Kg Selenium < 1.12 mg/Kg 7/10/2020 18:22 Silver < 0.561 7/10/2020 18:22 mg/Kg

Method Reference(s): EPA 6010C

EPA 3050B



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP1 4-5

Lab Sample ID: 203031-02 **Date Sampled:** 6/30/2020

Matrix: Soil Date Received: 7/6/2020

Mercury

Analyte Result Units Qualifier Date Analyzed

Mercury 0.0783 mg/Kg 7/13/2020 10:27

Method Reference(s):EPA 7471BPreparation Date:7/10/2020Data File:QC200713B

RCRA Metals (ICP)

Analyte Result **Units Oualifier Date Analyzed** Arsenic 3.60 mg/Kg 7/10/2020 18:26 Barium 37.4 mg/Kg 7/10/2020 18:26 Cadmium < 0.282 7/10/2020 18:26 mg/Kg Chromium 9.31 mg/Kg 7/10/2020 18:26 Lead 22.0 7/10/2020 18:26 mg/Kg Selenium < 1.13 mg/Kg 7/14/2020 15:09 Silver < 0.564 7/10/2020 18:26 mg/Kg

Method Reference(s): EPA 6010C

EPA 3050B



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP2 0-2

Lab Sample ID: 203031-03 **Date Sampled:** 6/30/2020

Matrix: Soil Date Received: 7/6/2020

Mercury

<u>Analyte</u> <u>Result</u> <u>Units</u> <u>Qualifier</u> <u>Date Analyzed</u>

Mercury 1.13 mg/Kg 7/13/2020 11:22

Method Reference(s):EPA 7471BPreparation Date:7/10/2020Data File:QC200713B

RCRA Metals (ICP)

Analyte Result **Units Oualifier Date Analyzed** Arsenic 7.06 mg/Kg 7/14/2020 19:19 Barium 40.7 7/14/2020 19:19 mg/Kg Cadmium 7/14/2020 19:19 1.16 mg/Kg Chromium 16.6 mg/Kg 7/14/2020 19:19 Lead 32.7 7/14/2020 19:19 mg/Kg Selenium < 1.02 mg/Kg 7/14/2020 19:19 Silver < 0.508 7/14/2020 19:19 mg/Kg

Method Reference(s): EPA 6010C

EPA 3050B



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP2 0-2 DUP

Lab Sample ID: 203031-04 **Date Sampled:** 6/30/2020

Matrix: Soil Date Received: 7/6/2020

Mercury

<u>Analyte</u> <u>Result</u> <u>Units</u> <u>Qualifier</u> <u>Date Analyzed</u>

Mercury 1.15 mg/Kg 7/13/2020 11:24

Method Reference(s):EPA 7471BPreparation Date:7/10/2020Data File:QC200713B

RCRA Metals (ICP)

Analyte Result **Units Oualifier Date Analyzed** Arsenic 7.31 mg/Kg 7/14/2020 19:23 Barium 35.6 mg/Kg 7/14/2020 19:23 Cadmium 1.29 7/14/2020 19:23 mg/Kg Chromium 14.5 mg/Kg 7/14/2020 19:23 Lead 24.5 7/14/2020 19:23 mg/Kg Selenium < 1.08 mg/Kg 7/14/2020 19:23 Silver < 0.538 7/14/2020 19:23 mg/Kg

Method Reference(s): EPA 6010C

EPA 3050B



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP2 5-6

Lab Sample ID: 203031-05 **Date Sampled:** 6/30/2020

Matrix: Soil Date Received: 7/6/2020

Mercury

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Mercury	1.15	mg/Kg	D	7/13/2020 11:26

Method Reference(s):EPA 7471BPreparation Date:7/10/2020Data File:QC200713B

RCRA Metals (ICP)

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Arsenic	5.98	mg/Kg		7/10/2020 18:31
Barium	76.1	mg/Kg		7/10/2020 18:31
Cadmium	0.770	mg/Kg	D	7/10/2020 18:31
Chromium	41.8	mg/Kg	DM	7/10/2020 18:31
Lead	55.4	mg/Kg	D	7/10/2020 18:31
Selenium	3.61	mg/Kg		7/10/2020 18:31
Silver	< 0.734	mg/Kg		7/10/2020 18:31

Method Reference(s): EPA 6010C

EPA 3050B



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP3 0-2

Lab Sample ID: 203031-06 **Date Sampled:** 6/30/2020

Matrix: Soil Date Received: 7/6/2020

Mercury

Analyte Result Units Qualifier Date Analyzed

Mercury 0.0255 mg/Kg 7/13/2020 10:42

Method Reference(s):EPA 7471BPreparation Date:7/10/2020Data File:QC200713B

RCRA Metals (ICP)

Analyte Result Units Oualifier Date Analyzed Arsenic 2.37 mg/Kg 7/14/2020 15:14 Barium 35.5 mg/Kg 7/10/2020 18:44 Cadmium 0.370 7/10/2020 18:44 mg/Kg Chromium 9.61 mg/Kg 7/10/2020 18:44 Lead 4.75 7/10/2020 18:44 mg/Kg Selenium < 1.15 mg/Kg 7/10/2020 18:44 Silver < 0.575 7/10/2020 18:44 mg/Kg

Method Reference(s): EPA 6010C

EPA 3050B



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP3 5-6

Lab Sample ID: 203031-07 **Date Sampled:** 6/30/2020

Matrix: Soil Date Received: 7/6/2020

Mercury

Analyte Result Units Qualifier Date Analyzed

Mercury 0.0632 mg/Kg 7/13/2020 10:44

Method Reference(s):EPA 7471BPreparation Date:7/10/2020Data File:QC200713B

RCRA Metals (ICP)

Analyte Result **Units Oualifier Date Analyzed** Arsenic 3.50 mg/Kg 7/10/2020 18:48 Barium 167 mg/Kg 7/10/2020 18:48 Cadmium 0.759 7/10/2020 18:48 mg/Kg Chromium 17.5 mg/Kg 7/10/2020 18:48 Lead 71.0 7/10/2020 18:48 mg/Kg Selenium 3.33 mg/Kg 7/10/2020 18:48 Silver 7/10/2020 18:48 < 0.644 mg/Kg

Method Reference(s): EPA 6010C

EPA 3050B



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP4 0-2

Lab Sample ID: 203031-08 **Date Sampled:** 6/30/2020

Matrix: Soil Date Received: 7/6/2020

Mercury

<u>Analyte</u> <u>Result</u> <u>Units</u> <u>Qualifier</u> <u>Date Analyzed</u>

Mercury 0.0205 mg/Kg 7/13/2020 10:46

Method Reference(s):EPA 7471BPreparation Date:7/10/2020Data File:QC200713B

RCRA Metals (ICP)

Analyte Result **Units Oualifier Date Analyzed** Arsenic 3.77 mg/Kg 7/10/2020 19:03 Barium 24.1 mg/Kg 7/10/2020 19:03 Cadmium 0.486 7/10/2020 19:03 mg/Kg Chromium 4.65 mg/Kg 7/10/2020 19:03 Lead 30.2 7/10/2020 19:03 mg/Kg Selenium < 5.18 mg/Kg 7/14/2020 15:18 Silver 0.879 7/10/2020 19:03 mg/Kg

Method Reference(s): EPA 6010C

EPA 3050B



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP4 5-6

Lab Sample ID: 203031-09 **Date Sampled:** 6/30/2020

Matrix: Soil Date Received: 7/6/2020

Mercury

<u>Analyte</u> <u>Result</u> <u>Units</u> <u>Qualifier</u> <u>Date Analyzed</u>

Mercury 0.0273 mg/Kg 7/13/2020 10:48

Method Reference(s):EPA 7471BPreparation Date:7/10/2020Data File:QC200713B

RCRA Metals (ICP)

Analyte Result **Units Oualifier Date Analyzed** Arsenic 4.82 mg/Kg 7/10/2020 19:07 Barium 103 7/10/2020 19:07 mg/Kg Cadmium 4.98 7/10/2020 19:07 mg/Kg Chromium 18.9 mg/Kg 7/10/2020 19:07 Lead 190 7/10/2020 19:07 mg/Kg Selenium < 1.09 mg/Kg 7/14/2020 15:28 Silver < 0.544 7/10/2020 19:07 mg/Kg

Method Reference(s): EPA 6010C

EPA 3050B



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP5 0-2

Lab Sample ID: 203031-10 **Date Sampled:** 6/30/2020

Matrix: Soil Date Received: 7/6/2020

Mercury

Analyte Result Units Qualifier Date Analyzed

Mercury 0.0415 mg/Kg 7/13/2020 10:50

Method Reference(s):EPA 7471BPreparation Date:7/10/2020Data File:QC200713B

RCRA Metals (ICP)

Analyte Result **Units Oualifier Date Analyzed** Arsenic 8.73 mg/Kg 7/10/2020 19:12 Barium 335 7/10/2020 19:12 mg/Kg Cadmium 0.629 7/10/2020 19:12 mg/Kg Chromium 30.1 mg/Kg 7/10/2020 19:12 Lead 275 7/10/2020 19:12 mg/Kg Selenium < 1.08 mg/Kg 7/10/2020 19:12 Silver 0.890 7/10/2020 19:12 mg/Kg

Method Reference(s): EPA 6010C

EPA 3050B



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP5 5-6

Lab Sample ID: 203031-11 **Date Sampled:** 6/30/2020

Matrix: Soil Date Received: 7/6/2020

Mercury

Analyte Result Units Qualifier Date Analyzed

Mercury 0.122 mg/Kg 7/13/2020 10:52

Method Reference(s):EPA 7471BPreparation Date:7/10/2020Data File:QC200713B

RCRA Metals (ICP)

Analyte Result **Units Oualifier Date Analyzed** Arsenic 5.22 mg/Kg 7/10/2020 19:16 Barium 104 mg/Kg 7/10/2020 19:16 Cadmium 1.58 mg/Kg 7/10/2020 19:16 Chromium 25.4 mg/Kg 7/10/2020 19:16 Lead 240 7/10/2020 19:16 mg/Kg Selenium 3.88 mg/Kg 7/10/2020 19:16 Silver 7/10/2020 19:16 2.89 mg/Kg

Method Reference(s): EPA 6010C

EPA 3050B

 Preparation Date:
 7/9/2020

 Data File:
 200710B



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP6 0-2

Lab Sample ID: 203031-12 **Date Sampled:** 6/30/2020

Matrix: Soil Date Received: 7/6/2020

Mercury

 Analyte
 Result
 Units
 Qualifier
 Date Analyzed

 Mercury
 0.166
 mg/Kg
 DM
 7/13/2020 11:48

Method Reference(s):EPA 7471BPreparation Date:7/10/2020Data File:QC200713B

RCRA Metals (ICP)

Analyte Result **Units Oualifier Date Analyzed** Arsenic 4.86 mg/Kg M 7/14/2020 16:10 Barium 102 mg/Kg 7/14/2020 16:10 Cadmium 1.52 mg/Kg M 7/14/2020 16:10 Chromium 15.2 mg/Kg 7/14/2020 16:10 M Lead 47.6 DM 7/14/2020 16:10 mg/Kg Selenium < 1.10 mg/Kg Μ 7/14/2020 16:10 Silver < 0.550 7/14/2020 16:10 mg/Kg

Method Reference(s): EPA 6010C

EPA 3050B



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP6 5-6

Lab Sample ID: 203031-13 **Date Sampled:** 6/30/2020

Matrix: Soil Date Received: 7/6/2020

Mercury

Analyte Result Units Qualifier Date Analyzed

Mercury 0.0605 mg/Kg 7/13/2020 10:54

Method Reference(s):EPA 7471BPreparation Date:7/10/2020Data File:QC200713B

RCRA Metals (ICP)

Analyte Result Units Oualifier Date Analyzed Arsenic 3.99 mg/Kg 7/10/2020 19:21 Barium 63.3 7/10/2020 19:21 mg/Kg Cadmium 0.456 mg/Kg 7/10/2020 19:21 Chromium 13.5 mg/Kg 7/10/2020 19:21 Lead 32.4 7/10/2020 19:21 mg/Kg Selenium 1.61 mg/Kg 7/10/2020 19:21 Silver < 0.593 7/10/2020 19:21 mg/Kg

Method Reference(s): EPA 6010C

EPA 3050B



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP7 0-2

Lab Sample ID: 203031-14 **Date Sampled:** 6/30/2020

Matrix: Soil Date Received: 7/6/2020

Mercury

Analyte Result Units Qualifier Date Analyzed

Mercury 0.0405 mg/Kg 7/13/2020 10:56

Method Reference(s):EPA 7471BPreparation Date:7/10/2020Data File:QC200713B

RCRA Metals (ICP)

Analyte Result **Units Oualifier Date Analyzed** Arsenic 2.34 mg/Kg 7/14/2020 15:32 Barium 53.3 7/10/2020 19:25 mg/Kg Cadmium 0.568 7/10/2020 19:25 mg/Kg Chromium 14.4 mg/Kg 7/10/2020 19:25 Lead 6.13 7/10/2020 19:25 mg/Kg Selenium < 1.18 mg/Kg 7/10/2020 19:25 Silver < 0.588 7/10/2020 19:25 mg/Kg

Method Reference(s): EPA 6010C

EPA 3050B



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP7 4-5

Lab Sample ID: 203031-15 **Date Sampled:** 6/30/2020

Matrix: Soil Date Received: 7/6/2020

Mercury

<u>Analyte</u> <u>Result</u> <u>Units</u> <u>Qualifier</u> <u>Date Analyzed</u>

Mercury 0.0600 mg/Kg 7/13/2020 10:58

Method Reference(s):EPA 7471BPreparation Date:7/10/2020Data File:QC200713B

RCRA Metals (ICP)

Analyte Result **Units Oualifier Date Analyzed** Arsenic 4.98 mg/Kg 7/10/2020 19:30 Barium 86.5 mg/Kg 7/10/2020 19:30 Cadmium 0.626 7/10/2020 19:30 mg/Kg Chromium 18.8 mg/Kg 7/10/2020 19:30 Lead 12.9 7/10/2020 19:30 mg/Kg Selenium 1.43 mg/Kg 7/14/2020 15:37 Silver < 0.683 7/10/2020 19:30 mg/Kg

Method Reference(s): EPA 6010C

EPA 3050B



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP8 0-2

Lab Sample ID: 203031-16 **Date Sampled:** 6/30/2020

Matrix: Soil Date Received: 7/6/2020

Mercury

<u>Analyte</u> <u>Result</u> <u>Units</u> <u>Qualifier</u> <u>Date Analyzed</u>

Mercury 0.0427 mg/Kg 7/13/2020 11:00

Method Reference(s):EPA 7471BPreparation Date:7/10/2020Data File:QC200713B

RCRA Metals (ICP)

Analyte Result **Units Oualifier Date Analyzed** Arsenic 3.89 mg/Kg 7/10/2020 19:34 Barium 40.0 7/10/2020 19:34 mg/Kg Cadmium 0.674 7/10/2020 19:34 mg/Kg Chromium 3.18 mg/Kg 7/10/2020 19:34 Lead 37.3 7/10/2020 19:34 mg/Kg Selenium < 5.45 mg/Kg 7/15/2020 14:58 Silver < 0.545 7/10/2020 19:34 mg/Kg

Method Reference(s): EPA 6010C

EPA 3050B



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP8 4-5

Lab Sample ID: 203031-17 **Date Sampled:** 6/30/2020

Matrix: Soil Date Received: 7/6/2020

Mercury

<u>Analyte</u> <u>Result</u> <u>Units</u> <u>Qualifier</u> <u>Date Analyzed</u>

Mercury 0.0623 mg/Kg 7/13/2020 11:06

Method Reference(s):EPA 7471BPreparation Date:7/10/2020Data File:QC200713B

RCRA Metals (ICP)

Analyte Result **Units Oualifier Date Analyzed** Arsenic 4.13 mg/Kg 7/14/2020 16:23 Barium 85.1 mg/Kg 7/14/2020 16:23 Cadmium 1.38 mg/Kg 7/14/2020 16:23 Chromium 20.1 mg/Kg 7/14/2020 16:23 Lead 35.5 7/14/2020 16:23 mg/Kg Selenium < 1.25 mg/Kg 7/14/2020 16:23 Silver 7/14/2020 16:23 < 0.626 mg/Kg

Method Reference(s): EPA 6010C

EPA 3050B



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP9 0-2

Lab Sample ID: 203031-18 **Date Sampled:** 6/30/2020

Matrix: Soil Date Received: 7/6/2020

Mercury

<u>Analyte</u> <u>Result</u> <u>Units</u> <u>Qualifier</u> <u>Date Analyzed</u>

Mercury **0.0571** mg/Kg 7/13/2020 11:08

Method Reference(s):EPA 7471BPreparation Date:7/10/2020Data File:QC200713B

RCRA Metals (ICP)

Analyte Result **Units Oualifier Date Analyzed** Arsenic 3.04 mg/Kg 7/14/2020 16:27 Barium 45.9 mg/Kg 7/14/2020 16:27 Cadmium 0.632 mg/Kg 7/14/2020 16:27 Chromium 11.3 mg/Kg 7/14/2020 16:27 Lead 15.7 7/14/2020 16:27 mg/Kg Selenium < 1.16 mg/Kg 7/14/2020 16:27 Silver < 0.581 7/14/2020 16:27 mg/Kg

Method Reference(s): EPA 6010C

EPA 3050B



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP9 5-6

Lab Sample ID: 203031-19 **Date Sampled:** 6/30/2020

Matrix: Soil Date Received: 7/6/2020

Mercury

<u>Analyte</u> <u>Result</u> <u>Units</u> <u>Qualifier</u> <u>Date Analyzed</u>

Mercury 0.0417 mg/Kg 7/13/2020 11:10

Method Reference(s):EPA 7471BPreparation Date:7/10/2020Data File:QC200713B

RCRA Metals (ICP)

Analyte Result **Units Oualifier Date Analyzed** Arsenic 4.18 mg/Kg 7/14/2020 16:32 Barium 65.3 mg/Kg 7/14/2020 16:32 Cadmium 0.834 mg/Kg 7/14/2020 16:32 Chromium 13.9 mg/Kg 7/14/2020 16:32 Lead 17.4 7/14/2020 16:32 mg/Kg Selenium < 1.38 mg/Kg 7/14/2020 16:32 Silver 7/14/2020 16:32 < 0.688 mg/Kg

Method Reference(s): EPA 6010C

EPA 3050B



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP10 0-2

Lab Sample ID: 203031-20 **Date Sampled:** 6/30/2020

Matrix: Soil Date Received: 7/6/2020

Mercury

<u>Analyte</u> <u>Result</u> <u>Units</u> <u>Qualifier</u> <u>Date Analyzed</u>

Mercury 0.0313 mg/Kg 7/13/2020 11:15

Method Reference(s):EPA 7471BPreparation Date:7/10/2020Data File:QC200713B

RCRA Metals (ICP)

Analyte Result **Units Oualifier Date Analyzed** Arsenic 2.38 mg/Kg 7/14/2020 16:36 Barium 27.6 mg/Kg 7/14/2020 16:36 Cadmium 0.799 mg/Kg 7/14/2020 16:36 Chromium 8.10 mg/Kg 7/14/2020 16:36 Lead 9.26 7/14/2020 16:36 mg/Kg Selenium < 1.05 mg/Kg 7/14/2020 16:36 Silver < 0.523 7/14/2020 16:36 mg/Kg

Method Reference(s): EPA 6010C

EPA 3050B



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP10 3-4

Lab Sample ID: 203031-21 **Date Sampled:** 6/30/2020

Matrix: Soil Date Received: 7/6/2020

Mercury

Analyte Result Units Qualifier Date Analyzed

Mercury 0.0452 mg/Kg 7/13/2020 11:20

Method Reference(s):EPA 7471BPreparation Date:7/10/2020Data File:QC200713B

RCRA Metals (ICP)

Analyte Result **Units Oualifier Date Analyzed** Arsenic 5.10 mg/Kg 7/14/2020 16:41 Barium 88.0 mg/Kg 7/14/2020 16:41 Cadmium 1.54 mg/Kg 7/14/2020 16:41 Chromium 19.6 mg/Kg 7/14/2020 16:41 Lead 15.1 7/14/2020 16:41 mg/Kg Selenium < 1.36 mg/Kg 7/14/2020 16:41 Silver 7/14/2020 16:41 < 0.681 mg/Kg

Method Reference(s): EPA 6010C

EPA 3050B



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP11 0-2

Lab Sample ID: 203031-22 **Date Sampled:** 6/30/2020

Matrix: Soil Date Received: 7/6/2020

Mercury

<u>Analyte</u> <u>Result</u> <u>Units</u> <u>Qualifier</u> <u>Date Analyzed</u>

Mercury 0.232 mg/Kg 7/13/2020 11:54

Method Reference(s):EPA 7471BPreparation Date:7/10/2020Data File:QC200713B

RCRA Metals (ICP)

Analyte Result **Units Oualifier Date Analyzed** Arsenic 5.57 mg/Kg 7/14/2020 16:55 Barium 133 mg/Kg 7/14/2020 16:55 Cadmium 1.92 mg/Kg 7/14/2020 16:55 Chromium 50.6 mg/Kg 7/14/2020 16:55 Lead 218 7/14/2020 16:55 mg/Kg Selenium 4.71 mg/Kg 7/14/2020 16:55 Silver < 0.538 7/14/2020 16:55 mg/Kg

Method Reference(s): EPA 6010C

EPA 3050B



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP11 4-5

Lab Sample ID: 203031-23 **Date Sampled:** 6/30/2020

Matrix: Soil Date Received: 7/6/2020

Mercury

Analyte Result Units Qualifier Date Analyzed

Mercury **0.166** mg/Kg 7/13/2020 11:56

Method Reference(s):EPA 7471BPreparation Date:7/10/2020Data File:QC200713B

RCRA Metals (ICP)

Analyte Result **Units Oualifier Date Analyzed** Arsenic 4.50 mg/Kg 7/14/2020 17:00 Barium 84.8 7/14/2020 17:00 mg/Kg Cadmium 0.920 7/14/2020 17:00 mg/Kg Chromium 30.2 mg/Kg 7/14/2020 17:00 Lead 69.2 7/14/2020 17:00 mg/Kg Selenium 3.25 mg/Kg 7/14/2020 17:00 Silver 7/14/2020 17:00 < 0.685 mg/Kg

Method Reference(s): EPA 6010C

EPA 3050B



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP12 0-2

Lab Sample ID: 203031-24 **Date Sampled:** 6/30/2020

Matrix: Soil Date Received: 7/6/2020

Mercury

Analyte Result Units Qualifier Date Analyzed

Mercury 0.0562 mg/Kg 7/13/2020 11:58

Method Reference(s):EPA 7471BPreparation Date:7/10/2020Data File:QC200713B

RCRA Metals (ICP)

Analyte Result **Units Oualifier Date Analyzed** Arsenic 2.84 mg/Kg 7/14/2020 17:04 Barium 37.3 7/14/2020 17:04 mg/Kg Cadmium 7/14/2020 17:04 1.01 mg/Kg Chromium 10.4 mg/Kg 7/14/2020 17:04 Lead 14.1 7/14/2020 17:04 mg/Kg Selenium < 1.10 mg/Kg 7/14/2020 17:04 Silver < 0.548 7/14/2020 17:04 mg/Kg

Method Reference(s): EPA 6010C

EPA 3050B



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP12 4-5

Lab Sample ID: 203031-25 **Date Sampled:** 6/30/2020

Matrix: Soil Date Received: 7/6/2020

Mercury

Analyte Result Units Qualifier Date Analyzed

Mercury 0.0323 mg/Kg 7/13/2020 12:00

Method Reference(s):EPA 7471BPreparation Date:7/10/2020Data File:QC200713B

RCRA Metals (ICP)

