Check one of the following: ☐ On-Site Storage of PCS ☐ Landfarming PCS ☒ Storage and Landfarming PCS

Iowa Department of Natural Resources

PETROLEUM CONTAMINATED SOIL LANDFARMING AND STORAGE NOTIFICATION FORM

Mulituse and single-use landfarming agencies shall submit the following notification form to the department and department field office with jurisdiction over the landfarm before land application; however, at least 30 days' notification is encouraged. Petroleum Contaminated Soil (PCS) from an emergency cleanup supervised by the department pursuant to subrule 120.6(1), however, shall be reported within 7 days of the emergency cleanup.

Send the completed application with attached information to:

Solid Waste Section
Land Quality Bureau
Iowa Department of Natural Resources
502 E 9th Street
Des Moines, IA 50319
Fax: (515) 725-8202

Visit https://www.iowadnr.gov/fieldoffice for a listing of field offices addresses and jurisdictions

Questions contact Matt Graesch at (515) 725-8331 or matthew.graesch@dnr.iowa.gov

For information on Emergency Response Spills, call (515) 725-8694 or visit http://www.iowadnr.gov/About-DNR/DNR-Staff-Offices/Environmental-Field-Offices/Emergency-Response-Unit

SECTION 1. CONTACT INFORMATION (Provide the name, address and telephone number for the following):

Landfarming Agency Owner(s)

Name: Blackhawk Environmental Testing, Inc.

Street Address: 113 Castle Lane, P.O. Box 85

City: Denver State: IA Zip Code: 50622

Phone Number: 319/231-8215 E-mail: olliethurman@msn.com

DNR Existing Permit Number for Agency: 09 - SDP- 09-07P -PCS

PCS Landfarming/Storage Location Owner

Name: Rhonda Schnitzler

Street Address: 2572 Pine Creek Road

City: Decorah State: IA Zip Code: 52101-7745

Phone Number: 563/419-2133 E-mail: rhonda@vikingstatebank.com

Legal Description of Property that will be Utilized for Landfarming/Storage:
(you may attach a legal description from your county assessor)

NW ¼ of NW ¼ of SE ¼ 33 (Section) T99 (Township) N R9 (Range) ☐E ☒W WINNESHIEK (County)

SECTION 2: PCS LANDFARMING AND STORAGE INFORMATION

Petroleum product contaminating soil (check all that apply):

☒ Gasoline ☒ Diesel ☐ Waste Oil ☐ Kerosene ☐ Jet Fuel ☐ Other _____

* Note: Storage of non-standard PCS requires a permit amendment request

Predominant texture of the contaminated soil:

☒ Clay ☐ Sand ☐ Silt ☐ Gravel ☐ Other _____

Does PCS contain or have the potential to produce tar balls:

☐ Yes ☒ No

* PCS that has the potential to produce tar balls shall not be landfarmed

Estimated volume of PCS to be stored: 175 to 200 Cubic Yards

Date PCS is expected to be delivered for storage: 9/19/2025

Date PCS is expected to be land applied: 9/30/2025

Is this project part of a department-supervised emergency cleanup?: ☐ Yes ☒ No

If yes, provide the spill number _____

Petroleum Contaminated Site or Facility

Name: Engen Express

Street Address: 610 North Street

City: Ridgeway State: IA Zip Code: 52165

Phone Number: 563/419-4778 E-mail: lisaengen@msn.com

Legal Description of Property that will be Utilized for Landfarming/Storage:

(you may attach a legal description from your county assessor)

NW ¼ of NW ¼ of SE ¼ 33 (Section) T99 (Township) N R9 (Range) ☐E ☒W WINNESHIEK (County)

Underground Storage Tank Owner, if applicable

Name: Engen Express LLC

Street Address: 610 North Street

City: Ridgeway State: IA Zip Code: 52165

Phone Number: 563/419-4778 E-mail: lisaengen@msn.com

UST Registration Number, if applicable: 199117359

LUST Registration Number, if applicable: pending

SECTION 3. NOTIFICATION FORM CHECKLIST

Checking the appropriate boxes below certifies that the attachments submitted in conjunction with this application form are complete and in compliance with the applicable chapters of the Iowa Administrative Code. While some of the attachments below may have been submitted previously, updated copies of each is required to be provided with each notification form.