Analyte Result **Units Oualifier Date Analyzed** Arsenic 2.28 mg/Kg 7/14/2020 17:09 Barium 120 7/14/2020 17:09 mg/Kg Cadmium 7/14/2020 17:09 1.64 mg/Kg Chromium 20.9 mg/Kg 7/14/2020 17:09 Lead 13.1 7/14/2020 17:09 mg/Kg Selenium < 1.21 mg/Kg 7/14/2020 17:09 Silver < 0.607 7/14/2020 17:09 mg/Kg

Method Reference(s): EPA 6010C

EPA 3050B



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP13 0-2

Lab Sample ID: 203031-26 **Date Sampled:** 7/1/2020

Matrix: Soil Date Received: 7/6/2020

Mercury

Analyte Result Units Qualifier Date Analyzed

Mercury **0.0461** mg/Kg 7/13/2020 12:05

Method Reference(s):EPA 7471BPreparation Date:7/10/2020Data File:QC200713B

RCRA Metals (ICP)

Analyte Result **Units Oualifier Date Analyzed** Arsenic 3.46 mg/Kg 7/14/2020 19:28 Barium 232 mg/Kg 7/14/2020 19:28 Cadmium 1.49 mg/Kg 7/14/2020 19:28 Chromium 14.1 mg/Kg 7/14/2020 19:28 Lead 285 7/14/2020 19:28 mg/Kg Selenium < 1.28 mg/Kg 7/14/2020 19:28 Silver < 0.641 7/14/2020 19:28 mg/Kg

Method Reference(s): EPA 6010C

EPA 3050B



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP13 4-5

Lab Sample ID: 203031-27 **Date Sampled:** 7/1/2020

Matrix: Soil Date Received: 7/6/2020

Mercury

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Mercury	0.0518	mg/Kg		7/13/2020 12:07

Method Reference(s):EPA 7471BPreparation Date:7/10/2020Data File:QC200713B

RCRA Metals (ICP)

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Arsenic	28.3	mg/Kg		7/14/2020 19:32
Barium	117	mg/Kg		7/14/2020 19:32
Cadmium	5.93	mg/Kg		7/14/2020 19:32
Chromium	33.8	mg/Kg		7/14/2020 19:32
Lead	96.6	mg/Kg		7/14/2020 19:32
Selenium	1.65	mg/Kg		7/14/2020 19:32
Silver	< 0.604	mg/Kg		7/14/2020 19:32

Method Reference(s): EPA 6010C

EPA 3050B

 Preparation Date:
 7/10/2020

 Data File:
 200714C

Semi-Volatile Organics (Acid/Base Neutrals)

<u>Analyte</u>	Result	<u>Units</u>	Qualifier	Date Analyzed
1,1-Biphenyl	< 350	ug/Kg		7/8/2020 16:39
1,2,4,5-Tetrachlorobenzene	< 350	ug/Kg		7/8/2020 16:39
1,2,4-Trichlorobenzene	< 350	ug/Kg		7/8/2020 16:39
1,2-Dichlorobenzene	< 350	ug/Kg		7/8/2020 16:39
1,3-Dichlorobenzene	< 350	ug/Kg		7/8/2020 16:39
1,4-Dichlorobenzene	< 350	ug/Kg		7/8/2020 16:39
2,2-Oxybis (1-chloropropane)	< 350	ug/Kg		7/8/2020 16:39
2,3,4,6-Tetrachlorophenol	< 350	ug/Kg		7/8/2020 16:39
2,4,5-Trichlorophenol	< 350	ug/Kg		7/8/2020 16:39

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

Report Prepared Thursday, July 16, 2020



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier:	TP13 4-5		
Lab Sample ID:	203031-27	Date Sampled:	7/1/2020
Matrix:	Soil	Date Received:	7/6/2020

				-,	
2,4,	6-Trichlorophenol	< 350	ug/Kg	7/8/2020	16:39
2,4	-Dichlorophenol	< 350	ug/Kg	7/8/2020	16:39
2,4	-Dimethylphenol	< 350	ug/Kg	7/8/2020	16:39
2,4	-Dinitrophenol	< 1400	ug/Kg	7/8/2020	16:39
2,4	-Dinitrotoluene	< 350	ug/Kg	7/8/2020	16:39
2,6	-Dinitrotoluene	< 350	ug/Kg	7/8/2020	16:39
2-C	hloronaphthalene	< 350	ug/Kg	7/8/2020	16:39
2-C	hlorophenol	< 350	ug/Kg	7/8/2020	16:39
2-M	lethylnapthalene	< 350	ug/Kg	7/8/2020	16:39
2-M	lethylphenol	< 350	ug/Kg	7/8/2020	16:39
2-N	litroaniline	< 350	ug/Kg	7/8/2020	16:39
2-N	litrophenol	< 350	ug/Kg	7/8/2020	16:39
3&4	4-Methylphenol	< 350	ug/Kg	7/8/2020	16:39
3,3	-Dichlorobenzidine	< 350	ug/Kg	7/8/2020	16:39
3-N	litroaniline	< 350	ug/Kg	7/8/2020	16:39
4,6	-Dinitro-2-methylphenol	< 469	ug/Kg	7/8/2020	16:39
4-B	romophenyl phenyl ether	< 350	ug/Kg	7/8/2020	16:39
4-C	hloro-3-methylphenol	< 350	ug/Kg	7/8/2020	16:39
4-C	hloroaniline	< 350	ug/Kg	7/8/2020	16:39
4-C	hlorophenyl phenyl ether	< 350	ug/Kg	7/8/2020	16:39
4-N	litroaniline	< 350	ug/Kg	7/8/2020	16:39
4-N	litrophenol	< 350	ug/Kg	7/8/2020	16:39
Ace	enaphthene	< 350	ug/Kg	7/8/2020	16:39
Ace	enaphthylene	< 350	ug/Kg	7/8/2020	16:39
Ace	etophenone	< 350	ug/Kg	7/8/2020	16:39
Ant	hracene	< 350	ug/Kg	7/8/2020	16:39
Atr	azine	< 350	ug/Kg	7/8/2020	16:39
Ber	nzaldehyde	< 350	ug/Kg	7/8/2020	16:39
Ber	nzo (a) anthracene	< 350	ug/Kg	7/8/2020	16:39
Ber	nzo (a) pyrene	< 350	ug/Kg	7/8/2020	16:39



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier:TP13 4-5Lab Sample ID:203031-27Date Sampled:7/1/2020Matrix:SoilDate Received:7/6/2020

Benzo (b) fluoranthene	< 350	ug/Kg	7/8/2020 16:39
Benzo (g,h,i) perylene	< 350	ug/Kg	7/8/2020 16:39
Benzo (k) fluoranthene	< 350	ug/Kg	7/8/2020 16:39
Bis (2-chloroethoxy) methane	< 350	ug/Kg	7/8/2020 16:39
Bis (2-chloroethyl) ether	< 350	ug/Kg	7/8/2020 16:39
Bis (2-ethylhexyl) phthalate	< 350	ug/Kg	7/8/2020 16:39
Butylbenzylphthalate	< 350	ug/Kg	7/8/2020 16:39
Caprolactam	< 350	ug/Kg	7/8/2020 16:39
Carbazole	< 350	ug/Kg	7/8/2020 16:39
Chrysene	< 350	ug/Kg	7/8/2020 16:39
Dibenz (a,h) anthracene	< 350	ug/Kg	7/8/2020 16:39
Dibenzofuran	< 350	ug/Kg	7/8/2020 16:39
Diethyl phthalate	< 350	ug/Kg	7/8/2020 16:39
Dimethyl phthalate	< 350	ug/Kg	7/8/2020 16:39
Di-n-butyl phthalate	< 350	ug/Kg	7/8/2020 16:39
Di-n-octylphthalate	< 350	ug/Kg	7/8/2020 16:39
Fluoranthene	< 350	ug/Kg	7/8/2020 16:39
Fluorene	< 350	ug/Kg	7/8/2020 16:39
Hexachlorobenzene	< 350	ug/Kg	7/8/2020 16:39
Hexachlorobutadiene	< 350	ug/Kg	7/8/2020 16:39
Hexachlorocyclopentadiene	< 1400	ug/Kg	7/8/2020 16:39
Hexachloroethane	< 350	ug/Kg	7/8/2020 16:39
Indeno (1,2,3-cd) pyrene	< 350	ug/Kg	7/8/2020 16:39
Isophorone	< 350	ug/Kg	7/8/2020 16:39
Naphthalene	< 350	ug/Kg	7/8/2020 16:39
Nitrobenzene	< 350	ug/Kg	7/8/2020 16:39
N-Nitroso-di-n-propylamine	< 350	ug/Kg	7/8/2020 16:39
N-Nitrosodiphenylamine	< 350	ug/Kg	7/8/2020 16:39
Pentachlorophenol	< 701	ug/Kg	7/8/2020 16:39
Phenanthrene	< 350	ug/Kg	7/8/2020 16:39



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP13 4-5

 Lab Sample ID:
 203031-27
 Date Sampled:
 7/1/2020

 Matrix:
 Soil
 Date Received:
 7/6/2020

Phenol	956	ug/Kg			7/8/2020	16:39
Pyrene	< 350	ug/Kg			7/8/2020	16:39
<u>Surrogate</u>	<u>Perce</u>	ent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	<u>yzed</u>
2,4,6-Tribromophenol		41.5	39 - 88.1		7/8/2020	16:39
2-Fluorobiphenyl		64.1	42.5 - 81.1		7/8/2020	16:39
2-Fluorophenol		53.8	39.8 - 77.3		7/8/2020	16:39
Nitrobenzene-d5		61.7	40.1 - 77.1		7/8/2020	16:39
Phenol-d5		53.9	41.7 - 76.6		7/8/2020	16:39
Terphenyl-d14		65.0	41.6 - 96.8		7/8/2020	16:39

Method Reference(s): EPA 8270D

EPA 3546

 Preparation Date:
 7/7/2020

 Data File:
 B47777.D

Volatile Organics

Analyte	Result	<u>Units</u>	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 1.88	ug/Kg		7/13/2020 20:08
1,1,2,2-Tetrachloroethane	< 1.88	ug/Kg		7/13/2020 20:08
1,1,2-Trichloroethane	< 1.88	ug/Kg		7/13/2020 20:08
1,1-Dichloroethane	< 1.88	ug/Kg		7/13/2020 20:08
1,1-Dichloroethene	< 1.88	ug/Kg		7/13/2020 20:08
1,2,3-Trichlorobenzene	< 4.71	ug/Kg		7/13/2020 20:08
1,2,4-Trichlorobenzene	< 4.71	ug/Kg		7/13/2020 20:08
1,2,4-Trimethylbenzene	< 1.88	ug/Kg		7/13/2020 20:08
1,2-Dibromo-3-Chloropropane	< 9.42	ug/Kg		7/13/2020 20:08
1,2-Dibromoethane	< 1.88	ug/Kg		7/13/2020 20:08
1,2-Dichlorobenzene	< 1.88	ug/Kg		7/13/2020 20:08
1,2-Dichloroethane	< 1.88	ug/Kg		7/13/2020 20:08
1,2-Dichloropropane	< 1.88	ug/Kg		7/13/2020 20:08
1,3,5-Trimethylbenzene	< 1.88	ug/Kg		7/13/2020 20:08
1,3-Dichlorobenzene	< 1.88	ug/Kg		7/13/2020 20:08
1,4-Dichlorobenzene	< 1.88	ug/Kg		7/13/2020 20:08



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier:	TP13 4-5		
Lab Sample ID:	203031-27	Date Sampled:	7/1/2020
Matrix:	Soil	Date Received:	7/6/2020

1-10101 1111	5611		Butt necessous	7 7 0 7 2 0 2 0	
1,4-Dioxane	< 18.8	ug/Kg		7/13/2020	20:08
2-Butanone	< 9.42	ug/Kg		7/13/2020	20:08
2-Hexanone	< 4.71	ug/Kg		7/13/2020	20:08
4-Methyl-2-pentanone	< 4.71	ug/Kg		7/13/2020	20:08
Acetone	12.3	ug/Kg		7/13/2020	20:08
Benzene	< 1.88	ug/Kg		7/13/2020	20:08
Bromochloromethane	< 4.71	ug/Kg		7/13/2020	20:08
Bromodichloromethane	< 1.88	ug/Kg		7/13/2020	20:08
Bromoform	< 4.71	ug/Kg		7/13/2020	20:08
Bromomethane	< 1.88	ug/Kg		7/13/2020	20:08
Carbon disulfide	< 1.88	ug/Kg		7/13/2020	20:08
Carbon Tetrachloride	< 1.88	ug/Kg		7/13/2020	20:08
Chlorobenzene	< 1.88	ug/Kg		7/13/2020	20:08
Chloroethane	< 1.88	ug/Kg		7/13/2020	20:08
Chloroform	< 1.88	ug/Kg		7/13/2020	20:08
Chloromethane	< 1.88	ug/Kg		7/13/2020	20:08
cis-1,2-Dichloroethene	< 1.88	ug/Kg		7/13/2020	20:08
cis-1,3-Dichloropropene	< 1.88	ug/Kg		7/13/2020	20:08
Cyclohexane	< 9.42	ug/Kg		7/13/2020	20:08
Dibromochloromethane	< 1.88	ug/Kg		7/13/2020	20:08
Dichlorodifluoromethan	e < 1.88	ug/Kg		7/13/2020	20:08
Ethylbenzene	< 1.88	ug/Kg		7/13/2020	20:08
Freon 113	< 1.88	ug/Kg		7/13/2020	20:08
Isopropylbenzene	< 1.88	ug/Kg		7/13/2020	20:08
m,p-Xylene	< 1.88	ug/Kg		7/13/2020	20:08
Methyl acetate	< 1.88	ug/Kg		7/13/2020	20:08
Methyl tert-butyl Ether	< 1.88	ug/Kg		7/13/2020	20:08
Methylcyclohexane	< 1.88	ug/Kg		7/13/2020	20:08
Methylene chloride	< 4.71	ug/Kg		7/13/2020	20:08
Naphthalene	< 4.71	ug/Kg		7/13/2020	20:08



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier:	TP13 4-5		
Lab Sample ID:	203031-27	Date Sampled:	7/1/2020
Matrix:	Soil	Date Received:	7/6/2020

S	<u>urrogate</u>	Percent R	ecovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
	Vinyl chloride	< 1.88	ug/Kg			7/13/2020	20:08
	Trichlorofluoromethane	< 1.88	ug/Kg			7/13/2020	20:08
	Trichloroethene	< 1.88	ug/Kg			7/13/2020	20:08
	trans-1,3-Dichloropropene	< 1.88	ug/Kg			7/13/2020	20:08
	trans-1,2-Dichloroethene	< 1.88	ug/Kg			7/13/2020	20:08
	Toluene	< 1.88	ug/Kg			7/13/2020	20:08
	Tetrachloroethene	< 1.88	ug/Kg			7/13/2020	20:08
	tert-Butylbenzene	< 1.88	ug/Kg			7/13/2020	20:08
	Styrene	< 4.71	ug/Kg			7/13/2020	20:08
	sec-Butylbenzene	< 1.88	ug/Kg			7/13/2020	20:08
	p-Isopropyltoluene	< 1.88	ug/Kg			7/13/2020	20:08
	o-Xylene	< 1.88	ug/Kg			7/13/2020	20:08
	n-Propylbenzene	< 1.88	ug/Kg			7/13/2020	20:08
	n-Butylbenzene	< 1.88	ug/Kg			7/13/2020	20:08

Surrogate	Percent Recovery	<u>Limits</u>	Outliers	Date Analy	zed
1,2-Dichloroethane-d4	82.8	80.8 - 134		7/13/2020	20:08
4-Bromofluorobenzene	110	54.9 - 132		7/13/2020	20:08
Pentafluorobenzene	107	85.8 - 114		7/13/2020	20:08
Toluene-D8	109	81 - 117		7/13/2020	20:08

Method Reference(s): EPA 8260C

EPA 5035A - L

Data File: x71753.D



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP14 0-2

Lab Sample ID: 203031-28 **Date Sampled:** 7/1/2020

Matrix: Soil Date Received: 7/6/2020

Mercury

Analyte Result Units Qualifier Date Analyzed

Mercury **0.0664** mg/Kg 7/13/2020 12:09

Method Reference(s):EPA 7471BPreparation Date:7/10/2020Data File:QC200713B

RCRA Metals (ICP)

Analyte Result **Units Oualifier Date Analyzed** Arsenic 8.33 mg/Kg 7/14/2020 19:37 Barium 79.9 mg/Kg 7/14/2020 19:37 Cadmium 7/14/2020 19:37 3.00 mg/Kg Chromium 102 mg/Kg 7/14/2020 19:37 Lead 215 7/14/2020 19:37 mg/Kg Selenium 4.80 mg/Kg 7/14/2020 19:37 Silver 7/14/2020 19:37 < 0.623 mg/Kg

Method Reference(s): EPA 6010C

EPA 3050B

 Preparation Date:
 7/10/2020

 Data File:
 200714C



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP14 5-6

Lab Sample ID: 203031-29 **Date Sampled:** 7/1/2020

Matrix: Soil Date Received: 7/6/2020

Mercury

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Mercury	0.0667	mg/Kg		7/13/2020 12:11

Method Reference(s):EPA 7471BPreparation Date:7/10/2020Data File:QC200713B

RCRA Metals (ICP)

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	Date Analyzed
Arsenic	7.83	mg/Kg		7/14/2020 19:41
Barium	70.7	mg/Kg		7/14/2020 19:41
Cadmium	1.94	mg/Kg		7/14/2020 19:41
Chromium	132	mg/Kg		7/14/2020 19:41
Lead	133	mg/Kg		7/14/2020 19:41
Selenium	9.10	mg/Kg		7/14/2020 19:41
Silver	< 0.673	mg/Kg		7/14/2020 19:41

Method Reference(s): EPA 6010C

EPA 3050B

 Preparation Date:
 7/10/2020

 Data File:
 200714C

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	<u>Units</u>	Qualifier	Date Analy	yzed
1,1-Biphenyl	< 390	ug/Kg		7/8/2020	17:08
1,2,4,5-Tetrachlorobenzene	< 390	ug/Kg		7/8/2020	17:08
1,2,4-Trichlorobenzene	< 390	ug/Kg		7/8/2020	17:08
1,2-Dichlorobenzene	< 390	ug/Kg		7/8/2020	17:08
1,3-Dichlorobenzene	< 390	ug/Kg		7/8/2020	17:08
1,4-Dichlorobenzene	< 390	ug/Kg		7/8/2020	17:08
2,2-Oxybis (1-chloropropane)	< 390	ug/Kg		7/8/2020	17:08
2,3,4,6-Tetrachlorophenol	< 390	ug/Kg		7/8/2020	17:08
2,4,5-Trichlorophenol	< 390	ug/Kg		7/8/2020	17:08

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

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Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier:TP14 5-6Lab Sample ID:203031-29Date Sampled:7/1/2020Matrix:SoilDate Received:7/6/2020

2,4,6-Trichlorophenol	< 390	ug/Kg	7/8/2020	17:08
2,4-Dichlorophenol	< 390	ug/Kg	7/8/2020	17:08
2,4-Dimethylphenol	981	ug/Kg	7/8/2020	17:08
2,4-Dinitrophenol	< 1560	ug/Kg	7/8/2020	17:08
2,4-Dinitrotoluene	< 390	ug/Kg	7/8/2020	17:08
2,6-Dinitrotoluene	< 390	ug/Kg	7/8/2020	17:08
2-Chloronaphthalene	< 390	ug/Kg	7/8/2020	17:08
2-Chlorophenol	< 390	ug/Kg	7/8/2020	17:08
2-Methylnapthalene	< 390	ug/Kg	7/8/2020	17:08
2-Methylphenol	< 390	ug/Kg	7/8/2020	17:08
2-Nitroaniline	< 390	ug/Kg	7/8/2020	17:08
2-Nitrophenol	< 390	ug/Kg	7/8/2020	17:08
3&4-Methylphenol	1400	ug/Kg	7/8/2020	17:08
3,3'-Dichlorobenzidine	< 390	ug/Kg	7/8/2020	17:08
3-Nitroaniline	< 390	ug/Kg	7/8/2020	17:08
4,6-Dinitro-2-methylphenol	< 522	ug/Kg	7/8/2020	17:08
4-Bromophenyl phenyl ether	< 390	ug/Kg	7/8/2020	17:08
4-Chloro-3-methylphenol	< 390	ug/Kg	7/8/2020	17:08
4-Chloroaniline	< 390	ug/Kg	7/8/2020	17:08
4-Chlorophenyl phenyl ether	< 390	ug/Kg	7/8/2020	17:08
4-Nitroaniline	< 390	ug/Kg	7/8/2020	17:08
4-Nitrophenol	< 390	ug/Kg	7/8/2020	17:08
Acenaphthene	< 390	ug/Kg	7/8/2020	17:08
Acenaphthylene	< 390	ug/Kg	7/8/2020	17:08
Acetophenone	< 390	ug/Kg	7/8/2020	17:08
Anthracene	< 390	ug/Kg	7/8/2020	17:08
Atrazine	< 390	ug/Kg	7/8/2020	17:08
Benzaldehyde	< 390	ug/Kg	7/8/2020	17:08
Benzo (a) anthracene	< 390	ug/Kg	7/8/2020	17:08
Benzo (a) pyrene	< 390	ug/Kg	7/8/2020	17:08



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier:TP14 5-6Lab Sample ID:203031-29Date Sampled:7/1/2020Matrix:SoilDate Received:7/6/2020

Benzo (b) fluoranthene	< 390	ug/Kg	7/8/2020 17:08
Benzo (g,h,i) perylene	< 390	ug/Kg	7/8/2020 17:08
Benzo (k) fluoranthene	< 390	ug/Kg	7/8/2020 17:08
Bis (2-chloroethoxy) methane	< 390	ug/Kg	7/8/2020 17:08
Bis (2-chloroethyl) ether	< 390	ug/Kg	7/8/2020 17:08
Bis (2-ethylhexyl) phthalate	1530	ug/Kg	7/8/2020 17:08
Butylbenzylphthalate	< 390	ug/Kg	7/8/2020 17:08
Caprolactam	< 390	ug/Kg	7/8/2020 17:08
Carbazole	< 390	ug/Kg	7/8/2020 17:08
Chrysene	< 390	ug/Kg	7/8/2020 17:08
Dibenz (a,h) anthracene	< 390	ug/Kg	7/8/2020 17:08
Dibenzofuran	< 390	ug/Kg	7/8/2020 17:08
Diethyl phthalate	< 390	ug/Kg	7/8/2020 17:08
Dimethyl phthalate	< 390	ug/Kg	7/8/2020 17:08
Di-n-butyl phthalate	786	ug/Kg	7/8/2020 17:08
Di-n-octylphthalate	< 390	ug/Kg	7/8/2020 17:08
Fluoranthene	< 390	ug/Kg	7/8/2020 17:08
Fluorene	< 390	ug/Kg	7/8/2020 17:08
Hexachlorobenzene	< 390	ug/Kg	7/8/2020 17:08
Hexachlorobutadiene	< 390	ug/Kg	7/8/2020 17:08
Hexachlorocyclopentadiene	< 1560	ug/Kg	7/8/2020 17:08
Hexachloroethane	< 390	ug/Kg	7/8/2020 17:08
Indeno (1,2,3-cd) pyrene	< 390	ug/Kg	7/8/2020 17:08
Isophorone	< 390	ug/Kg	7/8/2020 17:08
Naphthalene	< 390	ug/Kg	7/8/2020 17:08
Nitrobenzene	< 390	ug/Kg	7/8/2020 17:08
N-Nitroso-di-n-propylamine	< 390	ug/Kg	7/8/2020 17:08
N-Nitrosodiphenylamine	< 390	ug/Kg	7/8/2020 17:08
Pentachlorophenol	< 780	ug/Kg	7/8/2020 17:08
Phenanthrene	< 390	ug/Kg	7/8/2020 17:08



7/1/2020

Date Sampled:

Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP14 5-6 **Lab Sample ID:** 203031-29

Matrix: Soil Date Received: 7/6/2020

Phenol	6160	ug/Kg			7/8/2020	17:08
Pyrene	< 390	ug/Kg			7/8/2020	17:08
<u>Surrogate</u>	<u>Per</u>	cent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	<u>zed</u>
2,4,6-Tribromophenol		41.4	39 - 88.1		7/8/2020	17:08
2-Fluorobiphenyl		50.5	42.5 - 81.1		7/8/2020	17:08
2-Fluorophenol		47.3	39.8 - 77.3		7/8/2020	17:08
Nitrobenzene-d5		42.5	40.1 - 77.1		7/8/2020	17:08
Phenol-d5		46.8	41.7 - 76.6		7/8/2020	17:08
Terphenyl-d14		47.2	41.6 - 96.8		7/8/2020	17:08

Method Reference(s): EPA 8270D

EPA 3546

 Preparation Date:
 7/7/2020

 Data File:
 B47778.D

Volatile Organics

Analyte	Result	<u>Units</u>	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.01	ug/Kg		7/13/2020 20:30
1,1,2,2-Tetrachloroethane	< 2.01	ug/Kg		7/13/2020 20:30
1,1,2-Trichloroethane	< 2.01	ug/Kg		7/13/2020 20:30
1,1-Dichloroethane	< 2.01	ug/Kg		7/13/2020 20:30
1,1-Dichloroethene	< 2.01	ug/Kg		7/13/2020 20:30
1,2,3-Trichlorobenzene	< 5.03	ug/Kg		7/13/2020 20:30
1,2,4-Trichlorobenzene	< 5.03	ug/Kg		7/13/2020 20:30
1,2,4-Trimethylbenzene	< 2.01	ug/Kg		7/13/2020 20:30
1,2-Dibromo-3-Chloropropane	< 10.1	ug/Kg		7/13/2020 20:30
1,2-Dibromoethane	< 2.01	ug/Kg		7/13/2020 20:30
1,2-Dichlorobenzene	< 2.01	ug/Kg		7/13/2020 20:30
1,2-Dichloroethane	< 2.01	ug/Kg		7/13/2020 20:30
1,2-Dichloropropane	< 2.01	ug/Kg		7/13/2020 20:30
1,3,5-Trimethylbenzene	< 2.01	ug/Kg		7/13/2020 20:30
1,3-Dichlorobenzene	< 2.01	ug/Kg		7/13/2020 20:30
1,4-Dichlorobenzene	< 2.01	ug/Kg		7/13/2020 20:30



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier:TP14 5-6Lab Sample ID:203031-29Date Sampled:7/1/2020Matrix:SoilDate Received:7/6/2020

1,4-Dioxane	< 20.1	ug/Kg	7/13/2020 20:30
2-Butanone	< 10.1	ug/Kg	7/13/2020 20:30
2-Hexanone	< 5.03	ug/Kg	7/13/2020 20:30
4-Methyl-2-pentanone	< 5.03	ug/Kg	7/13/2020 20:30
Acetone	< 10.1	ug/Kg	7/13/2020 20:30
Benzene	< 2.01	ug/Kg	7/13/2020 20:30
Bromochloromethane	< 5.03	ug/Kg	7/13/2020 20:30
Bromodichloromethane	< 2.01	ug/Kg	7/13/2020 20:30
Bromoform	< 5.03	ug/Kg	7/13/2020 20:30
Bromomethane	< 2.01	ug/Kg	7/13/2020 20:30
Carbon disulfide	< 2.01	ug/Kg	7/13/2020 20:30
Carbon Tetrachloride	< 2.01	ug/Kg	7/13/2020 20:30
Chlorobenzene	< 2.01	ug/Kg	7/13/2020 20:30
Chloroethane	< 2.01	ug/Kg	7/13/2020 20:30
Chloroform	< 2.01	ug/Kg	7/13/2020 20:30
Chloromethane	< 2.01	ug/Kg	7/13/2020 20:30
cis-1,2-Dichloroethene	< 2.01	ug/Kg	7/13/2020 20:30
cis-1,3-Dichloropropene	< 2.01	ug/Kg	7/13/2020 20:30
Cyclohexane	< 10.1	ug/Kg	7/13/2020 20:30
Dibromochloromethane	< 2.01	ug/Kg	7/13/2020 20:30
Dichlorodifluoromethane	< 2.01	ug/Kg	7/13/2020 20:30
Ethylbenzene	< 2.01	ug/Kg	7/13/2020 20:30
Freon 113	< 2.01	ug/Kg	7/13/2020 20:30
Isopropylbenzene	< 2.01	ug/Kg	7/13/2020 20:30
m,p-Xylene	< 2.01	ug/Kg	7/13/2020 20:30
Methyl acetate	< 2.01	ug/Kg	7/13/2020 20:30
Methyl tert-butyl Ether	< 2.01	ug/Kg	7/13/2020 20:30
Methylcyclohexane	< 2.01	ug/Kg	7/13/2020 20:30
Methylene chloride	< 5.03	ug/Kg	7/13/2020 20:30
Naphthalene	< 5.03	ug/Kg	7/13/2020 20:30



7/13/2020

7/13/2020

7/13/2020

20:30

20:30

20:30

Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier:	TP14 5-6		
Lab Sample ID:	203031-29	Date Sampled:	7/1/2020
Matrix:	Soil	Date Received:	7/6/2020

n-Butylbenzene	< 2.01	ug/Kg			7/13/2020	20:30
n-Propylbenzene	< 2.01	ug/Kg			7/13/2020	20:30
o-Xylene	< 2.01	ug/Kg			7/13/2020	20:30
p-Isopropyltoluene	< 2.01	ug/Kg			7/13/2020	20:30
sec-Butylbenzene	< 2.01	ug/Kg			7/13/2020	20:30
Styrene	< 5.03	ug/Kg			7/13/2020	20:30
tert-Butylbenzene	< 2.01	ug/Kg			7/13/2020	20:30
Tetrachloroethene	< 2.01	ug/Kg			7/13/2020	20:30
Toluene	< 2.01	ug/Kg			7/13/2020	20:30
trans-1,2-Dichloroethene	< 2.01	ug/Kg			7/13/2020	20:30
trans-1,3-Dichloropropene	< 2.01	ug/Kg			7/13/2020	20:30
Trichloroethene	< 2.01	ug/Kg			7/13/2020	20:30
Trichlorofluoromethane	< 2.01	ug/Kg			7/13/2020	20:30
Vinyl chloride	< 2.01	ug/Kg			7/13/2020	20:30
Surrogate	Pero	cent Recovery	<u>Limits</u>	Outliers	Date Analy	zed
1,2-Dichloroethane-d4		83.0	80.8 - 134		7/13/2020	20:30

92.8

104

97.1

54.9 - 132

85.8 - 114

81 - 117

Internal standard outliers indicate probable matrix interference

Method Reference(s): EPA 8260C

EPA 5035A - L

Data File: x71754.D

4-Bromofluorobenzene

Pentafluorobenzene

Toluene-D8



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP14 5-6 DUP

Lab Sample ID:203031-30Date Sampled:7/1/2020Matrix:SoilDate Received:7/6/2020

Semi-Volatile Organics (Acid/Base Neutrals)

<u>Analyte</u>	Result	<u>Units</u>	Qualifier	Date Analyzed
1,1-Biphenyl	< 346	ug/Kg		7/8/2020 17:37
1,2,4,5-Tetrachlorobenzene	< 346	ug/Kg		7/8/2020 17:37
1,2,4-Trichlorobenzene	< 346	ug/Kg		7/8/2020 17:37
1,2-Dichlorobenzene	< 346	ug/Kg		7/8/2020 17:37
1,3-Dichlorobenzene	< 346	ug/Kg		7/8/2020 17:37
1,4-Dichlorobenzene	< 346	ug/Kg		7/8/2020 17:37
2,2-0xybis (1-chloropropane)	< 346	ug/Kg		7/8/2020 17:37
2,3,4,6-Tetrachlorophenol	< 346	ug/Kg		7/8/2020 17:37
2,4,5-Trichlorophenol	< 346	ug/Kg		7/8/2020 17:37
2,4,6-Trichlorophenol	< 346	ug/Kg		7/8/2020 17:37
2,4-Dichlorophenol	< 346	ug/Kg		7/8/2020 17:37
2,4-Dimethylphenol	781	ug/Kg		7/8/2020 17:37
2,4-Dinitrophenol	< 1390	ug/Kg		7/8/2020 17:37
2,4-Dinitrotoluene	< 346	ug/Kg	M	7/8/2020 17:37
2,6-Dinitrotoluene	< 346	ug/Kg		7/8/2020 17:37
2-Chloronaphthalene	< 346	ug/Kg		7/8/2020 17:37
2-Chlorophenol	< 346	ug/Kg		7/8/2020 17:37
2-Methylnapthalene	< 346	ug/Kg		7/8/2020 17:37
2-Methylphenol	< 346	ug/Kg		7/8/2020 17:37
2-Nitroaniline	< 346	ug/Kg		7/8/2020 17:37
2-Nitrophenol	< 346	ug/Kg		7/8/2020 17:37
3&4-Methylphenol	1550	ug/Kg		7/8/2020 17:37
3,3'-Dichlorobenzidine	< 346	ug/Kg		7/8/2020 17:37
3-Nitroaniline	< 346	ug/Kg		7/8/2020 17:37
4,6-Dinitro-2-methylphenol	< 463	ug/Kg		7/8/2020 17:37
4-Bromophenyl phenyl ether	< 346	ug/Kg		7/8/2020 17:37
4-Chloro-3-methylphenol	< 346	ug/Kg		7/8/2020 17:37
4-Chloroaniline	< 346	ug/Kg		7/8/2020 17:37



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier:TP14 5-6 DUPLab Sample ID:203031-30Date Sampled:7/1/2020Matrix:SoilDate Received:7/6/2020

4-Chlorophenyl phenyl ether	< 346	ug/Kg	7/8/2020 17:37
4-Nitroaniline	< 346	ug/Kg	7/8/2020 17:37
4-Nitrophenol	< 346	ug/Kg	7/8/2020 17:37
Acenaphthene	< 346	ug/Kg	7/8/2020 17:37
Acenaphthylene	< 346	ug/Kg	7/8/2020 17:37
Acetophenone	< 346	ug/Kg	7/8/2020 17:37
Anthracene	< 346	ug/Kg	7/8/2020 17:37
Atrazine	< 346	ug/Kg	7/8/2020 17:37
Benzaldehyde	< 346	ug/Kg	7/8/2020 17:37
Benzo (a) anthracene	< 346	ug/Kg	7/8/2020 17:37
Benzo (a) pyrene	< 346	ug/Kg	7/8/2020 17:37
Benzo (b) fluoranthene	< 346	ug/Kg	7/8/2020 17:37
Benzo (g,h,i) perylene	< 346	ug/Kg	7/8/2020 17:37
Benzo (k) fluoranthene	< 346	ug/Kg	7/8/2020 17:37
Bis (2-chloroethoxy) methane	< 346	ug/Kg	7/8/2020 17:37
Bis (2-chloroethyl) ether	< 346	ug/Kg	7/8/2020 17:37
Bis (2-ethylhexyl) phthalate	< 346	ug/Kg	7/8/2020 17:37
Butylbenzylphthalate	< 346	ug/Kg	7/8/2020 17:37
Caprolactam	< 346	ug/Kg	7/8/2020 17:37
Carbazole	< 346	ug/Kg	7/8/2020 17:37
Chrysene	< 346	ug/Kg	7/8/2020 17:37
Dibenz (a,h) anthracene	< 346	ug/Kg	7/8/2020 17:37
Dibenzofuran	< 346	ug/Kg	7/8/2020 17:37
Diethyl phthalate	< 346	ug/Kg	7/8/2020 17:37
Dimethyl phthalate	< 346	ug/Kg	7/8/2020 17:37
Di-n-butyl phthalate	427	ug/Kg	7/8/2020 17:37
Di-n-octylphthalate	< 346	ug/Kg	7/8/2020 17:37
Fluoranthene	< 346	ug/Kg	7/8/2020 17:37
Fluorene	< 346	ug/Kg	7/8/2020 17:37
Hexachlorobenzene	< 346	ug/Kg	7/8/2020 17:37



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP14 5-6 DUP

 Lab Sample ID:
 203031-30
 Date Sampled:
 7/1/2020

 Matrix:
 Soil
 Date Received:
 7/6/2020

Hexachlorobutadiene	< 346	ug/Kg		7/8/2020 17:37
Hexachlorocyclopentadiene	< 1390	ug/Kg		7/8/2020 17:37
Hexachloroethane	< 346	ug/Kg		7/8/2020 17:37
Indeno (1,2,3-cd) pyrene	< 346	ug/Kg		7/8/2020 17:37
Isophorone	< 346	ug/Kg		7/8/2020 17:37
Naphthalene	< 346	ug/Kg		7/8/2020 17:37
Nitrobenzene	< 346	ug/Kg		7/8/2020 17:37
N-Nitroso-di-n-propylamine	< 346	ug/Kg		7/8/2020 17:37
N-Nitrosodiphenylamine	< 346	ug/Kg		7/8/2020 17:37
Pentachlorophenol	< 693	ug/Kg		7/8/2020 17:37
Phenanthrene	< 346	ug/Kg		7/8/2020 17:37
Phenol	4650	ug/Kg	M	7/8/2020 17:37
Pyrene	< 346	ug/Kg		7/8/2020 17:37

Surrogate	Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	vzed
2,4,6-Tribromophenol	49.2	39 - 88.1		7/8/2020	17:37
2-Fluorobiphenyl	53.1	42.5 - 81.1		7/8/2020	17:37
2-Fluorophenol	56.2	39.8 - 77.3		7/8/2020	17:37
Nitrobenzene-d5	43.3	40.1 - 77.1		7/8/2020	17:37
Phenol-d5	53.5	41.7 - 76.6		7/8/2020	17:37
Terphenyl-d14	46.1	41.6 - 96.8		7/8/2020	17:37

Method Reference(s): EPA 8270D
EPA 3546
Preparation Date: 7/7/2020
Data File: B47779.D



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP15 0-2

Lab Sample ID: 203031-31 **Date Sampled:** 7/1/2020

Matrix: Soil Date Received: 7/6/2020

Mercury

<u>Analyte</u> <u>Result</u> <u>Units</u> <u>Qualifier</u> <u>Date Analyzed</u>

Mercury 0.227 mg/Kg 7/13/2020 12:15

Method Reference(s):EPA 7471BPreparation Date:7/10/2020Data File:QC200713B

RCRA Metals (ICP)

Analyte Result **Units Oualifier Date Analyzed** Arsenic 6.64 mg/Kg 7/14/2020 20:00 Barium 106 7/14/2020 20:00 mg/Kg Cadmium 7/14/2020 20:00 1.84 mg/Kg Chromium 70.8 mg/Kg 7/14/2020 20:00 Lead 39400 7/15/2020 15:07 mg/Kg Selenium 5.15 mg/Kg 7/14/2020 20:00 Silver 7/14/2020 20:00 3.01 mg/Kg

Method Reference(s): EPA 6010C

EPA 3050B



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP15 5-6

Lab Sample ID: 203031-32 **Date Sampled:** 7/1/2020

Matrix: Soil Date Received: 7/6/2020

Mercury

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Mercury	0.106	mg/Kg		7/13/2020 12:17

Method Reference(s):EPA 7471BPreparation Date:7/10/2020Data File:QC200713B

RCRA Metals (ICP)

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	Date Analy	<u>yzed</u>
Arsenic	8.97	mg/Kg		7/14/2020	20:04
Barium	47.2	mg/Kg		7/14/2020	20:04
Cadmium	1.80	mg/Kg		7/14/2020	20:04
Chromium	65.6	mg/Kg		7/14/2020	20:04
Lead	262	mg/Kg		7/14/2020	20:04
Selenium	4.83	mg/Kg		7/14/2020	20:04
Silver	< 0.635	mg/Kg		7/14/2020	20:04

Method Reference(s): EPA 6010C

EPA 3050B

 Preparation Date:
 7/10/2020

 Data File:
 200714C

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	<u>Units</u>	Qualifier	Date Analyzed
1,1-Biphenyl	< 367	ug/Kg		7/8/2020 18:06
1,2,4,5-Tetrachlorobenzene	< 367	ug/Kg		7/8/2020 18:06
1,2,4-Trichlorobenzene	< 367	ug/Kg		7/8/2020 18:06
1,2-Dichlorobenzene	< 367	ug/Kg		7/8/2020 18:06
1,3-Dichlorobenzene	< 367	ug/Kg		7/8/2020 18:06
1,4-Dichlorobenzene	758	ug/Kg		7/8/2020 18:06
2,2-Oxybis (1-chloropropane)	< 367	ug/Kg		7/8/2020 18:06
2,3,4,6-Tetrachlorophenol	< 367	ug/Kg		7/8/2020 18:06
2,4,5-Trichlorophenol	< 367	ug/Kg		7/8/2020 18:06

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

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Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier:TP15 5-6Lab Sample ID:203031-32Date Sampled:7/1/2020Matrix:SoilDate Received:7/6/2020

2,4,6-Trichlorophenol	< 367	ug/Kg	7/8/2020 18:06
2,4-Dichlorophenol	< 367	ug/Kg	7/8/2020 18:06
2,4-Dimethylphenol	1310	ug/Kg	7/8/2020 18:06
2,4-Dinitrophenol	< 1470	ug/Kg	7/8/2020 18:06
2,4-Dinitrotoluene	< 367	ug/Kg	7/8/2020 18:06
2,6-Dinitrotoluene	< 367	ug/Kg	7/8/2020 18:06
2-Chloronaphthalene	< 367	ug/Kg	7/8/2020 18:06
2-Chlorophenol	< 367	ug/Kg	7/8/2020 18:06
2-Methylnapthalene	670	ug/Kg	7/8/2020 18:06
2-Methylphenol	< 367	ug/Kg	7/8/2020 18:06
2-Nitroaniline	< 367	ug/Kg	7/8/2020 18:06
2-Nitrophenol	< 367	ug/Kg	7/8/2020 18:06
3&4-Methylphenol	928	ug/Kg	7/8/2020 18:06
3,3'-Dichlorobenzidine	< 367	ug/Kg	7/8/2020 18:06
3-Nitroaniline	< 367	ug/Kg	7/8/2020 18:06
4,6-Dinitro-2-methylphenol	< 491	ug/Kg	7/8/2020 18:06
4-Bromophenyl phenyl ether	< 367	ug/Kg	7/8/2020 18:06
4-Chloro-3-methylphenol	< 367	ug/Kg	7/8/2020 18:06
4-Chloroaniline	< 367	ug/Kg	7/8/2020 18:06
4-Chlorophenyl phenyl ether	< 367	ug/Kg	7/8/2020 18:06
4-Nitroaniline	< 367	ug/Kg	7/8/2020 18:06
4-Nitrophenol	< 367	ug/Kg	7/8/2020 18:06
Acenaphthene	< 367	ug/Kg	7/8/2020 18:06
Acenaphthylene	< 367	ug/Kg	7/8/2020 18:06
Acetophenone	< 367	ug/Kg	7/8/2020 18:06
Anthracene	< 367	ug/Kg	7/8/2020 18:06
Atrazine	< 367	ug/Kg	7/8/2020 18:06
Benzaldehyde	< 367	ug/Kg	7/8/2020 18:06
Benzo (a) anthracene	561	ug/Kg	7/8/2020 18:06
Benzo (a) pyrene	683	ug/Kg	7/8/2020 18:06



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier:TP15 5-6Lab Sample ID:203031-32Date Sampled:7/1/2020Matrix:SoilDate Received:7/6/2020

Benzo (b) fluoranthene	623	ug/Kg	7/8/2020	18:06
Benzo (g,h,i) perylene	859	ug/Kg	7/8/2020	18:06
Benzo (k) fluoranthene	< 367	ug/Kg	7/8/2020	18:06
Bis (2-chloroethoxy) methane	< 367	ug/Kg	7/8/2020	18:06
Bis (2-chloroethyl) ether	< 367	ug/Kg	7/8/2020	18:06
Bis (2-ethylhexyl) phthalate	< 367	ug/Kg	7/8/2020	18:06
Butylbenzylphthalate	< 367	ug/Kg	7/8/2020	18:06
Caprolactam	< 367	ug/Kg	7/8/2020	18:06
Carbazole	< 367	ug/Kg	7/8/2020	18:06
Chrysene	756	ug/Kg	7/8/2020	18:06
Dibenz (a,h) anthracene	< 367	ug/Kg	7/8/2020	18:06
Dibenzofuran	< 367	ug/Kg	7/8/2020	18:06
Diethyl phthalate	< 367	ug/Kg	7/8/2020	18:06
Dimethyl phthalate	< 367	ug/Kg	7/8/2020	18:06
Di-n-butyl phthalate	390	ug/Kg	7/8/2020	18:06
Di-n-octylphthalate	< 367	ug/Kg	7/8/2020	18:06
Fluoranthene	485	ug/Kg	7/8/2020	18:06
Fluorene	< 367	ug/Kg	7/8/2020	18:06
Hexachlorobenzene	< 367	ug/Kg	7/8/2020	18:06
Hexachlorobutadiene	< 367	ug/Kg	7/8/2020	18:06
Hexachlorocyclopentadiene	< 1470	ug/Kg	7/8/2020	18:06
Hexachloroethane	< 367	ug/Kg	7/8/2020	18:06
Indeno (1,2,3-cd) pyrene	581	ug/Kg	7/8/2020	18:06
Isophorone	< 367	ug/Kg	7/8/2020	18:06
Naphthalene	383	ug/Kg	7/8/2020	18:06
Nitrobenzene	< 367	ug/Kg	7/8/2020	18:06
N-Nitroso-di-n-propylamine	< 367	ug/Kg	7/8/2020	18:06
N-Nitrosodiphenylamine	< 367	ug/Kg	7/8/2020	18:06
Pentachlorophenol	< 734	ug/Kg	7/8/2020	18:06
Phenanthrene	476	ug/Kg	7/8/2020	18:06



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP15 5-6

 Lab Sample ID:
 203031-32
 Date Sampled:
 7/1/2020

 Matrix:
 Soil
 Date Received:
 7/6/2020

Phenol	6830	ug/Kg			7/8/2020	18:06
Pyrene	501	ug/Kg			7/8/2020	18:06
Surrogate	<u>Perc</u>	ent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
2,4,6-Tribromophenol		52.7	39 - 88.1		7/8/2020	18:06
2-Fluorobiphenyl		63.0	42.5 - 81.1		7/8/2020	18:06
2-Fluorophenol		55.8	39.8 - 77.3		7/8/2020	18:06
Nitrobenzene-d5		63.3	40.1 - 77.1		7/8/2020	18:06
Phenol-d5		55.6	41.7 - 76.6		7/8/2020	18:06
Terphenyl-d14		64.6	41.6 - 96.8		7/8/2020	18:06

Method Reference(s): EPA 8270D

EPA 3546

 Preparation Date:
 7/7/2020

 Data File:
 B47780.D

Volatile Organics

Analyte	Result	<u>Units</u>	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.64	ug/Kg		7/13/2020 20:52
1,1,2,2-Tetrachloroethane	< 2.64	ug/Kg		7/13/2020 20:52
1,1,2-Trichloroethane	< 2.64	ug/Kg		7/13/2020 20:52
1,1-Dichloroethane	< 2.64	ug/Kg		7/13/2020 20:52
1,1-Dichloroethene	< 2.64	ug/Kg		7/13/2020 20:52
1,2,3-Trichlorobenzene	< 6.60	ug/Kg		7/13/2020 20:52
1,2,4-Trichlorobenzene	< 6.60	ug/Kg		7/13/2020 20:52
1,2,4-Trimethylbenzene	< 2.64	ug/Kg		7/13/2020 20:52
1,2-Dibromo-3-Chloropropane	< 13.2	ug/Kg		7/13/2020 20:52
1,2-Dibromoethane	< 2.64	ug/Kg		7/13/2020 20:52
1,2-Dichlorobenzene	< 2.64	ug/Kg		7/13/2020 20:52
1,2-Dichloroethane	< 2.64	ug/Kg		7/13/2020 20:52
1,2-Dichloropropane	< 2.64	ug/Kg		7/13/2020 20:52
1,3,5-Trimethylbenzene	< 2.64	ug/Kg		7/13/2020 20:52
1,3-Dichlorobenzene	< 2.64	ug/Kg		7/13/2020 20:52
1,4-Dichlorobenzene	< 2.64	ug/Kg		7/13/2020 20:52



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier:	TP15 5-6		
Lab Sample ID:	203031-32	Date Sampled:	7/1/2020
Matrix:	Soil	Date Received:	7/6/2020

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1,4-Dioxane	< 26.4	ug/Kg	7/13/2020 20:52
2-Butanone	< 13.2	ug/Kg	7/13/2020 20:52
2-Hexanone	< 6.60	ug/Kg	7/13/2020 20:52
4-Methyl-2-pentanone	< 6.60	ug/Kg	7/13/2020 20:52
Acetone	15.4	ug/Kg	7/13/2020 20:52
Benzene	< 2.64	ug/Kg	7/13/2020 20:52
Bromochloromethane	< 6.60	ug/Kg	7/13/2020 20:52
Bromodichloromethane	< 2.64	ug/Kg	7/13/2020 20:52
Bromoform	< 6.60	ug/Kg	7/13/2020 20:52
Bromomethane	< 2.64	ug/Kg	7/13/2020 20:52
Carbon disulfide	< 2.64	ug/Kg	7/13/2020 20:52
Carbon Tetrachloride	< 2.64	ug/Kg	7/13/2020 20:52
Chlorobenzene	< 2.64	ug/Kg	7/13/2020 20:52
Chloroethane	< 2.64	ug/Kg	7/13/2020 20:52
Chloroform	< 2.64	ug/Kg	7/13/2020 20:52
Chloromethane	< 2.64	ug/Kg	7/13/2020 20:52
cis-1,2-Dichloroethene	< 2.64	ug/Kg	7/13/2020 20:52
cis-1,3-Dichloropropene	< 2.64	ug/Kg	7/13/2020 20:52
Cyclohexane	< 13.2	ug/Kg	7/13/2020 20:52
Dibromochloromethane	< 2.64	ug/Kg	7/13/2020 20:52
Dichlorodifluoromethane	< 2.64	ug/Kg	7/13/2020 20:52
Ethylbenzene	< 2.64	ug/Kg	7/13/2020 20:52
Freon 113	< 2.64	ug/Kg	7/13/2020 20:52
Isopropylbenzene	< 2.64	ug/Kg	7/13/2020 20:52
m,p-Xylene	< 2.64	ug/Kg	7/13/2020 20:52
Methyl acetate	< 2.64	ug/Kg	7/13/2020 20:52
Methyl tert-butyl Ether	< 2.64	ug/Kg	7/13/2020 20:52
Methylcyclohexane	< 2.64	ug/Kg	7/13/2020 20:52
Methylene chloride	< 6.60	ug/Kg	7/13/2020 20:52
Naphthalene	< 6.60	ug/Kg	7/13/2020 20:52



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier:	TP15 5-6		
Lab Sample ID:	203031-32	Date Sampled:	7/1/2020
Matrix:	Soil	Date Received:	7/6/2020

<u>.</u>	mir vPmrs	<u> </u>	CCOVCIA		<u>Vadicis</u>	<u> </u>	acu
S	<u>urrogate</u>	Percent R	ecoverv	Limits	Outliers	Date Analy	zed
	Vinyl chloride	< 2.64	ug/Kg			7/13/2020	20:52
	Trichlorofluoromethane	< 2.64	ug/Kg			7/13/2020	20:52
	Trichloroethene	< 2.64	ug/Kg			7/13/2020	20:52
	trans-1,3-Dichloropropene	< 2.64	ug/Kg			7/13/2020	20:52
	trans-1,2-Dichloroethene	< 2.64	ug/Kg			7/13/2020	20:52
	Toluene	< 2.64	ug/Kg			7/13/2020	20:52
	Tetrachloroethene	< 2.64	ug/Kg			7/13/2020	20:52
	tert-Butylbenzene	< 2.64	ug/Kg			7/13/2020	20:52
	Styrene	< 6.60	ug/Kg			7/13/2020	20:52
	sec-Butylbenzene	< 2.64	ug/Kg			7/13/2020	20:52
	p-Isopropyltoluene	< 2.64	ug/Kg			7/13/2020	20:52
	o-Xylene	< 2.64	ug/Kg			7/13/2020	20:52
	n-Propylbenzene	< 2.64	ug/Kg			7/13/2020	20:52
	n-Butylbenzene	< 2.64	ug/Kg			7/13/2020	20:52

urrogate	Percent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
1,2-Dichloroethane-d4	87.6	80.8 - 134		7/13/2020	20:52
4-Bromofluorobenzene	90.3	54.9 - 132		7/13/2020	20:52
Pentafluorobenzene	104	85.8 - 114		7/13/2020	20:52
Toluene-D8	96.1	81 - 117		7/13/2020	20:52

Internal standard outliers indicate probable matrix interference

Method Reference(s): EPA 8260C

EPA 5035A - L

Data File: x71755.D



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP16 0-2

Lab Sample ID: 203031-33 **Date Sampled:** 7/1/2020

Matrix: Soil Date Received: 7/6/2020

Mercury

<u>Analyte</u> <u>Result</u> <u>Units</u> <u>Qualifier</u> <u>Date Analyzed</u>

Mercury **0.0163** mg/Kg 7/13/2020 12:19

Method Reference(s):EPA 7471BPreparation Date:7/10/2020Data File:QC200713B

RCRA Metals (ICP)

Analyte Result **Units Oualifier Date Analyzed** Arsenic 3.33 mg/Kg 7/14/2020 20:08 Barium 194 mg/Kg 7/14/2020 20:08 Cadmium 7/14/2020 20:08 1.40 mg/Kg Chromium 12.5 mg/Kg 7/14/2020 20:08 Lead 46.2 7/14/2020 20:08 mg/Kg Selenium < 1.16 mg/Kg 7/14/2020 20:08 Silver < 0.578 7/14/2020 20:08 mg/Kg

Method Reference(s): EPA 6010C

EPA 3050B



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP16 4-5

Lab Sample ID: 203031-34 **Date Sampled:** 7/1/2020

Matrix: Soil Date Received: 7/6/2020

Mercury

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	Date Analyzed
Mercury	0.0114	mg/Kg		7/13/2020 12:21

Method Reference(s):EPA 7471BPreparation Date:7/10/2020Data File:QC200713B

RCRA Metals (ICP)

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	Date Analy	<u>vzed</u>
Arsenic	2.91	mg/Kg		7/15/2020	15:12
Barium	65.3	mg/Kg		7/14/2020	20:13
Cadmium	0.768	mg/Kg		7/14/2020	20:13
Chromium	8.46	mg/Kg		7/14/2020	20:13
Lead	20.4	mg/Kg		7/14/2020	20:13
Selenium	< 1.27	mg/Kg		7/14/2020	20:13
Silver	< 0.637	mg/Kg		7/14/2020	20:13

Method Reference(s): EPA 6010C

EPA 3050B

 Preparation Date:
 7/10/2020

 Data File:
 200715B

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	<u>Units</u>	Qualifier	Date Analy	yzed
1,1-Biphenyl	< 349	ug/Kg		7/8/2020	18:35
1,2,4,5-Tetrachlorobenzene	< 349	ug/Kg		7/8/2020	18:35
1,2,4-Trichlorobenzene	< 349	ug/Kg		7/8/2020	18:35
1,2-Dichlorobenzene	< 349	ug/Kg		7/8/2020	18:35
1,3-Dichlorobenzene	< 349	ug/Kg		7/8/2020	18:35
1,4-Dichlorobenzene	< 349	ug/Kg		7/8/2020	18:35
2,2-Oxybis (1-chloropropane)	< 349	ug/Kg		7/8/2020	18:35
2,3,4,6-Tetrachlorophenol	< 349	ug/Kg		7/8/2020	18:35
2,4,5-Trichlorophenol	< 349	ug/Kg		7/8/2020	18:35

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Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier:	TP16 4-5		
Lab Sample ID:	203031-34	Date Sampled:	7/1/2020
Matrix:	Soil	Date Received:	7/6/2020

			- /	
2,4,6-Trichlorophenol	< 349	ug/Kg	7/8/2020	18:35
2,4-Dichlorophenol	< 349	ug/Kg	7/8/2020	18:35
2,4-Dimethylphenol	< 349	ug/Kg	7/8/2020	18:35
2,4-Dinitrophenol	< 1390	ug/Kg	7/8/2020	18:35
2,4-Dinitrotoluene	< 349	ug/Kg	7/8/2020	18:35
2,6-Dinitrotoluene	< 349	ug/Kg	7/8/2020	18:35
2-Chloronaphthalene	< 349	ug/Kg	7/8/2020	18:35
2-Chlorophenol	< 349	ug/Kg	7/8/2020	18:35
2-Methylnapthalene	< 349	ug/Kg	7/8/2020	18:35
2-Methylphenol	< 349	ug/Kg	7/8/2020	18:35
2-Nitroaniline	< 349	ug/Kg	7/8/2020	18:35
2-Nitrophenol	< 349	ug/Kg	7/8/2020	18:35
3&4-Methylphenol	< 349	ug/Kg	7/8/2020	18:35
3,3'-Dichlorobenzidine	< 349	ug/Kg	7/8/2020	18:35
3-Nitroaniline	< 349	ug/Kg	7/8/2020	18:35
4,6-Dinitro-2-methylphenol	< 466	ug/Kg	7/8/2020	18:35
4-Bromophenyl phenyl ether	< 349	ug/Kg	7/8/2020	18:35
4-Chloro-3-methylphenol	< 349	ug/Kg	7/8/2020	18:35
4-Chloroaniline	< 349	ug/Kg	7/8/2020	18:35
4-Chlorophenyl phenyl ether	< 349	ug/Kg	7/8/2020	18:35
4-Nitroaniline	< 349	ug/Kg	7/8/2020	18:35
4-Nitrophenol	< 349	ug/Kg	7/8/2020	18:35
Acenaphthene	< 349	ug/Kg	7/8/2020	18:35
Acenaphthylene	< 349	ug/Kg	7/8/2020	18:35
Acetophenone	< 349	ug/Kg	7/8/2020	18:35
Anthracene	< 349	ug/Kg	7/8/2020	18:35
Atrazine	< 349	ug/Kg	7/8/2020	18:35
Benzaldehyde	< 349	ug/Kg	7/8/2020	18:35
Benzo (a) anthracene	< 349	ug/Kg	7/8/2020	18:35
Benzo (a) pyrene	< 349	ug/Kg	7/8/2020	18:35



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier:TP16 4-5Lab Sample ID:203031-34Date Sampled:7/1/2020Matrix:SoilDate Received:7/6/2020

Benzo (b) fluoranthene	< 349	ug/Kg	7/8/2020 18:35
Benzo (g,h,i) perylene	< 349	ug/Kg	7/8/2020 18:35
Benzo (k) fluoranthene	< 349	ug/Kg	7/8/2020 18:35
Bis (2-chloroethoxy) methane	< 349	ug/Kg	7/8/2020 18:35
Bis (2-chloroethyl) ether	< 349	ug/Kg	7/8/2020 18:35
Bis (2-ethylhexyl) phthalate	< 349	ug/Kg	7/8/2020 18:35
Butylbenzylphthalate	< 349	ug/Kg	7/8/2020 18:35
Caprolactam	< 349	ug/Kg	7/8/2020 18:35
Carbazole	< 349	ug/Kg	7/8/2020 18:35
Chrysene	< 349	ug/Kg	7/8/2020 18:35
Dibenz (a,h) anthracene	< 349	ug/Kg	7/8/2020 18:35
Dibenzofuran	< 349	ug/Kg	7/8/2020 18:35
Diethyl phthalate	< 349	ug/Kg	7/8/2020 18:35
Dimethyl phthalate	< 349	ug/Kg	7/8/2020 18:35
Di-n-butyl phthalate	< 349	ug/Kg	7/8/2020 18:35
Di-n-octylphthalate	< 349	ug/Kg	7/8/2020 18:35
Fluoranthene	< 349	ug/Kg	7/8/2020 18:35
Fluorene	< 349	ug/Kg	7/8/2020 18:35
Hexachlorobenzene	< 349	ug/Kg	7/8/2020 18:35
Hexachlorobutadiene	< 349	ug/Kg	7/8/2020 18:35
Hexachlorocyclopentadiene	< 1390	ug/Kg	7/8/2020 18:35
Hexachloroethane	< 349	ug/Kg	7/8/2020 18:35
Indeno (1,2,3-cd) pyrene	< 349	ug/Kg	7/8/2020 18:35
Isophorone	< 349	ug/Kg	7/8/2020 18:35
Naphthalene	< 349	ug/Kg	7/8/2020 18:35
Nitrobenzene	< 349	ug/Kg	7/8/2020 18:35
N-Nitroso-di-n-propylamine	< 349	ug/Kg	7/8/2020 18:35
N-Nitrosodiphenylamine	< 349	ug/Kg	7/8/2020 18:35
Pentachlorophenol	< 697	ug/Kg	7/8/2020 18:35
Phenanthrene	< 349	ug/Kg	7/8/2020 18:35



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP16 4-5 **Lab Sample ID:** 203031-34

Lab Sample ID:203031-34Date Sampled:7/1/2020Matrix:SoilDate Received:7/6/2020

Phenol	< 349	ug/Kg			7/8/2020	18:35
Pyrene	< 349	ug/Kg			7/8/2020	18:35
<u>Surrogate</u>	<u>Perce</u>	ent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	<u>zed</u>
2,4,6-Tribromophenol		67.2	39 - 88.1		7/8/2020	18:35
2-Fluorobiphenyl		72.3	42.5 - 81.1		7/8/2020	18:35
2-Fluorophenol		74.7	39.8 - 77.3		7/8/2020	18:35
Nitrobenzene-d5		72.4	40.1 - 77.1		7/8/2020	18:35
Phenol-d5		66.8	41.7 - 76.6		7/8/2020	18:35
Terphenyl-d14		73.2	41.6 - 96.8		7/8/2020	18:35

Method Reference(s): EPA 8270D

EPA 3546

 Preparation Date:
 7/7/2020

 Data File:
 B47781.D

Volatile Organics

Analyte	Result	<u>Units</u>	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.07	ug/Kg		7/13/2020 21:15
1,1,2,2-Tetrachloroethane	< 2.07	ug/Kg		7/13/2020 21:15
1,1,2-Trichloroethane	< 2.07	ug/Kg		7/13/2020 21:15
1,1-Dichloroethane	< 2.07	ug/Kg		7/13/2020 21:15
1,1-Dichloroethene	< 2.07	ug/Kg		7/13/2020 21:15
1,2,3-Trichlorobenzene	< 5.17	ug/Kg		7/13/2020 21:15
1,2,4-Trichlorobenzene	< 5.17	ug/Kg		7/13/2020 21:15
1,2,4-Trimethylbenzene	< 2.07	ug/Kg		7/13/2020 21:15
1,2-Dibromo-3-Chloropropane	< 10.3	ug/Kg		7/13/2020 21:15
1,2-Dibromoethane	< 2.07	ug/Kg		7/13/2020 21:15
1,2-Dichlorobenzene	< 2.07	ug/Kg		7/13/2020 21:15
1,2-Dichloroethane	< 2.07	ug/Kg		7/13/2020 21:15
1,2-Dichloropropane	< 2.07	ug/Kg		7/13/2020 21:15
1,3,5-Trimethylbenzene	< 2.07	ug/Kg		7/13/2020 21:15
1,3-Dichlorobenzene	< 2.07	ug/Kg		7/13/2020 21:15
1,4-Dichlorobenzene	< 2.07	ug/Kg		7/13/2020 21:15



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier:	TP16 4-5		
Lab Sample ID:	203031-34	Date Sampled:	7/1/2020
Matrix:	Soil	Date Received:	7/6/2020

Mati ix.		3011			Date Received.	7/0/2020	
1,4-D	ioxane		< 20.7	ug/Kg		7/13/2020	21:15
2-But	tanone		< 10.3	ug/Kg		7/13/2020	21:15
2-Hex	xanone		< 5.17	ug/Kg		7/13/2020	21:15
4-Me	thyl-2-pentanone		< 5.17	ug/Kg		7/13/2020	21:15
Aceto	one		< 10.3	ug/Kg		7/13/2020	21:15
Benze	ene		< 2.07	ug/Kg		7/13/2020	21:15
Brom	ochloromethane		< 5.17	ug/Kg		7/13/2020	21:15
Brom	odichloromethane		< 2.07	ug/Kg		7/13/2020	21:15
Brom	oform		< 5.17	ug/Kg		7/13/2020	21:15
Brom	omethane		< 2.07	ug/Kg		7/13/2020	21:15
Carbo	on disulfide		< 2.07	ug/Kg		7/13/2020	21:15
Carbo	on Tetrachloride		< 2.07	ug/Kg		7/13/2020	21:15
Chlor	obenzene		< 2.07	ug/Kg		7/13/2020	21:15
Chlor	oethane		< 2.07	ug/Kg		7/13/2020	21:15
Chlor	oform		< 2.07	ug/Kg		7/13/2020	21:15
Chlor	omethane		< 2.07	ug/Kg		7/13/2020	21:15
cis-1,	2-Dichloroethene		< 2.07	ug/Kg		7/13/2020	21:15
cis-1,	3-Dichloropropene		< 2.07	ug/Kg		7/13/2020	21:15
Cyclo	hexane		< 10.3	ug/Kg		7/13/2020	21:15
Dibro	omochloromethane		< 2.07	ug/Kg		7/13/2020	21:15
Dichl	orodifluoromethane	e	< 2.07	ug/Kg		7/13/2020	21:15
Ethyl	benzene		< 2.07	ug/Kg		7/13/2020	21:15
Freor	n 113		< 2.07	ug/Kg		7/13/2020	21:15
Isopr	opylbenzene		< 2.07	ug/Kg		7/13/2020	21:15
m,p-X	Kylene		< 2.07	ug/Kg		7/13/2020	21:15
Meth	yl acetate		< 2.07	ug/Kg		7/13/2020	21:15
Meth	yl tert-butyl Ether		< 2.07	ug/Kg		7/13/2020	21:15
Meth	ylcyclohexane		< 2.07	ug/Kg		7/13/2020	21:15
Meth	ylene chloride		< 5.17	ug/Kg		7/13/2020	21:15
Naph	thalene		< 5.17	ug/Kg		7/13/2020	21:15

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Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier:	TP16 4-5		
Lab Sample ID:	203031-34	Date Sampled:	7/1/2020
Matrix:	Soil	Date Received:	7/6/2020

n-Butylbenzene	< 2.07	ug/Kg			7/13/2020	21:15
n-Propylbenzene	< 2.07	ug/Kg			7/13/2020	21:15
o-Xylene	< 2.07	ug/Kg			7/13/2020	21:15
p-Isopropyltoluene	< 2.07	ug/Kg			7/13/2020	21:15
sec-Butylbenzene	< 2.07	ug/Kg			7/13/2020	21:15
Styrene	< 5.17	ug/Kg			7/13/2020	21:15
tert-Butylbenzene	< 2.07	ug/Kg			7/13/2020	21:15
Tetrachloroethene	< 2.07	ug/Kg			7/13/2020	21:15
Toluene	< 2.07	ug/Kg			7/13/2020	21:15
trans-1,2-Dichloroethene	< 2.07	ug/Kg			7/13/2020	21:15
trans-1,3-Dichloropropene	< 2.07	ug/Kg			7/13/2020	21:15
Trichloroethene	< 2.07	ug/Kg			7/13/2020	21:15
Trichlorofluoromethane	< 2.07	ug/Kg			7/13/2020	21:15
Vinyl chloride	< 2.07	ug/Kg			7/13/2020	21:15
Surrogate	Per	cent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
1,2-Dichloroethane-d4		85.5	80.8 - 134		7/13/2020	21:15
4-Bromofluorobenzene		81.9	54.9 - 132		7/13/2020	21:15
Pentafluorobenzene		107	85.8 - 114		7/13/2020	21:15

98.3

81 - 117

7/13/2020

21:15

Internal standard outliers indicate probable matrix interference

Method Reference(s): EPA 8260C

EPA 5035A - L

Data File: x71756.D

Toluene-D8



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP17 0-2

Lab Sample ID: 203031-35 **Date Sampled:** 7/1/2020

Matrix: Soil Date Received: 7/6/2020

Mercury

<u>Analyte</u> <u>Result</u> <u>Units</u> <u>Qualifier</u> <u>Date Analyzed</u>

Mercury **0.257** mg/Kg 7/13/2020 12:23

Method Reference(s):EPA 7471BPreparation Date:7/10/2020Data File:QC200713B

RCRA Metals (ICP)

Analyte Result **Units Oualifier Date Analyzed** Arsenic 5.17 mg/Kg 7/14/2020 20:18 Barium 112 mg/Kg 7/14/2020 20:18 Cadmium 1.87 mg/Kg 7/14/2020 20:18 Chromium 27.9 mg/Kg 7/14/2020 20:18 Lead 47.4 7/14/2020 20:18 mg/Kg Selenium < 1.12 mg/Kg 7/14/2020 20:18 Silver < 0.562 7/14/2020 20:18 mg/Kg

Method Reference(s): EPA 6010C

EPA 3050B

 Preparation Date:
 7/10/2020

 Data File:
 200714C



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP17 4-5

Lab Sample ID: 203031-36 **Date Sampled:** 7/1/2020

Matrix: Soil Date Received: 7/6/2020

Mercury

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed
Mercury	1.49	mg/Kg		7/13/2020 12:40

Method Reference(s):EPA 7471BPreparation Date:7/10/2020Data File:QC200713B

RCRA Metals (ICP)

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	Date Analyzed
Arsenic	18.8	mg/Kg		7/14/2020 20:22
Barium	70.2	mg/Kg		7/14/2020 20:22
Cadmium	4.32	mg/Kg		7/14/2020 20:22
Chromium	35.5	mg/Kg		7/14/2020 20:22
Lead	499	mg/Kg		7/14/2020 20:22
Selenium	< 1.35	mg/Kg		7/14/2020 20:22
Silver	< 0.677	mg/Kg		7/14/2020 20:22

Method Reference(s): EPA 6010C

EPA 3050B

 Preparation Date:
 7/10/2020

 Data File:
 200714C

Semi-Volatile Organics (Acid/Base Neutrals)

<u>Analyte</u>	Result	<u>Units</u>	Qualifier	Date Analy	yzed
1,1-Biphenyl	649	ug/Kg		7/8/2020	19:04
1,2,4,5-Tetrachlorobenzene	< 384	ug/Kg		7/8/2020	19:04
1,2,4-Trichlorobenzene	< 384	ug/Kg		7/8/2020	19:04
1,2-Dichlorobenzene	< 384	ug/Kg		7/8/2020	19:04
1,3-Dichlorobenzene	< 384	ug/Kg		7/8/2020	19:04
1,4-Dichlorobenzene	< 384	ug/Kg		7/8/2020	19:04
2,2-Oxybis (1-chloropropane)	< 384	ug/Kg		7/8/2020	19:04
2,3,4,6-Tetrachlorophenol	< 384	ug/Kg		7/8/2020	19:04
2,4,5-Trichlorophenol	< 384	ug/Kg		7/8/2020	19:04

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Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier:TP17 4-5Lab Sample ID:203031-36Date Sampled:7/1/2020Matrix:SoilDate Received:7/6/2020

2,4,6-Trichlorophenol	< 384	ug/Kg	7/8/2020	19:04
2,4-Dichlorophenol	< 384	ug/Kg	7/8/2020	19:04
2,4-Dimethylphenol	< 384	ug/Kg	7/8/2020	19:04
2,4-Dinitrophenol	< 1540	ug/Kg	7/8/2020	19:04
2,4-Dinitrotoluene	< 384	ug/Kg	7/8/2020	19:04
2,6-Dinitrotoluene	< 384	ug/Kg	7/8/2020	19:04
2-Chloronaphthalene	< 384	ug/Kg	7/8/2020	19:04
2-Chlorophenol	< 384	ug/Kg	7/8/2020	19:04
2-Methylnapthalene	8370	ug/Kg	7/8/2020	19:04
2-Methylphenol	< 384	ug/Kg	7/8/2020	19:04
2-Nitroaniline	< 384	ug/Kg	7/8/2020	19:04
2-Nitrophenol	< 384	ug/Kg	7/8/2020	19:04
3&4-Methylphenol	< 384	ug/Kg	7/8/2020	19:04
3,3'-Dichlorobenzidine	< 384	ug/Kg	7/8/2020	19:04
3-Nitroaniline	< 384	ug/Kg	7/8/2020	19:04
4,6-Dinitro-2-methylphenol	< 514	ug/Kg	7/8/2020	19:04
4-Bromophenyl phenyl ether	< 384	ug/Kg	7/8/2020	19:04
4-Chloro-3-methylphenol	< 384	ug/Kg	7/8/2020	19:04
4-Chloroaniline	< 384	ug/Kg	7/8/2020	19:04
4-Chlorophenyl phenyl ether	< 384	ug/Kg	7/8/2020	19:04
4-Nitroaniline	< 384	ug/Kg	7/8/2020	19:04
4-Nitrophenol	< 384	ug/Kg	7/8/2020	19:04
Acenaphthene	< 384	ug/Kg	7/8/2020	19:04
Acenaphthylene	< 384	ug/Kg	7/8/2020	19:04
Acetophenone	< 384	ug/Kg	7/8/2020	19:04
Anthracene	< 384	ug/Kg	7/8/2020	19:04
Atrazine	< 384	ug/Kg	7/8/2020	19:04
Benzaldehyde	< 384	ug/Kg	7/8/2020	19:04
Benzo (a) anthracene	470	ug/Kg	7/8/2020	19:04
Benzo (a) pyrene	< 384	ug/Kg	7/8/2020	19:04

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Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier:TP17 4-5Lab Sample ID:203031-36Date Sampled:7/1/2020Matrix:SoilDate Received:7/6/2020

Benzo (b) fluoranthene	< 384	ug/Kg	7/8/2020 19:04
Benzo (g,h,i) perylene	< 384	ug/Kg	7/8/2020 19:04
Benzo (k) fluoranthene	< 384	ug/Kg	7/8/2020 19:04
Bis (2-chloroethoxy) methane	< 384	ug/Kg	7/8/2020 19:04
Bis (2-chloroethyl) ether	< 384	ug/Kg	7/8/2020 19:04
Bis (2-ethylhexyl) phthalate	< 384	ug/Kg	7/8/2020 19:04
Butylbenzylphthalate	< 384	ug/Kg	7/8/2020 19:04
Caprolactam	< 384	ug/Kg	7/8/2020 19:04
Carbazole	< 384	ug/Kg	7/8/2020 19:04
Chrysene	442	ug/Kg	7/8/2020 19:04
Dibenz (a,h) anthracene	< 384	ug/Kg	7/8/2020 19:04
Dibenzofuran	1590	ug/Kg	7/8/2020 19:04
Diethyl phthalate	< 384	ug/Kg	7/8/2020 19:04
Dimethyl phthalate	< 384	ug/Kg	7/8/2020 19:04
Di-n-butyl phthalate	< 384	ug/Kg	7/8/2020 19:04
Di-n-octylphthalate	< 384	ug/Kg	7/8/2020 19:04
Fluoranthene	410	ug/Kg	7/8/2020 19:04
Fluorene	< 384	ug/Kg	7/8/2020 19:04
Hexachlorobenzene	< 384	ug/Kg	7/8/2020 19:04
Hexachlorobutadiene	< 384	ug/Kg	7/8/2020 19:04
Hexachlorocyclopentadiene	< 1540	ug/Kg	7/8/2020 19:04
Hexachloroethane	< 384	ug/Kg	7/8/2020 19:04
Indeno (1,2,3-cd) pyrene	< 384	ug/Kg	7/8/2020 19:04
Isophorone	< 384	ug/Kg	7/8/2020 19:04
Naphthalene	7020	ug/Kg	7/8/2020 19:04
Nitrobenzene	< 384	ug/Kg	7/8/2020 19:04
N-Nitroso-di-n-propylamine	< 384	ug/Kg	7/8/2020 19:04
N-Nitrosodiphenylamine	< 384	ug/Kg	7/8/2020 19:04
Pentachlorophenol	< 769	ug/Kg	7/8/2020 19:04
Phenanthrene	3240	ug/Kg	7/8/2020 19:04

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Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP17 4-5

 Lab Sample ID:
 203031-36
 Date Sampled:
 7/1/2020

 Matrix:
 Soil
 Date Received:
 7/6/2020

Phenol	< 384	ug/Kg			7/8/2020	19:04
Pyrene	425	ug/Kg			7/8/2020	19:04
<u>Surrogate</u>	<u>Perc</u>	ent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	zed
2,4,6-Tribromophenol		49.0	39 - 88.1		7/8/2020	19:04
2-Fluorobiphenyl		55.3	42.5 - 81.1		7/8/2020	19:04
2-Fluorophenol		52.6	39.8 - 77.3		7/8/2020	19:04
Nitrobenzene-d5		48.4	40.1 - 77.1		7/8/2020	19:04
Phenol-d5		50.5	41.7 - 76.6		7/8/2020	19:04
Terphenyl-d14		48.9	41.6 - 96.8		7/8/2020	19:04

Method Reference(s): EPA 8270D

EPA 3546

 Preparation Date:
 7/7/2020

 Data File:
 B47782.D

Volatile Organics

Analyte	Result	<u>Units</u>	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 4.61	ug/Kg		7/13/2020 21:37
1,1,2,2-Tetrachloroethane	< 4.61	ug/Kg		7/13/2020 21:37
1,1,2-Trichloroethane	< 4.61	ug/Kg		7/13/2020 21:37
1,1-Dichloroethane	< 4.61	ug/Kg		7/13/2020 21:37
1,1-Dichloroethene	< 4.61	ug/Kg		7/13/2020 21:37
1,2,3-Trichlorobenzene	< 11.5	ug/Kg		7/13/2020 21:37
1,2,4-Trichlorobenzene	< 11.5	ug/Kg		7/13/2020 21:37
1,2,4-Trimethylbenzene	< 4.61	ug/Kg		7/13/2020 21:37
1,2-Dibromo-3-Chloropropane	< 23.0	ug/Kg		7/13/2020 21:37
1,2-Dibromoethane	< 4.61	ug/Kg		7/13/2020 21:37
1,2-Dichlorobenzene	< 4.61	ug/Kg		7/13/2020 21:37
1,2-Dichloroethane	< 4.61	ug/Kg		7/13/2020 21:37
1,2-Dichloropropane	< 4.61	ug/Kg		7/13/2020 21:37
1,3,5-Trimethylbenzene	< 4.61	ug/Kg		7/13/2020 21:37
1,3-Dichlorobenzene	< 4.61	ug/Kg		7/13/2020 21:37
1,4-Dichlorobenzene	< 4.61	ug/Kg		7/13/2020 21:37

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Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier:	TP17 4-5	
Lab Sample ID:	203031-36	Date Sampled: 7/1/2020
Matrix:	Soil	Date Received: 7/6/2020

			1 -1
1,4-Dioxane	< 46.1	ug/Kg	7/13/2020 21:37
2-Butanone	< 23.0	ug/Kg	7/13/2020 21:37
2-Hexanone	< 11.5	ug/Kg	7/13/2020 21:37
4-Methyl-2-pentanone	< 11.5	ug/Kg	7/13/2020 21:37
Acetone	< 23.0	ug/Kg	7/13/2020 21:37
Benzene	< 4.61	ug/Kg	7/13/2020 21:37
Bromochloromethane	< 11.5	ug/Kg	7/13/2020 21:37
Bromodichloromethane	< 4.61	ug/Kg	7/13/2020 21:37
Bromoform	< 11.5	ug/Kg	7/13/2020 21:37
Bromomethane	< 4.61	ug/Kg	7/13/2020 21:37
Carbon disulfide	< 4.61	ug/Kg	7/13/2020 21:37
Carbon Tetrachloride	< 4.61	ug/Kg	7/13/2020 21:37
Chlorobenzene	< 4.61	ug/Kg	7/13/2020 21:37
Chloroethane	< 4.61	ug/Kg	7/13/2020 21:37
Chloroform	< 4.61	ug/Kg	7/13/2020 21:37
Chloromethane	< 4.61	ug/Kg	7/13/2020 21:37
cis-1,2-Dichloroethene	< 4.61	ug/Kg	7/13/2020 21:37
cis-1,3-Dichloropropene	< 4.61	ug/Kg	7/13/2020 21:37
Cyclohexane	< 23.0	ug/Kg	7/13/2020 21:37
Dibromochloromethane	< 4.61	ug/Kg	7/13/2020 21:37
Dichlorodifluoromethane	< 4.61	ug/Kg	7/13/2020 21:37
Ethylbenzene	< 4.61	ug/Kg	7/13/2020 21:37
Freon 113	< 4.61	ug/Kg	7/13/2020 21:37
Isopropylbenzene	< 4.61	ug/Kg	7/13/2020 21:37
m,p-Xylene	< 4.61	ug/Kg	7/13/2020 21:37
Methyl acetate	< 4.61	ug/Kg	7/13/2020 21:37
Methyl tert-butyl Ether	< 4.61	ug/Kg	7/13/2020 21:37
Methylcyclohexane	< 4.61	ug/Kg	7/13/2020 21:37
Methylene chloride	< 11.5	ug/Kg	7/13/2020 21:37
Naphthalene	< 11.5	ug/Kg	7/13/2020 21:37

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Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier:	TP17 4-5		
Lab Sample ID:	203031-36	Date Sampled:	7/1/2020
Matrix:	Soil	Date Received:	7/6/2020

n-Butylbenzene	< 4.61	ug/Kg			7/13/2020	21:37
n-Propylbenzene	< 4.61	ug/Kg			7/13/2020	21:37
o-Xylene	< 4.61	ug/Kg			7/13/2020	21:37
p-Isopropyltoluene	< 4.61	ug/Kg			7/13/2020	21:37
sec-Butylbenzene	< 4.61	ug/Kg			7/13/2020	21:37
Styrene	< 11.5	ug/Kg			7/13/2020	21:37
tert-Butylbenzene	< 4.61	ug/Kg			7/13/2020	21:37
Tetrachloroethene	< 4.61	ug/Kg			7/13/2020	21:37
Toluene	< 4.61	ug/Kg			7/13/2020	21:37
trans-1,2-Dichloroethene	< 4.61	ug/Kg			7/13/2020	21:37
trans-1,3-Dichloropropene	< 4.61	ug/Kg			7/13/2020	21:37
Trichloroethene	< 4.61	ug/Kg			7/13/2020	21:37
Trichlorofluoromethane	< 4.61	ug/Kg			7/13/2020	21:37
Vinyl chloride	< 4.61	ug/Kg			7/13/2020	21:37
<u>Surrogate</u>	Perce	nt Recovery	<u>Limits</u>	Outliers	Date Analy	zed
1,2-Dichloroethane-d4		87.5	80.8 - 134		7/13/2020	21:37

 1,2-Dichloroethane-d4
 87.5
 80.8 - 134
 7/13/2020
 21:37

 4-Bromofluorobenzene
 71.0
 54.9 - 132
 7/13/2020
 21:37

 Pentafluorobenzene
 113
 85.8 - 114
 7/13/2020
 21:37

 Toluene-D8
 91.8
 81 - 117
 7/13/2020
 21:37

Internal standard outliers indicate probable matrix interference

Method Reference(s): EPA 8260C

EPA 5035A - L

Data File: x71757.D

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Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP18 0-2

Lab Sample ID: 203031-37 **Date Sampled:** 7/1/2020

Matrix: Soil Date Received: 7/6/2020

Mercury

Analyte Result Units Qualifier Date Analyzed

Mercury 0.0246 mg/Kg 7/13/2020 12:31

Method Reference(s):EPA 7471BPreparation Date:7/10/2020Data File:QC200713B

RCRA Metals (ICP)

Analyte Result **Units Oualifier Date Analyzed** Arsenic 3.19 mg/Kg 7/14/2020 20:27 Barium 7/14/2020 20:27 115 mg/Kg Cadmium 2.04 7/14/2020 20:27 mg/Kg Chromium 25.4 mg/Kg 7/14/2020 20:27 Lead 17.5 7/14/2020 20:27 mg/Kg Selenium < 1.10 mg/Kg 7/14/2020 20:27 Silver < 0.552 7/14/2020 20:27 mg/Kg

Method Reference(s): EPA 6010C

EPA 3050B

 Preparation Date:
 7/10/2020

 Data File:
 200714C



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP18 4-5

Lab Sample ID: 203031-38 **Date Sampled:** 7/1/2020

Matrix: Soil Date Received: 7/6/2020

Mercury

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	Qualifier	Date Analyzed	
Mercury	1.62	mg/Kg		7/13/2020 12:42	

Method Reference(s):EPA 7471BPreparation Date:7/10/2020Data File:QC200713B

RCRA Metals (ICP)

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	Date Analy	<u>zed</u>
Arsenic	7.10	mg/Kg		7/14/2020	20:31
Barium	154	mg/Kg		7/14/2020	20:31
Cadmium	1.55	mg/Kg		7/14/2020	20:31
Chromium	16.6	mg/Kg		7/14/2020	20:31
Lead	62.2	mg/Kg		7/14/2020	20:31
Selenium	< 1.38	mg/Kg		7/14/2020	20:31
Silver	< 0.689	mg/Kg		7/14/2020	20:31

Method Reference(s): EPA 6010C

EPA 3050B

 Preparation Date:
 7/10/2020

 Data File:
 200714C

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	<u>Units</u>	Qualifier	Date Analy	vzed
1,1-Biphenyl	< 394	ug/Kg		7/9/2020	19:17
1,2,4,5-Tetrachlorobenzene	< 394	ug/Kg		7/9/2020	19:17
1,2,4-Trichlorobenzene	< 394	ug/Kg		7/9/2020	19:17
1,2-Dichlorobenzene	< 394	ug/Kg		7/9/2020	19:17
1,3-Dichlorobenzene	< 394	ug/Kg		7/9/2020	19:17
1,4-Dichlorobenzene	< 394	ug/Kg		7/9/2020	19:17
2,2-Oxybis (1-chloropropane)	< 394	ug/Kg		7/9/2020	19:17
2,3,4,6-Tetrachlorophenol	< 394	ug/Kg		7/9/2020	19:17
2,4,5-Trichlorophenol	< 394	ug/Kg		7/9/2020	19:17

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Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier:TP18 4-5Lab Sample ID:203031-38Date Sampled:7/1/2020Matrix:SoilDate Received:7/6/2020

			1 -1
2,4,6-Trichlorophenol	< 394	ug/Kg	7/9/2020 19:17
2,4-Dichlorophenol	< 394	ug/Kg	7/9/2020 19:17
2,4-Dimethylphenol	< 394	ug/Kg	7/9/2020 19:17
2,4-Dinitrophenol	< 1580	ug/Kg	7/9/2020 19:17
2,4-Dinitrotoluene	< 394	ug/Kg	7/9/2020 19:17
2,6-Dinitrotoluene	< 394	ug/Kg	7/9/2020 19:17
2-Chloronaphthalene	< 394	ug/Kg	7/9/2020 19:17
2-Chlorophenol	< 394	ug/Kg	7/9/2020 19:17
2-Methylnapthalene	< 394	ug/Kg	7/9/2020 19:17
2-Methylphenol	< 394	ug/Kg	7/9/2020 19:17
2-Nitroaniline	< 394	ug/Kg	7/9/2020 19:17
2-Nitrophenol	< 394	ug/Kg	7/9/2020 19:17
3&4-Methylphenol	< 394	ug/Kg	7/9/2020 19:17
3,3'-Dichlorobenzidine	< 394	ug/Kg	7/9/2020 19:17
3-Nitroaniline	< 394	ug/Kg	7/9/2020 19:17
4,6-Dinitro-2-methylphenol	< 527	ug/Kg	7/9/2020 19:17
4-Bromophenyl phenyl ether	< 394	ug/Kg	7/9/2020 19:17
4-Chloro-3-methylphenol	< 394	ug/Kg	7/9/2020 19:17
4-Chloroaniline	< 394	ug/Kg	7/9/2020 19:17
4-Chlorophenyl phenyl ether	< 394	ug/Kg	7/9/2020 19:17
4-Nitroaniline	< 394	ug/Kg	7/9/2020 19:17
4-Nitrophenol	< 394	ug/Kg	7/9/2020 19:17
Acenaphthene	< 394	ug/Kg	7/9/2020 19:17
Acenaphthylene	< 394	ug/Kg	7/9/2020 19:17
Acetophenone	< 394	ug/Kg	7/9/2020 19:17
Anthracene	< 394	ug/Kg	7/9/2020 19:17
Atrazine	< 394	ug/Kg	7/9/2020 19:17
Benzaldehyde	< 394	ug/Kg	7/9/2020 19:17
Benzo (a) anthracene	814	ug/Kg	7/9/2020 19:17
Benzo (a) pyrene	836	ug/Kg	7/9/2020 19:17

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Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier:TP18 4-5Lab Sample ID:203031-38Date Sampled:7/1/2020Matrix:SoilDate Received:7/6/2020

Benzo (b) fluoranthene	954	ug/Kg	7/9/2020 19:17
Benzo (g,h,i) perylene	535	ug/Kg	7/9/2020 19:17
Benzo (k) fluoranthene	665	ug/Kg	7/9/2020 19:17
Bis (2-chloroethoxy) methane	< 394	ug/Kg	7/9/2020 19:17
Bis (2-chloroethyl) ether	< 394	ug/Kg	7/9/2020 19:17
Bis (2-ethylhexyl) phthalate	< 394	ug/Kg	7/9/2020 19:17
Butylbenzylphthalate	< 394	ug/Kg	7/9/2020 19:17
Caprolactam	< 394	ug/Kg	7/9/2020 19:17
Carbazole	< 394	ug/Kg	7/9/2020 19:17
Chrysene	1030	ug/Kg	7/9/2020 19:17
Dibenz (a,h) anthracene	< 394	ug/Kg	7/9/2020 19:17
Dibenzofuran	< 394	ug/Kg	7/9/2020 19:17
Diethyl phthalate	< 394	ug/Kg	7/9/2020 19:17
Dimethyl phthalate	< 394	ug/Kg	7/9/2020 19:17
Di-n-butyl phthalate	< 394	ug/Kg	7/9/2020 19:17
Di-n-octylphthalate	< 394	ug/Kg	7/9/2020 19:17
Fluoranthene	1650	ug/Kg	7/9/2020 19:17
Fluorene	< 394	ug/Kg	7/9/2020 19:17
Hexachlorobenzene	< 394	ug/Kg	7/9/2020 19:17
Hexachlorobutadiene	< 394	ug/Kg	7/9/2020 19:17
Hexachlorocyclopentadiene	< 1580	ug/Kg	7/9/2020 19:17
Hexachloroethane	< 394	ug/Kg	7/9/2020 19:17
Indeno (1,2,3-cd) pyrene	897	ug/Kg	7/9/2020 19:17
Isophorone	< 394	ug/Kg	7/9/2020 19:17
Naphthalene	< 394	ug/Kg	7/9/2020 19:17
Nitrobenzene	< 394	ug/Kg	7/9/2020 19:17
N-Nitroso-di-n-propylamine	< 394	ug/Kg	7/9/2020 19:17
N-Nitrosodiphenylamine	< 394	ug/Kg	7/9/2020 19:17
Pentachlorophenol	< 788	ug/Kg	7/9/2020 19:17
Phenanthrene	1040	ug/Kg	7/9/2020 19:17

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7/1/2020

Date Sampled:

Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP18 4-5 **Lab Sample ID:** 203031-38

Matrix: Soil Date Received: 7/6/2020

Phenol	< 394	ug/Kg			7/9/2020	19:17
Pyrene	1440	ug/Kg			7/9/2020	19:17
<u>Surrogate</u>	<u>Perc</u>	ent Recovery	<u>Limits</u>	<u>Outliers</u>	Date Analy	<u>zed</u>
2,4,6-Tribromophenol		58.0	39 - 88.1		7/9/2020	19:17
2-Fluorobiphenyl		68.5	42.5 - 81.1		7/9/2020	19:17
2-Fluorophenol		70.4	39.8 - 77.3		7/9/2020	19:17
Nitrobenzene-d5		73.0	40.1 - 77.1		7/9/2020	19:17
Phenol-d5		70.9	41.7 - 76.6		7/9/2020	19:17
Terphenyl-d14		78.2	41.6 - 96.8		7/9/2020	19:17

Method Reference(s): EPA 8270D

EPA 3546

Preparation Date: 7/7/2020 Data File: B47809.D

Volatile Organics

<u>Analyte</u>	Result	<u>Units</u>	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 2.59	ug/Kg		7/13/2020 21:59
1,1,2,2-Tetrachloroethane	< 2.59	ug/Kg		7/13/2020 21:59
1,1,2-Trichloroethane	< 2.59	ug/Kg		7/13/2020 21:59
1,1-Dichloroethane	< 2.59	ug/Kg		7/13/2020 21:59
1,1-Dichloroethene	< 2.59	ug/Kg		7/13/2020 21:59
1,2,3-Trichlorobenzene	< 6.47	ug/Kg		7/13/2020 21:59
1,2,4-Trichlorobenzene	< 6.47	ug/Kg		7/13/2020 21:59
1,2,4-Trimethylbenzene	< 2.59	ug/Kg		7/13/2020 21:59
1,2-Dibromo-3-Chloropropane	< 12.9	ug/Kg		7/13/2020 21:59
1,2-Dibromoethane	< 2.59	ug/Kg		7/13/2020 21:59
1,2-Dichlorobenzene	< 2.59	ug/Kg		7/13/2020 21:59
1,2-Dichloroethane	< 2.59	ug/Kg		7/13/2020 21:59
1,2-Dichloropropane	< 2.59	ug/Kg		7/13/2020 21:59
1,3,5-Trimethylbenzene	< 2.59	ug/Kg		7/13/2020 21:59
1,3-Dichlorobenzene	< 2.59	ug/Kg		7/13/2020 21:59
1,4-Dichlorobenzene	< 2.59	ug/Kg		7/13/2020 21:59

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Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier:	TP18 4-5		
Lab Sample ID:	203031-38	Date Sampled:	7/1/2020
Matrix:	Soil	Date Received:	7/6/2020

matrix:	5011			Date Received:	//6/2020	
1,4-Dioxane		< 25.9	ug/Kg		7/13/2020	21:59
2-Butanone		< 12.9	ug/Kg		7/13/2020	21:59
2-Hexanone		< 6.47	ug/Kg		7/13/2020	21:59
4-Methyl-2-penta	anone	< 6.47	ug/Kg		7/13/2020	21:59
Acetone		< 12.9	ug/Kg		7/13/2020	21:59
Benzene		< 2.59	ug/Kg		7/13/2020	21:59
Bromochloromet	thane	< 6.47	ug/Kg		7/13/2020	21:59
Bromodichlorom	iethane	< 2.59	ug/Kg		7/13/2020	21:59
Bromoform		< 6.47	ug/Kg		7/13/2020	21:59
Bromomethane		< 2.59	ug/Kg		7/13/2020	21:59
Carbon disulfide		< 2.59	ug/Kg		7/13/2020	21:59
Carbon Tetrachlo	oride	< 2.59	ug/Kg		7/13/2020	21:59
Chlorobenzene		< 2.59	ug/Kg		7/13/2020	21:59
Chloroethane		< 2.59	ug/Kg		7/13/2020	21:59
Chloroform		< 2.59	ug/Kg		7/13/2020	21:59
Chloromethane		< 2.59	ug/Kg		7/13/2020	21:59
cis-1,2-Dichloroe	ethene	< 2.59	ug/Kg		7/13/2020	21:59
cis-1,3-Dichlorop	oropene	< 2.59	ug/Kg		7/13/2020	21:59
Cyclohexane		< 12.9	ug/Kg		7/13/2020	21:59
Dibromochlorom	ıethane	< 2.59	ug/Kg		7/13/2020	21:59
Dichlorodifluoro	methane	< 2.59	ug/Kg		7/13/2020	21:59
Ethylbenzene		< 2.59	ug/Kg		7/13/2020	21:59
Freon 113		< 2.59	ug/Kg		7/13/2020	21:59
Isopropylbenzen	e	< 2.59	ug/Kg		7/13/2020	21:59
m,p-Xylene		< 2.59	ug/Kg		7/13/2020	21:59
Methyl acetate		< 2.59	ug/Kg		7/13/2020	21:59
Methyl tert-butyl	l Ether	< 2.59	ug/Kg		7/13/2020	21:59
Methylcyclohexa	ne	< 2.59	ug/Kg		7/13/2020	21:59
Methylene chlori	de	< 6.47	ug/Kg		7/13/2020	21:59
Naphthalene		< 6.47	ug/Kg		7/13/2020	21:59

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Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier:	TP18 4-5		
Lab Sample ID:	203031-38	Date Sampled:	7/1/2020
Matrix:	Soil	Date Received:	7/6/2020

n-Butylbenzene	< 2.59	ug/Kg			7/13/2020	21:59
n-Propylbenzene	< 2.59	ug/Kg			7/13/2020	21:59
o-Xylene	< 2.59	ug/Kg			7/13/2020	21:59
p-Isopropyltoluene	< 2.59	ug/Kg			7/13/2020	21:59
sec-Butylbenzene	< 2.59	ug/Kg			7/13/2020	21:59
Styrene	< 6.47	ug/Kg			7/13/2020	21:59
tert-Butylbenzene	< 2.59	ug/Kg			7/13/2020	21:59
Tetrachloroethene	< 2.59	ug/Kg			7/13/2020	21:59
Toluene	< 2.59	ug/Kg			7/13/2020	21:59
trans-1,2-Dichloroethene	< 2.59	ug/Kg			7/13/2020	21:59
trans-1,3-Dichloropropene	< 2.59	ug/Kg			7/13/2020	21:59
Trichloroethene	< 2.59	ug/Kg			7/13/2020	21:59
Trichlorofluoromethane	< 2.59	ug/Kg			7/13/2020	21:59
Vinyl chloride	< 2.59	ug/Kg			7/13/2020	21:59
<u>Surrogate</u>	Perc	ent Recovery	<u>Limits</u>	Outliers	Date Analy	zed
1,2-Dichloroethane-d4		88.0	80.8 - 134		7/13/2020	21:59
4-Bromofluorobenzene		67.4	54.9 - 132		7/13/2020	21:59

108

90.0

85.8 - 114

81 - 117

7/13/2020

7/13/2020

21:59

21:59

Internal standard outliers indicate probable matrix interference

Method Reference(s): EPA 8260C

EPA 5035A - L

Data File: x71758.D

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Pentafluorobenzene

Toluene-D8



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP18 4-5 DUP

 Lab Sample ID:
 203031-39
 Date Sampled:
 7/1/2020

 Matrix:
 Soil
 Date Received:
 7/6/2020

Volatile Organics

<u>Analyte</u>	Result	<u>Units</u>	Qualifier	Date Analyzed
1,1,1-Trichloroethane	< 3.03	ug/Kg		7/14/2020 16:02
1,1,2,2-Tetrachloroethane	< 3.03	ug/Kg		7/14/2020 16:02
1,1,2-Trichloroethane	< 3.03	ug/Kg		7/14/2020 16:02
1,1-Dichloroethane	< 3.03	ug/Kg		7/14/2020 16:02
1,1-Dichloroethene	< 3.03	ug/Kg		7/14/2020 16:02
1,2,3-Trichlorobenzene	< 7.58	ug/Kg		7/14/2020 16:02
1,2,4-Trichlorobenzene	< 7.58	ug/Kg		7/14/2020 16:02
1,2,4-Trimethylbenzene	< 3.03	ug/Kg		7/14/2020 16:02
1,2-Dibromo-3-Chloropropane	< 15.2	ug/Kg		7/14/2020 16:02
1,2-Dibromoethane	< 3.03	ug/Kg		7/14/2020 16:02
1,2-Dichlorobenzene	< 3.03	ug/Kg		7/14/2020 16:02
1,2-Dichloroethane	< 3.03	ug/Kg		7/14/2020 16:02
1,2-Dichloropropane	< 3.03	ug/Kg		7/14/2020 16:02
1,3,5-Trimethylbenzene	< 3.03	ug/Kg		7/14/2020 16:02
1,3-Dichlorobenzene	< 3.03	ug/Kg		7/14/2020 16:02
1,4-Dichlorobenzene	< 3.03	ug/Kg		7/14/2020 16:02
1,4-Dioxane	< 30.3	ug/Kg		7/14/2020 16:02
2-Butanone	< 15.2	ug/Kg		7/14/2020 16:02
2-Hexanone	< 7.58	ug/Kg		7/14/2020 16:02
4-Methyl-2-pentanone	< 7.58	ug/Kg		7/14/2020 16:02
Acetone	< 15.2	ug/Kg		7/14/2020 16:02
Benzene	< 3.03	ug/Kg		7/14/2020 16:02
Bromochloromethane	< 7.58	ug/Kg		7/14/2020 16:02
Bromodichloromethane	< 3.03	ug/Kg		7/14/2020 16:02
Bromoform	< 7.58	ug/Kg		7/14/2020 16:02
Bromomethane	< 3.03	ug/Kg		7/14/2020 16:02
Carbon disulfide	< 3.03	ug/Kg		7/14/2020 16:02
Carbon Tetrachloride	< 3.03	ug/Kg		7/14/2020 16:02

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Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier:TP18 4-5 DUPLab Sample ID:203031-39Date Sampled:7/1/2020Matrix:SoilDate Received:7/6/2020

Chlorobenzene	< 3.03	ug/Kg	7/14/2020 16:02
Chloroethane	< 3.03	ug/Kg	7/14/2020 16:02
Chloroform	< 3.03	ug/Kg	7/14/2020 16:02
Chloromethane	< 3.03	ug/Kg	7/14/2020 16:02
cis-1,2-Dichloroethene	< 3.03	ug/Kg	7/14/2020 16:02
cis-1,3-Dichloropropene	< 3.03	ug/Kg	7/14/2020 16:02
Cyclohexane	< 15.2	ug/Kg	7/14/2020 16:02
Dibromochloromethane	< 3.03	ug/Kg	7/14/2020 16:02
Dichlorodifluoromethane	< 3.03	ug/Kg	7/14/2020 16:02
Ethylbenzene	< 3.03	ug/Kg	7/14/2020 16:02
Freon 113	< 3.03	ug/Kg	7/14/2020 16:02
Isopropylbenzene	< 3.03	ug/Kg	7/14/2020 16:02
m,p-Xylene	< 3.03	ug/Kg	7/14/2020 16:02
Methyl acetate	< 3.03	ug/Kg	7/14/2020 16:02
Methyl tert-butyl Ether	< 3.03	ug/Kg	7/14/2020 16:02
Methylcyclohexane	< 3.03	ug/Kg	7/14/2020 16:02
Methylene chloride	< 7.58	ug/Kg	7/14/2020 16:02
Naphthalene	< 7.58	ug/Kg	7/14/2020 16:02
n-Butylbenzene	< 3.03	ug/Kg	7/14/2020 16:02
n-Propylbenzene	< 3.03	ug/Kg	7/14/2020 16:02
o-Xylene	< 3.03	ug/Kg	7/14/2020 16:02
p-Isopropyltoluene	< 3.03	ug/Kg	7/14/2020 16:02
sec-Butylbenzene	< 3.03	ug/Kg	7/14/2020 16:02
Styrene	< 7.58	ug/Kg	7/14/2020 16:02
tert-Butylbenzene	< 3.03	ug/Kg	7/14/2020 16:02
Tetrachloroethene	< 3.03	ug/Kg	7/14/2020 16:02
Toluene	< 3.03	ug/Kg	7/14/2020 16:02
trans-1,2-Dichloroethene	< 3.03	ug/Kg	7/14/2020 16:02
trans-1,3-Dichloropropene	< 3.03	ug/Kg	7/14/2020 16:02
Trichloroethene	< 3.03	ug/Kg	7/14/2020 16:02

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



Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Sample Identifier: TP18 4-5 DUP

 Lab Sample ID:
 203031-39
 Date Sampled:
 7/1/2020

 Matrix:
 Soil
 Date Received:
 7/6/2020

Trichlorofluoromethane	< 3.03	ug/Kg			7/14/2020	16:02
Vinyl chloride	< 3.03	ug/Kg			7/14/2020	16:02
<u>Surrogate</u>	<u>Perce</u>	ent Recovery	<u>Limits</u>	Outliers	Date Analy	<u>zed</u>
1,2-Dichloroethane-d4		88.7	80.8 - 134		7/14/2020	16:02
4-Bromofluorobenzene		61.4	54.9 - 132		7/14/2020	16:02
Pentafluorobenzene		110	85.8 - 114		7/14/2020	16:02
Toluene-D8		86.5	81 - 117		7/14/2020	16:02

Internal standard outliers indicate probable matrix interference

Method Reference(s): EPA 8260C

EPA 5035A - L

Data File: x71782.D



Client:

Leader Consulting Services, Inc.

Project Reference:

2020 River Rd

Lab Project ID:

203031

Matrix:

Soil

Semi-Volatile Organics (Acid/Base Neutrals)

Result	<u>Units</u>	Qualifier	Date Analy	zed
<270	ug/Kg		7/8/2020	12:17
<270	ug/Kg		7/8/2020	12:17
<270	ug/Kg		7/8/2020	12:17
<270	ug/Kg		7/8/2020	12:17
<270	ug/Kg		7/8/2020	12:17
<270	ug/Kg		7/8/2020	12:17
<270	ug/Kg		7/8/2020	12:17
<270	ug/Kg		7/8/2020	12:17
<270	ug/Kg		7/8/2020	12:17
<270	ug/Kg		7/8/2020	12:17
<270	ug/Kg		7/8/2020	12:17
<270	ug/Kg		7/8/2020	12:17
<1080	ug/Kg		7/8/2020	12:17
<270	ug/Kg		7/8/2020	12:17
<270	ug/Kg		7/8/2020	12:17
<270	ug/Kg		7/8/2020	12:17
<270	ug/Kg		7/8/2020	12:17
<270	ug/Kg		7/8/2020	12:17
<270	ug/Kg		7/8/2020	12:17
<270	ug/Kg		7/8/2020	12:17
<270	ug/Kg		7/8/2020	12:17
<270	ug/Kg		7/8/2020	12:17
<270	ug/Kg		7/8/2020	12:17
<270	ug/Kg		7/8/2020	12:17
<541	ug/Kg		7/8/2020	12:17
<270	ug/Kg		7/8/2020	12:17
<270	ug/Kg		7/8/2020	12:17
<270	ug/Kg		7/8/2020	12:17
	<270 <270 <270 <270 <270 <270 <270 <270	<270	<270	<270

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Client:

Leader Consulting Services, Inc.

Project Reference:

2020 River Rd

Lab Project ID:

203031

Matrix:

Soil

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	<u>Units</u>	Qualifier	Date Analy	zed
4-Chlorophenyl phenyl ether	<270	ug/Kg		7/8/2020	12:17
4-Nitroaniline	<270	ug/Kg		7/8/2020	12:17
4-Nitrophenol	<270	ug/Kg		7/8/2020	12:17
Acenaphthene	<270	ug/Kg		7/8/2020	12:17
Acenaphthylene	<270	ug/Kg		7/8/2020	12:17
Acetophenone	<270	ug/Kg		7/8/2020	12:17
Anthracene	<270	ug/Kg		7/8/2020	12:17
Atrazine	<270	ug/Kg		7/8/2020	12:17
Benzaldehyde	<270	ug/Kg		7/8/2020	12:17
Benzo (a) anthracene	<270	ug/Kg		7/8/2020	12:17
Benzo (a) pyrene	<270	ug/Kg		7/8/2020	12:17
Benzo (b) fluoranthene	<270	ug/Kg		7/8/2020	12:17
Benzo (g,h,i) perylene	<270	ug/Kg		7/8/2020	12:17
Benzo (k) fluoranthene	<270	ug/Kg		7/8/2020	12:17
Bis (2-chloroethoxy) methane	<270	ug/Kg		7/8/2020	12:17
Bis (2-chloroethyl) ether	<270	ug/Kg		7/8/2020	12:17
Bis (2-ethylhexyl) phthalate	<270	ug/Kg		7/8/2020	12:17
Butylbenzylphthalate	<270	ug/Kg		7/8/2020	12:17
Caprolactam	<270	ug/Kg		7/8/2020	12:17
Carbazole	<270	ug/Kg		7/8/2020	12:17
Chrysene	<270	ug/Kg		7/8/2020	12:17
Dibenz (a,h) anthracene	<270	ug/Kg		7/8/2020	12:17
Dibenzofuran	<270	ug/Kg		7/8/2020	12:17
Diethyl phthalate	<270	ug/Kg		7/8/2020	12:17
Dimethyl phthalate	<270	ug/Kg		7/8/2020	12:17
Di-n-butyl phthalate	<270	ug/Kg		7/8/2020	12:17
Di-n-octylphthalate	<270	ug/Kg		7/8/2020	12:17
Fluoranthene	<270	ug/Kg		7/8/2020	12:17

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Leader Consulting Services, Inc. Client:

Project Reference: 2020 River Rd

Lab Project ID: 203031

Matrix: Soil

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte	Result	<u>Units</u>	Qualifier	Date Analy	zed
Fluorene	<270	ug/Kg		7/8/2020	12:17
Hexachlorobenzene	<270	ug/Kg		7/8/2020	12:17
Hexachlorobutadiene	<270	ug/Kg		7/8/2020	12:17
Hexachlorocyclopentadiene	<1080	ug/Kg		7/8/2020	12:17
Hexachloroethane	<270	ug/Kg		7/8/2020	12:17
Indeno (1,2,3-cd) pyrene	<270	ug/Kg		7/8/2020	12:17
Isophorone	<270	ug/Kg		7/8/2020	12:17
Naphthalene	<270	ug/Kg		7/8/2020	12:17
Nitrobenzene	<270	ug/Kg		7/8/2020	12:17
N-Nitroso-di-n-propylamine	<270	ug/Kg		7/8/2020	12:17
N-Nitrosodiphenylamine	<270	ug/Kg		7/8/2020	12:17
Pentachlorophenol	<541	ug/Kg		7/8/2020	12:17
Phenanthrene	<270	ug/Kg		7/8/2020	12:17
Phenol	<270	ug/Kg		7/8/2020	12:17
Pyrene	<270	ug/Kg		7/8/2020	12:17
Surrogate	Percent Recovery	Limits	<u>Outliers</u>	Date Anal	yzed
2,4,6-Tribromophenol	59.7	39 - 88.1		7/8/2020	12:17
2-Fluorobiphenyl	64.4	42.5 - 81.1		7/8/2020	12:17
2-Fluorophenol	59.5	39.8 - 77.3		7/8/2020	12:17
Nitrobenzene-d5	63.1	40.1 - 77.1		7/8/2020	12:17

Method Reference(s):

EPA 8270D

EPA 3546

Preparation Date:

7/7/2020

Data File: QC Batch ID:

Phenol-d5

Terphenyl-d14

B47768.D QC200707ABNS

QC Number:

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60.6

73.4

41.7 - 76.6

41.6 - 96.8

7/8/2020

7/8/2020

12:17

12:17



QC Report for Laboratory Control Sample

Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd Lab Project ID: 203031

Soil

Matrix:

Semi-Volatile Organics (Acid/Base Neutrals)

Method Reference(s): Preparation Date: Data File: QC Number: QC Batch ID:	Pyrene	Phenol	Pentachlorophenol	N-Nitroso-di-n-propylamine	Acenaphthene	4-Nitrophenol	4-Chloro-3-methylphenol	2-Chlorophenol	2,4-Dinitrotoluene	1,4-Dichlorobenzene	1,2,4-Trichlorobenzene	Analyte	
EPA 8270D EPA 3546 7/7/2020 B47769.D 1 QC200707ABNS													
	2750	4120	4120	2750	2750	4120	4120	4120	2750	2750	2750	Added	<u>Spike</u>
	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	<u>Units</u>	<u>Spike</u>
	1930	2740	3230	1770	1880	2420	2950	2770	1780	1630	1730	Result	LCS
	70.4	66.5	78.4	64.5	68.3	58.6	71.7	67.3	65.0	59.4	63.1	Recovery	LCS %
	47 - 98.7	48.6 - 79.6	42 - 104	44.2 - 80.4	48.4 - 82.4	39.1 - 94.7	51.4 • 84.6	49.7 - 79.1	47.6 - 89.4	43.5 - 71	46.1 - 75.9	Limits	% Rec
												Outliers	LCS
	7/8/2020	7/8/2020	7/8/2020	7/8/2020	7/8/2020	7/8/2020	7/8/2020	7/8/2020	7/8/2020	7/8/2020	7/8/2020	<u>Analyzed</u>	Date

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



QC Report for Matrix Spike and Matrix Spike Duplicate

Client: Leader Consulting Services, Inc.

Project Reference: 2020 River Rd

Sample Identifier: Lab Sample ID: 203031-30 TP14 5-6 DUP

Matrix:

Date Analyzed: 7/9/2020 Date Received: 7/6/2020 **Date Sampled:**

7/1/2020

Lab Project ID:

203031

Semi-Volatile Organics (Acid/Base Neutrals)

	<u>Sample</u>	Result	MS	<u>MS</u>	MS %	MSD	MSD	MSD %	% Rec.	MS	MSD	Relative	RPD	RPD
Analyte	Result	<u>Units</u>	Added	Result	Recovery	Added	Result	Recovery	Limits	<u>Outlier</u>	<u>Outlier</u>	% Diff.	Limit	<u>Outlier</u>
1,2,4-Trichlorobenzene	< 346	ug/Kg	3480	1710	49.2	3710	1920	51.8	46.1 - 75.9			5.16	27.1	
1,4-Dichlorobenzene	< 346	ug/Kg	3480	1770	50.8	3710	1990	53.6	43.5 - 71			5.27	32.9	
2,4-Dinitrotoluene	< 346	ug/Kg	3480	1040	30.0	3710	1000	27.0	47.6 - 89.4	*	*	10.4	33.8	
2-Chlorophenol	< 346	ug/Kg	5220	3070	58.7	5560	3410	61.3	49.7 - 79.1			4.28	29.9	
4-Chloro-3-methylphenol	< 346	ug/Kg	5220	3250	62.3	5560	3520	63.3	51.4 - 84.6			1.63	27.6	
4-Nitrophenol	< 346	ug/Kg	5220	2820	54.0	5560	2950	53.0	39.1 - 94.7			1.77	49.7	
Acenaphthene	< 346	ug/Kg	3480	1870	53.8	3710	2240	60.5	48.4 - 82.4			11.7	31.8	
N-Nitroso-di-n-propylamine	< 346	ug/Kg	3480	2290	65.8	3710	2510	67.7	44.2 - 80.4			2.89	34.5	
Pentachlorophenol	< 693	ug/Kg	5220	3080	58.9	5560	3810	68.6	42 - 104			15.1	45	
Phenol	4650	ug/Kg	5220	8740	78.4	5560	10500	105	48.6 - 79.6		*	29.4	31.4	
Pyrene	< 346	ug/Kg	3480	1770	50.9	3710	2500	67.5	47 - 98.7			28.1	40.4	

compliance with the sample condition requirements upon receipt. Any estimated values are displayed, and derived values calculated, based on numeric result only. See primary analytical report for data flags. This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including

Report Prepared Friday, July 10, 2020



QC Report for Matrix Spike and Matrix Spike Duplicate

Client: Leader Consulting Services, Inc.

Project Reference: 2020 River Rd

Lab Sample ID: 203031-30

Matrix: Sample Identifier: TP14 5-6 DUP

Semi-Volatile Organics (Acid/Base Neutrals)

Analyte

Result

<u>Units</u>

Added Result Recovery Added

Result

Recovery

Limits

Outlier

Sample Result SW MS

MS % MSD

MSD

MSD %

% Rec.

SW

MSD

Relative

Date Received: 7/6/2020

Date Analyzed: 7/9/2020

Date Sampled:

7/1/2020

Lab Project ID:

203031

RPD

Limit **Outlier** RPD

Outlier % Diff.

QC Batch ID: QC200707ABNS

B47779.D B47811.D B47810.D 7/7/2020 EPA 3546 EPA 8270I

Data File(s): Preparation Date: Method Reference(s):

compliance with the sample condition requirements upon receipt. Any estimated values are displayed, and derived values calculated, based on numeric result only. See primary analytical report for data flags. This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including

Report Prepared Friday, July 10, 2020



Client:

Leader Consulting Services, Inc.

Project Reference:

2020 River Rd

Lab Project ID:

203031

Matrix:

Soil

RCRA Metals (ICP)

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	Qualifier	alifier Date Analyz		
Arsenic	<0.463	mg/Kg		7/9/2020	16:01	
Barium	<4.63	mg/Kg		7/9/2020	16:01	
Cadmium	<0.231	mg/Kg		7/9/2020	16:01	
Chromium	< 0.463	mg/Kg		7/9/2020	16:01	
Lead	< 0.463	mg/Kg		7/9/2020	16:01	
Selenium	<0.926	mg/Kg		7/9/2020	16:01	
Silver	< 0.463	mg/Kg		7/9/2020	16:01	

Method Reference(s):

EPA 6010C

EPA 3050B

Preparation Date:

7/9/2020

Data File:

200709B

QC Batch ID:

QC200709Soil

QC Number:

1

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

Report Prepared Tuesday, July 14, 2020 Page 81 of 101

QC Report for Laboratory Control Sample and Control Sample Duplicate

Leader Consulting Services, Inc.

Client:

Project Reference: 2020 River Rd

Lab Project ID: 203031

Matrix: Soil

RCRA Metals (ICP)

QC Number: QC Batch ID:

QC200709Soil

Data File: Preparation Date:

200709В 7/9/2020

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



QC Report for Sample Spike and Sample Duplicate

Lab Project ID: 203031

Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

RCRA Metals (ICP)

Matrix:	Sample Identifier:	Lab Sample ID:
Soil	TP2 5-6	203031-05
	Date Received:	Date Sampled:
	7/6/2020	6/30/2020

	Silver	Selenium	Lead	Chromiun	Cadmium	Barium	Arsenic	Analyte
Method Reference(s):	< 0.73			1 41.8				Sample Results
EF								
EPA 6010C EPA 3050B	mg/Kg	Result Units						
	17.5	175	175	175	70.0	175	175	<u>Spike</u> Added
	14.1	138	198	162	55.5	230	146	Spike Result
	80.8	77.0	81.5	68.5	78.2	87.7	79.9	Spike % Recovery
	75 - 125	75 - 125	75 - 125	75 - 125	75 - 125	75 - 125	75 - 125	% Rec Limits
				*				<u>Spike</u> Outliers
	<0.713	3.76	71.3	31.6	0.956	88.9	5.62	<u>Duplicate</u> <u>Result</u>
	NC	4.07	25.1	27.8	21.5	15.4	6.28	Relative % Difference
	20	20	20	20	20	20	20	RPD Limit
			*	*	*			RPD Outliers
	7/10/2020	7/10/2020	7/10/2020	7/10/2020	7/10/2020	7/10/2020	7/10/2020	<u>Date</u> <u>Analyzed</u>

ten times the spike added. 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

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

Report Prepared Tuesday, July 14, 2020

QC Batch ID:

Preparation Date:

7/9/2020 200710B

QC200709Soil



Client:

Leader Consulting Services, Inc.

Project Reference:

2020 River Rd

Lab Project ID:

203031

Matrix:

Soil

RCRA Metals (ICP)

<u>Analyte</u>	Result	<u>Units</u>	Qualifier	Date Analyzed	
Arsenic	< 0.467	mg/Kg		7/13/2020	15:59
Barium	<4.67	mg/Kg		7/13/2020	15:59
Cadmium	< 0.234	mg/Kg		7/14/2020	15:46
Chromium	< 0.467	mg/Kg		7/14/2020	15:46
Lead	< 0.467	mg/Kg		7/14/2020	15:46
Selenium	< 0.935	mg/Kg		7/13/2020	15:59
Silver	< 0.467	mg/Kg		7/13/2020	15:59

Method Reference(s):

EPA 6010C

EPA 3050B

Preparation Date:

7/9/2020

Data File:

200713C

QC Batch ID:

QC200709Soil2

QC Number:

1

QC Report for Laboratory Control Sample and Control Sample Duplicate

Client: Leader Consulting Services, Inc.

Project Reference: 2020 River Rd

Matrix: Lab Project ID: 203031

Soil

RCRA Metals (ICP)

	Silver	Selenium	Lead	Chromium	Cadmium	Barium	Arsenic	Analyte
Method Reference(s): Preparation Date: Data File: QC Number: QC Batch ID:	12	1;	1;	1:	49.5	1:	1:	<u>А</u> ф
(s):	12.4 1	124	124	124		124	124	LCS L
EPA 6010C EPA 3050B 7/9/2020 200713C 1 QC2007099	11.8	118	118	118	47.2	118	118	LCSD Added
EPA 6010C EPA 3050B 7/9/2020 200713C 1 QC200709Soil2	mg/Kg	<u>Spike</u> <u>Units</u>						
	11.6	110	128	127	52.9	134	116	<u>LCS</u> <u>Result</u>
	10.8	102	120	120	50.4	126	109	LCSD Result
	93.5	88.7	103	103	107	108	93.8	LCS % Recovery
	92.0	86.1	102	102	107	107	92.6	LCSD % Recovery
	80 - 120	80 - 120	80 - 120	80 - 120	80 - 120	80 - 120	80 - 120	% Rec Limits
								<u>LCS</u> <u>Outliers</u>
								<u>LCSD</u> Outliers
	1.63	2.92	1.64	0.861	0.0936	1.06	1.34	LCS LCSD Relative % Outliers Outliers Difference
	20	20	20	20	20	20	20	RPD Limit
								<u>RPD</u> Outliers
	7/13/2020	7/13/2020	7/14/2020	7/14/2020	7/14/2020	7/13/2020	7/13/2020	<u>Date</u> <u>Analyzed</u>

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



QC Report for Sample Spike and Sample Duplicate

Client: Leader Consulting Services, Inc.

Project Reference: 2020 River Rd

Lab Sample ID: 203031-12

Sample Identifier: Soil TP6 0-2

Date Received: 7/6/2020

Date Sampled:

6/30/2020

Lab Project ID: 203031

Matrix:

RCRA Metals (ICP)

	Silver	Selenium	Lead	Chromium	Cadmium	Barium	Arsenic	Analyte	
Preparation Date:	< 0.550	< 1		15.2		10	4.	Res	<u>Sar</u>
	550	< 1.10	6	.2	52)2	36	Results	Sample
EPA 3050B 7/9/2020	mg/Kg	<u>Units</u>	Result						
	13.7	137	137	137	55.0	137	137	8	<u>Spike</u>
	10.4	91.6	128	112	41.0	209	102	Result	<u>Spike</u>
	75.8	66.7	58.2	70.1	71.9	78.3	71.0	Recovery	Spike %
	75 - 125	75 - 125	75 - 125	75 - 125	75 - 125	75 - 125	75 - 125	Limits	% Rec
		*	*	*	*		*	Outliers	<u>Spike</u>
	<0.560	<1.12	38.2	17.2	1.59	94.2	5.02	Result	<u>Duplicate</u>
	NC	NC	22.1	12.6	4.76	7.68	3.08	Difference	Relative %
	20	20	20	20	20	20	20	Limit	RPD
			*					Outliers	RPD
	7/14/2020	7/14/2020	7/14/2020	7/14/2020	7/14/2020	7/14/2020	7/14/2020	<u>Analyzed</u>	Date

QC Batch ID:

QC200709Soil2

ten times the spike added. 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

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

Report Prepared Wednesday, July 15, 2020



Client:

Leader Consulting Services, Inc.

Project Reference:

2020 River Rd

Lab Project ID:

203031

Matrix:

Soil

Mercury

Analyte Result Units Qualifier Date Analyzed

Mercury <0.00719 mg/Kg 7/13/2020 10:19

Method Reference(s):

EPA 7471B

Preparation Date:

7/10/2020

Data File: QC Batch ID: QC200713B QC200710HgSoil

QC Number:

1



QC Report for Laboratory Control Sample and Control Sample Duplicate

Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd **Lab Project ID:** 203031

ct ID: 203031 Soil

Matrix:

Mercury

Mercury <u>Analyte</u> Data File: QC Number: Preparation Date: Method Reference(s): 0.0777 Added LCS 0.0735 **Added** LCSD QC200713B EPA 7471B 7/10/2020 mg/Kg <u>Units</u> **Spike** Result 0.0726 0.0695 LCS Result LCSD Recovery Recovery LCS % 93.5 LCSD % 94.5 80 - 120 % Rec Limits **Outliers** LCS Outliers Difference **LCSD** Relative % 1.12 Limit RPD 20 Outliers RPD

7/13/2020

<u>Date</u> <u>Analyzed</u>

QC Batch ID:

QC200710HgSoil

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



QC Report for Sample Spike and Sample Duplicate

Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Lab Sample ID:203031-05Sample Identifier:TP2 5-6

Date Received: 7/6/2020

Date Sampled:

6/30/2020

Lab Project ID: 203031

Soil

Matrix:

Mercury

Mercury **Analyte** Preparation Date: Method Reference(s): Results Sample 1.15 QC200713B 7/10/2020 EPA 7471B mg/Kg Result Units Added 0.104**Spike** Result <u>Spike</u> 0.800Recovery Spike % NC 75 - 125Limits % Rec **Outliers** Spike Duplicate Result 0.630 Relative % **Difference** 58.2 Limit RPD 20 **Outliers** RPD 7/13/2020 Analyzed

QC Batch ID:

QC200710HgSoil

ten times the spike added. 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

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

Report Prepared Tuesday, July 14, 2020



QC Report for Sample Spike and Sample Duplicate

Client: <u>Leader Consulting Services, Inc.</u>

Project Reference: 2020 River Rd

Lab Sample ID:203031-12Sample Identifier:TP6 0-2

Date Received: 7/6/2020

Date Sampled:

6/30/2020

Lab Project ID: 203031

Soil

Matrix:

Mercury

Mercury **Analyte** Preparation Date: Method Reference(s): 0.166Results Sample QC200713B 7/10/2020 EPA 7471B mg/Kg Result Units Added 0.0883<u>Spike</u> Result **Spike** 0.232Recovery Spike % 74.2 75 - 125% Rec Limits **Outliers** <u>Spike</u> <u>Duplicate</u> Result 0.127 Relative % **Difference** 26.6 Limit RPD 20 **Outliers** RPD 7/13/2020 <u>Analyzed</u> Date

QC Batch ID:

QC200710HgSoil2

ten times the spike added. 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

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

Report Prepared Tuesday, July 14, 2020



Client:

Leader Consulting Services, Inc.

Project Reference:

2020 River Rd

Lab Project ID:

203031

Matrix:

Soil

Mercury

Analyte Result Units Qualifier Date Analyzed

< 0.00741

mg/Kg

Mercury

Method Reference(s): Preparation Date:

EPA 7471B 7/10/2020

Data File:

QC200713B

QC Batch ID:

QC200710HgSoil2

QC Number:

1

7/13/2020

11:42



QC Report for Laboratory Control Sample and Control Sample Duplicate

Client: Leader Consulting Services, Inc.

Project Reference: 2020 River Rd Lab Project ID: 203031

Soil

Matrix:

Mercury

Analyte Added LCS Added LCSD <u>Spike</u> Units Result LCS Result LCSD Recovery Recovery LCS % LCSD % Limits % Rec Outliers Outliers Difference **LCS LCSD** Relative % Limit RPD **Outliers** RPD

Method Reference(s): EPA 7471B

0.0787

0.0722

mg/Kg

0.0708

0.0632

90.0

87.6

80 - 120

2.70

20

7/13/2020

<u>Date</u> <u>Analyzed</u>

Mercury

 Preparation Date:
 7/10/2020

 Data File:
 QC200713B

QC Number: 1
QC Batch ID: QC200710HgSoil2

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



Analytical Report Appendix

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

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

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

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

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

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

- "<" = Analyzed for but not detected at or above the quantitation limit.
- "E" = Result has been estimated, calibration limit exceeded.
- "Z" = See case narrative.
- "D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.
- "M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.
- "B" = Method blank contained trace levels of analyte. Refer to included method blank report.
- "I" = 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.

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt. Page 93 of 101

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, tern or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty.

Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.

Scope and Compensation. LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB wi use LAB default method for all tests unless specified otherwise on the Work Order.

Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.

Prices.

Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.

Limitations of Liability.

In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to reperform 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.

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt. Page 94 of 101

17-3311	
Page	
100	

Page 95 of 101

Turnaround Time Availability contingent upon lab : Standard 5 day None Requ 10 day Rush 3 day Rush 2 day Rush 1 day Date Needed Delease indicate needed: Other please indicate		DATE COLLECTED COLLECTED S 6/30/20 6/30/20	PARADIGM PROJECT REFERENCE 2020 PIVOR FO
Availability contingent upon lab approval; additional fees may apply. 5 day None Required Batch QC Category A Category B Category B Other Diease indicate package needed: Nepplements None Required None Required None Required NYSDEC EDD Other EDD Diease indicate EDD needed:	2 16 15 DO	G R R A A A TP1 0-2 X TP2 4-5 I TP 2 0-2	CLIENT: LEADER CONSULTING ADDRESS: PD 296 CITY: CARCACE STATE; PHONE: 483 2361 Matrix Codes: AQ-Aqueous Liquid NQ-Non-Aqueous Liquid
Sampled By Date/Time Total Co Relingvis Hed By Received By P.I.F. Date/Time Date/Time P.I.F. P.I.F. Pola Co Received @ Lab By Date/Time C (c A 7/6/Jobb 09:08 By signing this form, client agrees to Paradigm Terms and Conditions (reverse).	W V V V V V V V V V V V V V V V V V V V		CLIENT: ADDRESS ADDRESS ATTN: PHONE: ATTN: VA - Water VG - Groundwater
Total Cost:		REMARKS	Quotation #: Email: SD - Solid WP - Wipe PT - Paint CK - Caulk
	000000000000000000000000000000000000000	PARADIGM LAE SAMPLE NUMBER	OL - Oil

See additional page for sample conditions.

6/30/20 DATE COLLECTED 2020 RIVER Turnaround Time PROJECT REFERENCE PARADIGM COLLECTED TIME m - - 0 0 7 2 0 0 ໝ > ⊼ ດ 100 106 Matrix Codes:
AQ - Aqueous Liquid
NQ - Non-Aqueous Liquid ATTN: CITY: Report Supplements PHONE: 25 00 90 CADEN 7 0-2 5-4 2.6 0-2 2-2 2-6 SAMPLE IDENTIFIER STATE: USM/SM WA - Water
WG - Groundwater ΖĮΡ S × - ス - > ≤ 0 m D O C ATTN: CITY: CLIENT: ADDRESS: PHONE: 70 2 M W M C Z C C + ROLA METALS **DW** - Drinking Water **WW** - Wastewater INVOICE TO: STATE: SO - Soil SL - Sludge ZIP: SD - Solid PT - Paint Email: Quotation #: 20303 REMARKS LAB PROJECT ID WP - Wipe CK - Caulk PARADIGM LAB SAMPLE NUMBER OL - Oil AR - Air 1 16 in w 0 ملا

See additional page for sample conditions.	See additional pag				
reverse).	By signing this form, client agrees to Paradigm Terms and Conditions (reverse).	Other EDD	Other Dease indicate package needed:		Date Needed
	•				Rush 1 day
	7/6/2020 12:34		Category B		Rush 2 day
	Saint fuch	NYSDEC EDD	Category A		Rush 3 day
	Relinquished	Basic EDD	Batch QC	X	10 day
Total Cost:	Sampled By Date/Time	None Required	None Required		Standard 5 day
1)		fees may apply.	Availability contingent upon lab approval; additional fees may apply.	lity contingent	Availabil
	•				

Pag 2 86 Page 96 of 101



							6/30/20	DATE COLLECTED COLLECTED		2020 RIWR RI	PROJECT REFERENCE				FARADIGM			
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							5	X − Z → D S		WA - Water WG - Groundwater	ATTN:	PHONE:	ZIP CITY:	ADDRESS:	CLIENT:	大丁 川口 し	CHAIN OF CUSTOD	nue, Rochester, NY 14608
							×	RCFA METAUS	REQUESTED ANALY	DW - Drinking Water WW - Wastewater			STATE:	SS:		INVOICE TO:	CUSTODY	179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311
									SIS	SO - Soil SL - Sludge			ZIP:	X	5			5) 647-3311
								REMARKS	HI TO THE PERSON NAMED IN	SD - Solid WP - Wipe PT - Paint CK - Caulk		Email:	Quotation #:	203051	LAB PROJECT I	The state of the s	Apre 3 of 6 3,57	
ŝ	200	2	ಬ	ນ _	ى ئ	19	8/	PARADIGM LAB SAMPLE NUMBER		OL - Oil AR - Aīr					0		300	

See additional page for sample conditi				
By signing this form, client agrees to Paradigm Terms and Conditions (reverse).	Other EDD EDD needed :	Other package needed:		Date Neededplease indicate date needed:
				Rush 1 day
$\frac{1}{1-1} \frac{1}{1-1} \frac{1}$		Category B		Rush 2 day
July 7-2-20 11:26	NYSDEC EDD	Category A		Rush 3 day
Relinquished By Dake/Tithe	Basic EDD	Batch QC	N E	10 day
Sampled By Michael Date/Time Total Cost:	None Required	None Required		Standard 5 day
		Availability contingent upon lab approval; additional fees may apply.	lity contingent	Availabil
	ements	xeport auppiements	a IIIIe	I unitar outling I illie

ions.

PARADIGM PROJECT REFERENCE ACCOLLECTED COLLECTED COLLE	STATE: STATE: STATE: SAMPLE IDENTIFIER 9-2 4-5 4-5	CLIENT: ADDRESS: ATTN: ADDRESS: ADDRESS: ADDRESS: ATTN: ADDRESS: ADDRESS: ADDRESS: ADDRESS: ADDRESS: ADDRESS: ADDR	LAB PROJECT ID 20303 Quotation #: Email: WP - Wipe OL - Oil PT - Paint CK - Caulk AR - Air PARADIGM LAB SAMPLE NUMBER 28
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nple condit	See additional page for sample condit	See addition		,			
	itions (reverse).	By signing this form, client agrees to Paradigm Terms and Conditions (reverse).	please indicate EDD needed:	please indicate package needed:	blease indicate	ded:	please indicate date needed:
		Received @ Lab By Date/Time]	Ì		Rush 1 day
		2/2 7/6/2020 12:34			Category B		Rush 2 day
	33	As the man flich 1-2-20 11:20	NYSDEC EDD	A	Category A		Rush 3 day
		Relinquished by Date/Timb	Basic EDD		Batch QC	X	10 day
	Total Cost:	Sampled By Date/Time	None Required		None Required		Standard 5 day
			fees may apply.	Availability contingent upon lab approval; additional fees may apply.	nt upon lab	ility continge	Availab
			lements	Report Supplements		nd Time	Turnaround Time

	REPORT TO:	INVOICE TO:		N N
PARADIGM	CLEAST TANDED	CLIENT:	LAB PROJECT ID	
	ADDRESS:	ADDRESS: CMM	203031	
	CITY: STATE: ZIP	CITY: STATE: ZIP:	Quotation #:	
	PHONE:	PHONE:	Email:	
PROJECT REFERENCE	ATTN:	ATTN:		
2020 RIVER RO	Matrix Codes: AQ - Aqueous Liquid WG - Gr NQ - Non-Aqueous Liquid WG - Gr	WA - Water DW - Drinking Water SO - Soil WG - Groundwater WW - Wastewater SL - Sludge	SD - Solid WP - Wipe OI PT - Paint CK - Caulk At	OL - Oil AR - Air
		UREQUESTED ANALYSIS		
TE COLLECTED TIME P R COLLECTED S B T 1	SAMPLE IDENTIFIER	X-Z->E ONDOO ONDOE O	REMARKS	PARADIGM LAB SAMPLE NUMBER
1/10 ×	TP15 0-2	✓		ω -
	(C)			
	TP 15 5-6	- ×) 32
	TP 15 5-6	X + X		
	TP 16 0-2	- ×		w w
	TP 16 BAR 4-5	×		
	TP 16 8796 4-5	×		724
	TP 16 5/10 4-5	ч X		12

DATE COLLECTED

7/1/20

Rush 1 day Rush 2 day Rush 3 day 10 day Date Needed Standard 5 day please indicate date needed: **Turnaround Time** Availability contingent upon lab approval; additional fees may apply. Batch QC None Required Other Category B Category A stease indicate package needed: Report Supplements None Required NYSDEC EDD Other EDD Basic EDD lease indicate EDD needed By signing this form, client agrees to Paradigm Terms and Conditions (reverse). Sampled By Received @ Lab By /dodo See additional page for sample conditions. 1:26 P.I.F Total Cost:

Page 99 of 101



Page 6 86

			9 10
REPORT TO:	INVOICETO:	2.30	
ADDRESS: WAYER	4	LAB PROJECT ID	100 م
CITY: STATE: ZIP	CITY: STATE: ZIP:	Quotation #:	Pag
PHONE:	PHONE:	Email:	
ATTN:	ATTN:		
Matrix Codes: AQ - Aqueous Liquid NQ - Non-Aqueous Liquid WG -	- Water DW - Drinking Water SO - Soil - Groundwater WW - Wastewater SL - Sludge	SD - Solid WP - Wipe C PT - Paint CK - Caulk A	OL - Oil AR - Air
	S		
	STAR		PARADIGM LAB
	m O π O π O π O π O π		NUMBER
1P17 0-2	× 1 S		W
TP 17 4-5	- ×		
TP 17 9-5	- x		>36
7017 4-5	-¢		/
TP 18 0-2	- X		37
J-1 814	×		
2-h 31 dt	×		38
10 18 4-5	×		_
1 18 4-5 DUP.	X		39
Report Supplements			
Availability contingent upon lab approval; additional fees may apply.			
None Required None Required Samp	pled by PULL TISTON	Total Cost:	
		ATE: ZIP CITY: STATE: WA - Water WG - Groundwater WW - Drinking Water WW - Wastewater W - Groundwater WW - Wastewater W - Wastewater W - Water WW - Wastewater W - Wastewater W - Water WW - Wastewater W - Wastewater W - Water WW - Wastewater W - Wastewater W - Water WW - Wastewater W - Water W - Water WW - Wastewater W - Water W - Water WW - Wastewater W - Water W - Water WW - Wastewater W - Water W - Water W - Water WW - Wastewater W - Water W - Wa	CLEAVE: ATTE: ATTE:

By signing this form, client agrees to Paradigm Terms and Conditions (reverse).

Rush 1 day Rush 2 day

Date Needed_

Other

Category B Category A

NYSDEC EDD

please indicate package needed:

Other EDD needed :

Received @ Lab By

6/2020 Date/Time

7-2-20

11:20

P.I.F.

please indicate date needed:

10 day

Batch QC

Basic EDD

Rush 3 day

See additional page for sample conditions.



Chain of Custody Supplement

Client:	Leader Consulting Services	Completed by:	Slenn Pezzulo
Lab Project ID:	203031	Date: 7	13/2020
	Sample Condition Per NELAC/ELAP 210		
Condition	NELAC compliance with the sample co Yes	ondition requirements upon No	receipt N/A
Container Type	ents		
Transferred to method- compliant container Headspace (<1 mL)			
Preservation Comme			
Chlorine Absent (<0.10 ppm per test strip Comme			X
Holding Time Comme	in VOA Freeter 7/6/2		
Temperature Comme	nts 6°C red		h(tals
Compliant Sample Quant	1		

APPENDIX G ALPHA ANALYTICAL REPORT



ANALYTICAL REPORT

Lab Number: L2028262

Client: Leader Consukting Services, Inc.

PO Box 286

Clarence, NY 14031

ATTN: Jeffrey Wittlinger
Phone: (716) 565-0963
Project Name: 2020 RIVER RD
Project Number: Not Specified

Report Date: 07/10/20

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: 2020 RIVER RD **Project Number:** Not Specified

 Lab Number:
 L2028262

 Report Date:
 07/10/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2028262-01	TP-1 0-2' SPLIT	SOIL	Not Specified	06/30/20 12:00	07/06/20
L2028262-02	TP-3 0-2' SPLIT	SOIL	Not Specified	06/30/20 12:00	07/06/20



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.	



Serial_No:07102019:30

Project Name:2020 RIVER RDLab Number:L2028262Project Number:Not SpecifiedReport Date:07/10/20

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:

Title: Technical Director/Representative Date: 07/10/20

Jufani Morrissey-Tiffani Morrissey

ALPHA

METALS



SAMPLE RESULTS

Lab ID:L2028262-01Date Collected:06/30/20 12:00Client ID:TP-1 0-2' SPLITDate Received:07/06/20Sample Location:Not SpecifiedField Prep:Not Specified

Sample Depth:

Matrix: Soil Percent Solids: 88%

Percent Solids.	0070					Dilution	Date	Date	Prep	Analytical		
Parameter	Result	Qualifier	Units	RL	MDL	Factor	Prepared	Analyzed	Method	Method	Analyst	
Total Metals - Man	sfield I ah											
Total Motals Mail	oncia Lab											
Arsenic, Total	2.25		mg/kg	0.434	0.090	1	07/08/20 06:4	5 07/09/20 17:26	EPA 3050B	1,6010D	BV	
Barium, Total	32.7		mg/kg	0.434	0.076	1	07/08/20 06:4	5 07/09/20 17:26	EPA 3050B	1,6010D	BV	
Cadmium, Total	ND		mg/kg	0.434	0.043	1	07/08/20 06:4	5 07/09/20 17:26	EPA 3050B	1,6010D	BV	
Chromium, Total	11.1		mg/kg	0.434	0.042	1	07/08/20 06:4	5 07/09/20 17:26	EPA 3050B	1,6010D	BV	
Lead, Total	6.20		mg/kg	2.17	0.116	1	07/08/20 06:4	5 07/09/20 17:26	EPA 3050B	1,6010D	BV	
Mercury, Total	ND		mg/kg	0.071	0.047	1	07/08/20 09:4	5 07/08/20 14:58	EPA 7471B	1,7471B	EW	
Selenium, Total	ND		mg/kg	0.868	0.112	1	07/08/20 06:4	5 07/09/20 17:26	EPA 3050B	1,6010D	BV	
Silver, Total	ND		mg/kg	0.434	0.123	1	07/08/20 06:4	5 07/09/20 17:26	EPA 3050B	1,6010D	BV	



SAMPLE RESULTS

Lab ID:L2028262-02Date Collected:06/30/20 12:00Client ID:TP-3 0-2' SPLITDate Received:07/06/20Sample Location:Not SpecifiedField Prep:Not Specified

Sample Depth:

Matrix: Soil
Percent Solids: 85%

Percent Solids:	05/6					Dilution	Date	Date	Prep	Analytical	
Parameter	Result	Qualifier	Units	RL	MDL	Factor	Prepared	Analyzed	Method	Method	Analyst
Total Metals - Man	cfield Lab										
Total Metals - Mail	Sileiu Lab										
Arsenic, Total	2.62		mg/kg	0.444	0.092	1	07/08/20 06:4	5 07/09/20 17:30	EPA 3050B	1,6010D	BV
Barium, Total	29.8		mg/kg	0.444	0.077	1	07/08/20 06:4	5 07/09/20 17:30	EPA 3050B	1,6010D	BV
Cadmium, Total	ND		mg/kg	0.444	0.044	1	07/08/20 06:4	5 07/09/20 17:30	EPA 3050B	1,6010D	BV
Chromium, Total	6.63		mg/kg	0.444	0.043	1	07/08/20 06:4	5 07/09/20 17:30	EPA 3050B	1,6010D	BV
Lead, Total	6.00		mg/kg	2.22	0.119	1	07/08/20 06:4	5 07/09/20 17:30	EPA 3050B	1,6010D	BV
Mercury, Total	ND		mg/kg	0.073	0.048	1	07/08/20 09:4	5 07/08/20 15:01	EPA 7471B	1,7471B	EW
Selenium, Total	ND		mg/kg	0.887	0.114	1	07/08/20 06:4	5 07/09/20 17:30	EPA 3050B	1,6010D	BV
Silver, Total	ND		mg/kg	0.444	0.126	1	07/08/20 06:4	5 07/09/20 17:30	EPA 3050B	1,6010D	BV



Serial_No:07102019:30

Project Name: 2020 RIVER RD
Project Number: Not Specified

Lab Number: L2028262 **Report Date:** 07/10/20

Method Blank Analysis Batch Quality Control

Parameter	Result C	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield	Lab for sa	ample(s):	01-02 Ba	atch: Wo	G13898	11-1				
Arsenic, Total	0.172	J	mg/kg	0.400	0.083	1	07/08/20 06:45	07/09/20 09:35	1,6010D	LC
Barium, Total	ND		mg/kg	0.400	0.070	1	07/08/20 06:45	07/09/20 09:35	1,6010D	LC
Cadmium, Total	ND		mg/kg	0.400	0.039	1	07/08/20 06:45	07/09/20 09:35	1,6010D	LC
Chromium, Total	0.068	J	mg/kg	0.400	0.038	1	07/08/20 06:45	07/09/20 09:35	1,6010D	LC
Lead, Total	ND		mg/kg	2.00	0.107	1	07/08/20 06:45	07/09/20 09:35	1,6010D	LC
Selenium, Total	ND		mg/kg	0.800	0.103	1	07/08/20 06:45	07/09/20 09:35	1,6010D	LC
Silver, Total	ND		mg/kg	0.400	0.113	1	07/08/20 06:45	07/09/20 09:35	1,6010D	LC

Prep Information

Digestion Method: EPA 3050B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytica Method	
Total Metals - Mans	sfield Lab for sample(s):	01-02 B	atch: W	G13898	374-1				
Mercury, Total	ND	mg/kg	0.083	0.054	1	07/08/20 09:45	07/08/20 14:18	3 1,7471B	EW

Prep Information

Digestion Method: EPA 7471B



Lab Control Sample Analysis Batch Quality Control

Project Name: 2020 RIVER RD

Project Number:

Not Specified

Lab Number: L2028262

Report Date: 07/10/20

Parameter	LCS %Recovery	y Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample	e(s): 01-02 B	Batch: WG138	89811-2 SRM	Lot Number:	D109-540			
Arsenic, Total	97		-		70-130	-		
Barium, Total	99		-		75-125	-		
Cadmium, Total	93		-		75-125	-		
Chromium, Total	100		-		70-130	-		
Lead, Total	94		-		72-128	-		
Selenium, Total	101		-		68-132	-		
Silver, Total	100		-		68-131	-		
Total Metals - Mansfield Lab Associated sample	e(s): 01-02 B	Batch: WG138	39874-2 SRM	Lot Number:	D109-540			
Mercury, Total	94		-		60-140	-		



Matrix Spike Analysis Batch Quality Control

Project Name: 2020 RIVER RD
Project Number: Not Specified

Lab Number: L2028262

Report Date: 07/10/20

arameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery C	Recovery Qual Limits	RPD Qual	RPD Limits
otal Metals - Mansfield Lab	Associated san	nple(s): 01-02	QC Ba	ch ID: WG138	9811-3	QC Sam	nple: L2018377-3	5 Client ID: MS	S Sample	
Arsenic, Total	1.48	9.2	11.1	105		-	-	75-125	-	20
Barium, Total	70.0	153	240	111		-	-	75-125	-	20
Cadmium, Total	ND	3.91	3.63	93		-	-	75-125	-	20
Chromium, Total	9.56	15.3	29.2	128	Q	-	-	75-125	-	20
Lead, Total	46.7	39.1	90.6	112		-	-	75-125	-	20
Selenium, Total	ND	9.2	8.67	94		-	-	75-125	-	20
Silver, Total	ND	23	25.0	109		-	-	75-125	-	20
otal Metals - Mansfield Lab	Associated san	nple(s): 01-02	QC Ba	ch ID: WG138	9874-3	QC Sam	nple: L2028095-0	1 Client ID: MS	S Sample	
Mercury, Total	0.121J	0.358	0.442	124	Q	-	-	80-120	-	20

Lab Duplicate Analysis Batch Quality Control

Project Name: 2020 RIVER RD
Project Number: Not Specified

Lab Number: L2028262

Report Date: 07/10/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-0	2 QC Batch ID:	WG1389811-4 QC Sample:	L2018377-35	Client ID:	DUP Sam	ple
Arsenic, Total	1.48	3.40	mg/kg	79	Q	20
Barium, Total	70.0	57.9	mg/kg	19		20
Cadmium, Total	ND	ND	mg/kg	NC		20
Chromium, Total	9.56	10.1	mg/kg	5		20
Lead, Total	46.7	43.8	mg/kg	6		20
Selenium, Total	ND	ND	mg/kg	NC		20
Silver, Total	ND	ND	mg/kg	NC		20
otal Metals - Mansfield Lab Associated sample(s): 01-0	2 QC Batch ID:	WG1389874-4 QC Sample:	L2028095-01	Client ID:	: DUP Sam	ple
Mercury, Total	0.121J	ND	mg/kg	NC		20

INORGANICS & MISCELLANEOUS



Serial_No:07102019:30

Project Name: 2020 RIVER RD Lab Number: L2028262

Project Number: Not Specified Report Date: 07/10/20

SAMPLE RESULTS

Lab ID:L2028262-01Date Collected:06/30/20 12:00Client ID:TP-1 0-2' SPLITDate Received:07/06/20Sample Location:Not SpecifiedField Prep:Not Specified

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab)								
Solids, Total	87.9		%	0.100	NA	1	-	07/08/20 08:49	121,2540G	PR



Serial_No:07102019:30

Project Name: 2020 RIVER RD Lab Number: L2028262 **Project Number:** Not Specified

Report Date: 07/10/20

SAMPLE RESULTS

Lab ID: Date Collected: L2028262-02 06/30/20 12:00 Client ID: TP-3 0-2' SPLIT Date Received: 07/06/20 Not Specified Sample Location: Not Specified Field Prep:

Sample Depth:

Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry -	Westborough Lab									
Solids, Total	85.4		%	0.100	NA	1	-	07/08/20 08:49	121,2540G	PR



Lab Duplicate Analysis

Batch Quality Control

Lab Number:

L2028262

Report Date:

07/10/20

Parameter	Native Samp	ole D	uplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Asso	ciated sample(s): 01-02	QC Batch ID:	WG1389903-1	QC Sample:	L2028262-01	Client ID:	TP-1 0-2' SPLIT
Solids, Total	87.9		88.4	%	1		20



Project Name:

Project Number:

2020 RIVER RD

Not Specified

Serial_No:07102019:30

Lab Number: L2028262

Report Date: 07/10/20

Sample Receipt and Container Information

Were project specific reporting limits specified?

2020 RIVER RD

Cooler Information

Project Name:

Cooler Custody Seal

A Absent

Project Number: Not Specified

Container Info	ormation		Initial	Final	Temp			Frozen	
Container ID	Container Type	Cooler	pН	pН	deg C	Pres	Seal	Date/Time	Analysis(*)
L2028262-01A	Glass 120ml/4oz unpreserved	Α	NA		4.4	Υ	Absent		TS(7)
L2028262-01X	Glass 60ml unpreserved split	А	NA		4.4	Y	Absent		AS-TI(180),BA-TI(180),AG-TI(180),CR- TI(180),SE-TI(180),PB-TI(180),HG-T(28),CD- TI(180)
L2028262-02A	Glass 120ml/4oz unpreserved	Α	NA		4.4	Υ	Absent		TS(7)
L2028262-02X	Glass 60ml unpreserved split	Α	NA		4.4	Υ	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)



GLOSSARY

Acronyms

EDL

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.)

from unutions, concentrations of moisture content, where applicable. (Dob report formats only.)

- 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 DALLy using Solid Disease Microsoft and CDALT.

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)

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

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 - 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.

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.

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.

Footnotes

Report Format: DU Report with 'J' Qualifiers



 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 Water-preserved 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, Benza(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.
- 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 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 AND 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
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations
 of the analyte.
- ${\bf E} \qquad \hbox{-Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.}$
- 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. (DoD and NYSDEC Part 375 PFAS only.)
- 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 the identification is based on a mass spectral library search.

Report Format: DU Report with 'J' Qualifiers



Data Qualifiers

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.)

 \boldsymbol{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



Serial_No:07102019:30

Project Name:2020 RIVER RDLab Number:L2028262Project Number:Not SpecifiedReport Date:07/10/20

REFERENCES

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.



Serial_No:07102019:30

Alpha Analytical, Inc. Facility: Company-wide

Department: Quality Assurance

Title: Certificate/Approval Program Summary

ID No.:17873 Revision 17

Published Date: 4/28/2020 9:42:21 AM

Page 1 of 1

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: lodomethane (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, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

EPA TO-12 Non-methane organics

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 II, 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, Aq, Ca, Zn. EPA 200.8: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Aq, 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.

Document Type: Form

Pre-Qualtrax Document ID: 08-113

Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	NEW YORK CHAIN OF CUSTODY Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288	Service Centers Mahwah, NJ 07430: 35 Whitney Albany, NY 12205: 14 Walker W Tonawanda, NY 14150: 275 Coo Project Information Project Name: Project Location:	ay		Page / o		Delive	Date Rec in Lab rables ASP-A EQUIS (1		7/	ASP-	/ 20 B S (4 File)	ALPHA Job # (2028202 Billing Information Same as Client Info
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Data Usability Summary Report June & July 2020 Sampling Event 2020 River Road Site Wheatfield, New York Project No. 908.001

DATA USABILITY

The Quality Assurance Project Plan ("QAPP") was prepared for this project by Leader Consulting Services, Inc. ("Leader") for Niagara County. The QAPP presents the policies, organization, objectives, functional activities, and specific Quality Assurance ("QA") and Quality Control ("QC") measures designed to achieve the data quality goals associated with this investigation. The QAPP identifies procedures for sample preparation and handling, sample chain-of-custody, laboratory analyses, and reporting that were implemented during this investigation to ensure the accuracy and integrity of the data generated during the investigation.

Leader conducted the sampling event on June 30 and July 1, 2020 as part of the Phase II Investigation activities of the 2020 River Road Property ("Site") in Niagara County, Wheatfield, New York.

DATA SUMMARY

The Data Usability Review and Data Validation Compliance Chart has been completed for the laboratory deliverable packages generated by Paradigm Environmental Services, Inc. ("Paradigm"), pertaining to samples collected on the Site on June 30 and July 1, 2020. A total of 36 soil samples were collected, plus Quality Control samples, during the June/July 2020 sampling event as part of 6 NYCRR Part 375, Environmental Remediation Programs. The following USEPA Methodologies were used to analyze these samples for the following analytes:

Volatile Organic Compounds ("VOCs")

Semi-Volatile Organics ("SVOCs")

Metals

Mercury

Total Solids

USEPA Method 8260

USEPA Method 8270D

USEPA Method 3050B/6010D

USEPA Method 7471B

USEPA Method 1684

Field duplicates, surrogates, internal standards, reference samples, matrix spikes, and matrix spike duplicates were included in the sample set and processed.

Samples were collected and received on the following schedule:

Sample Data Group ("SDG")	Date Collected	Date Received by Paradigm	Sample Matrix	Requested Analyses	Sample Temperature (°C)
203031	06/30/2020 07/01/2020	07/06/2020	Soils (36 Sample Locations)	VOCs 8260 SVOCs 8270 Metals Mercury Total Solids	6°C

Data usability and validation was performed with guidance from the most current editions of the USEPA CLP National Functional Guidelines for Inorganic and Organic Data Review. The following items were reviewed:

- Data Completeness;
- Custody Documentation;
- Holding Times;
- Sample Blanks Review;
- Field Duplicate Samples;
- Matrix Spike Samples and Duplicates; and
- Control Spike/Laboratory Control Samples.

Those items showing deficiencies, if any, are discussed in the attached Data Validation Compliance Chart. All others were found to be acceptable as outlined in the above-mentioned usability procedures, and as applicable for the methodology. Unless noted specifically in the following text, reported results are substantiated by the reported data, and generated in compliance with protocol requirements.

In summary, sample preservation, handling, and processing was conducted with compliance to protocol requirements and with adherence to quality criteria and the reported results are considered "usable".

The Data Validation Compliance Chart is included with this report.

CUSTODY DOCUMENTATION

Chain of Custody ("COC") forms are used to document the history of sample possession from the time the sample containers leave their point of origin (usually the laboratory performing the analyses) to the time the samples are received by the laboratory. COCs are considered legal documents.

The laboratory report, 203031 associated with the eighteen (18) soil samples collected on June 30 and July 1, 2020 is detailed below:

- 1. TP1: 0-2 feet
- 2. TP1: 4-5 feet
- 3. TP2: 0-2 ft (plus Duplicate)
- 4. TP2: 5-6 feet (Matrix Spike/Matrix Spike Duplicate)
- 5. TP3: 0-2 feet
- 6. TP3: 5-6 feet
- 7. TP4: 0-2 feet
- 8. TP4: 5-6 feet
- 9. TP5: 0-2 feet

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10. TP5: 5-6 feet
11. TP6: 0-2 feet (plus Matrix Spike/Matrix Spike Duplicate)
12. TP6: 5-6 feet
13. TP7: 0-2 feet
14. TP7: 4-5 feet
15. TP8: 0-2 feet
16. TP8: 4-5 feet
17. TP9: 0-2 feet
18. TP9: 5-6 feet
19. TP10: 0-3 feet
20. TP10: 3-4 feet
21. TP11: 0-2 feet
22. TP11: 4-5 feet
23. TP12: 0-2 feet
24. TP12: 4-5 feet
25. TP13: 0-2 feet
26. TP13: 4-5 feet
27. TP14: 0-2 feet
28. TP14: 5-6 feet (plus Matrix Spike/Matrix Spike Duplicate)
29. TP15: 0-2 feet
30. TP15: 5-6 feet
31. TP16: 0-2 feet
32. TP16: 4-5 feet
33. TP17: 0-2 feet
34. TP17: 4-5 feet
35. TP18: 0-2 feet
36. TP18: 4-5 feet (plus Duplicate)
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Samples TP2 (0-2 feet) and TP18 (4-5 feet) were collected in Duplicate.

Samples TP2 (5-6 feet), TP6 (0-2 feet), and TP14 (5-6 feet) were collected as the Matrix Spike (MS) and Matrix Spike Duplicate (MSD).

The Chain of Custody ("COC") documents the sample collection efforts. There were no discrepancies on the COC.

PRESERVATION AND TECHNICAL HOLDING TIMES

The laboratory noted that the VOC samples were placed in a refrigerator for 48 hours prior to being placed in the freezer. The refrigerator at the laboratory is maintained between 0°C and 6.0°C. This is compliant with the QAPP.

The cooler temperatures were below the 6.0°C limit as well.

All sample holding times were met.

ACCURACY, PRECISION, AND SENSITIVITY OF ANALYSES

The fundamental QA objective with respect to the accuracy, precision, and sensitivity of analytical data is to achieve the QC acceptance of each analytical protocol. Accuracy and precision are determined using matrix spike ("MS") and matrix spike duplicate ("MSD") samples.

Accuracy is a measure of the difference of a set of analytical results to the accepted or expected values. Accuracy was assessed by using the MS/MSD and surrogate spike recovery data.

Recovery values were reported within the laboratory QC limits for each analytical parameter:

Precision is a measure of the mutual agreement between measurements of the same parameter.

The sample results for the Site are considered "usable" as the associated laboratory control sample recoveries were within acceptable recovery limits.

COMPLETENESS, REPRESENTATIVENESS, AND COMPARABILITY OF DATA

Completeness is the measure of the amount of valid data obtained from a measurement system compared with the amount expected to be obtained under normal conditions. Review of the analytical data packages provided by Paradigm indicates that the requested parameters were analyzed for and reported by the laboratory for each sample submitted under proper chain-of-custody procedures. Based upon MEHC's review of the laboratory data, a usable data level was achieved.

Representativeness of the data is obtained through the design of the sampling program and the adherence to established sample collection procedures, sample-handling SOPs, and analytical procedures. The sampling program outlined in the Work Plan was designed to provide for data representative of site conditions taking into consideration past disposal practices, existing data from past studies, and the physical site setting. Collection of the soil samples were conducted in accordance with established industry and regulatory protocols.

The laboratory maintained all holding times for the specific analytical protocols.

Comparability of the data is derived from the evaluation of field duplicate samples and the adherence to established sampling and analytical procedures. A field duplicate is an independent sample collected as close as possible to the original location from the same sampling point. All of the soil samples were analyzed utilizing standardized USEPA methodologies performed in accordance with the latest version of the NYSDEC ASP protocols.

QUALITY CONTROL CHECKS

Trip Blanks

A trip blank is provided with each sampling event to be analyzed for volatile organic compounds (VOCs). Analysis of trip blanks determines whether a sample bottle was contaminated during shipment from the manufacturer, while in bottle storage, in shipment to the laboratory, or during analysis at a laboratory. Trip blanks consist of an aliquot of distilled water sealed in a sample bottle, prepared by the analytical laboratory prior to shipping the sample bottles.

A Trip blank was NOT included with the shipment of the soil samples.

Field (Equipment) Blanks

A field (equipment) blank was NOT collected as part of this project as dedicated field sampling equipment was used at each location.

Method Blanks

A method blank is a sample of reagent water, which is carried through the analytical procedure alongside the project samples to determine the level of laboratory background and reagent contamination.

For this investigation, a method blank was analyzed alongside the soil samples collected on June 30 and July 1, 2020. There were no Metals, SVOCs. Or VOCs detected in the Method Blank.

Matrix Spike/Matrix Spike Duplicate Samples

For the Site, the MS/MSD samples were collected and analyzed for the soil samples. The sample results are considered acceptable and were within the control limits with the following exceptions:

- 1. TP14 (5-6 feet): Phenol spike recovery (MS/MSD) was greater than the upper control limit. All other quality control parameters were met. The sample result is listed as estimated as J+. The project samples did not have detectable levels of phenol and are not qualified.
- 2. TP2 (5-6 feet): Chromium spike recovery was less than the lower acceptance limit but greater than 30% recovery. The sample result is listed as estimated as J. The Relative Percent Difference ("RPD") for Cadmium, Chromium, Lead, and Mercury were greater than the acceptance limits and are estimated as J.
- 3. TP6 (0-2 feet): Arsenic, Cadmium, Chromium, Lead, Mercury, and Selenium spike recoveries were less than the lower acceptance limits but greater than 30% recovery. The sample results are listed as estimated as J. The RPD for Lead was greater than the acceptance limit and is estimated as J.

These results are detailed in the Data Validation Compliance Chart.

Surrogate Analyses

Surrogates are compounds added directly to every standard, blank, MS/MSD, and sample at a known concentration, prior to extraction or analysis; and used to evaluate the analytical efficiency by measuring percent recovery of those compounds upon analysis. The laboratory reported surrogate recoveries were within established QC limits for the surrogates.

OVERALL ASSESSMENT

As was determined by this evaluation, the laboratory followed the specified analytical methods. Accuracy was acceptable as demonstrated by the surrogate, laboratory control sample/laboratory control samples ("LCS"), and MS/MSD, % Recovery values, with the exceptions noted in the above narrative.

The sample results for the Site, as qualified, are considered acceptable for use.

PREPARED BY: ME Holvey, Consulting, LLC

Mary Ellen Holvey, CIH Senior Industrial Hygienist

August 10, 2020

Data Validation Compliance Chart 2020 River Road Wheatfield, New York

June 30 and July 1, 2020 Sampling Event

Sample Data Group (SDG)	203031						
Matrix	Soils						
Analysis	VOCs 8260	SVOCs 8270	Metals and Mercury				
Holding Times	Samples were extracted and analyzed within USEPA holding times						
Sample Preservation	The samples were collected and preserved in accordance with laboratory and QAPP protocols.						
Method Blanks	All data quality objectives were satisfied.						
Detection Limits	No issues identified.						
Matrix Spike/Matrix Spike Duplicate	TP14 (5-6 feet): Phenol spike recovery (MS/MSD) was greater than the upper control limit. All other quality control parameters were met. The sample result is listed as estimated. The project samples did not have detectable levels of phenol and are not qualified. 2,4-Dinitrotoluene was outside the MS/MSD recovery limit however the target analyte was not found above the Method Reporting Limit and no corrective action was taken. The sample set results are accepted based on associated laboratory control sample (LCS) recoveries for the target compounds. All other data quality objectives were satisfied.		TP2 (5-6 feet): Chromium spike recovery was less than the lower acceptance limit but greater than 30% recovery. The sample result is listed as estimated. The Relative Percent Difference ("RPD") for Cadmium, Chromium, Lead, and Mercury were greater than the acceptance limits and are estimated. TP6 (0-2 feet): Arsenic, Cadmium, Chromium, Lead, Mercury, and Selenium spike recoveries were less than the lower acceptance limits but greater than 30% recovery. The sample results are listed as estimated. The RPD for Lead was greater than the acceptance limit and is estimated. The sample set results are accepted based on associated laboratory control sample (LCS) recoveries for the target compounds. All other data quality objectives were satisfied.				

Data Validation Compliance Chart 2020 River Road Wheatfield, New York

June 30 and July 1, 2020 Sampling Event

Sample Data Group (SDG)	203031					
Matrix	Soils					
Analysis	VOCs 8260	SVOCs 8270	Metals and Mercury			
Surrogates	All data quality objectives were satisfied.					
Internal Standards	All data quality objectives were satisfied.					
Laboratory Control Sample	All laboratory internal quality control samples were within acceptable ranges.					