Required Document

☒ Section A. Topographical Map of Landfarm [IAC 567 Chapter 120.11(1) "b" (2)]
☒ Section B. Soil Map of Landfarm with Key [IAC 567 Chapter 120.11(1) "b" (2)]
☒ Section C. 100-Year Flood Plain Map [IAC 567 Chapter 120.11(1) "b" (2)]
☐ Section D. Map of Landfarm Plot to be Utilized [IAC 567 Chapter 120.11(1) "b" (2)]
☒ Section E. Application Rate Calculations Pursuant to 120.9(6) [IAC 567 Chapter 120.11(1) "b"(3)]
☒ Section F. Chemical Analysis of Petroleum Contaminated Soil [IAC 567 Chapter 120.11(1) "c"]

SECTION 4. LANDFARMING AGENCY OWNER CERTIFICATION FOR LANDFARMING AND STORAGE OF PCS

I certify under penalty of law that I am the owner of the landfarming agency for which this Petroleum Contaminated Soil Landfarming and Storage Notification Form is submitted, and that I have examined and am familiar with the requirements of landfarming and storage of petroleum contaminated soil in accordance with Iowa Administrative Code 567-Chapter 120, and that the information I have provided is true, accurate and complete.

Signature: _____ Date: 9/16/2025

Printed Name: Ollie Thurman

SECTION 5. LANDFARMING SITE OWNER CERTIFICATION FOR LANDFARMING AND STORAGE OF PCS

I certify I own the application or storage site for the petroleum contaminated soil referenced above and I understand the landfarming practices described in this notification must conform with the requirements contained in Iowa Administrative (IAC) Code 567-Chapter 120.

Signature: Rhonda Schnitzler Date: 9/16/2025

Printed Name: Rhonda Schnitzler

DOCUMENTS TO BE ATTACHED

SECTION A. TOPOGRAPHICAL MAP OF LANDFARM (ONLY APPLICABLE FOR SINGLE USE LANDFARM)

✓ Provide a topographical map that includes at least a ¼ mile radius around the landfarm site. Clearly mark the following on the map:

a. Application site boundary
b. Water wells and occupied structures within ¼ mile of the application site
c. Streams, lakes, ponds, drainage ditches, sinkholes and tile line surface intakes that are located within a ¼ mile of the application site

SECTION B. SOIL MAP OF LANDFARM (ONLY APPLICABLE FOR SINGLE USE LANDFARM)

✓ Provide a soil map with key showing where the PCS will be applied and the landfarm site boundary. If PCS is planned to be stored, mark the location on the soil map. Soil maps can be obtained from the local Natural Resource Conservation Service (NRCS) office.

PCS shall not be applied on Loamy Sand, Sand, and Silt for single-use landfarms and Clay, Sandy Clay, Sandy Clay Loam, Sandy Loam, Loamy Sand, Sand, and Silt for multiuse landfarms as classified by the USDA Textural Classification Chart for Soils. Soils in the operating area shall have a pH greater than 6 and less than 9, free of debris larger than 4 inches in diameter, and have a minimum of 6 feet of soil over bedrock.

SECTION C. FLOOD PLAIN MAP (ONLY APPLICABLE FOR SINGLE-USE LANDFARM)

✓ Provide a 100-year flood plain map showing where the PCS will be applied and the landfarm site boundary.

SECTION D. MAP OF LANDFARM PLOT TO BE UTILIZED (ONLY APPLICABLE FOR MULTIUSE LANDFARM)

✓ Provide a map illustrating the multiuse landfarm site and indicating the landfarm plot which the PCS is to be applied.

SECTION E. APPLICATION RATE CALCULATIONS PURSUANT TO IAC 567-120.9(6) (APPLICABLE TO SINGLE- USE AND MULTIUSE LANDFARM)

✓ PCS shall be land applied at a rate that is as uniform as practical over an area sufficient to satisfy the greater of the following area requirements. However, PCS from an emergency cleanup supervised by the department pursuant to subrule 120.6(1) may instead be land applied at a rate of 162 ft^2 of landfarm area per cubic yard (yd^3) of PCS, that is as uniform as practical, and in which no layer of unincorporated PCS is thicker than 2 inches.

a. Petroleum constituents. PCS shall be land applied over the largest area required by the following:
   (1) Benzene. PCS contaminated with benzene shall be land applied in accordance with Table 1. The average concentration of benzene in the PCS shall be used to determine the landfarm area (ft^2) required per cubic yard (yd^3) of PCS to be land applied. The average concentration of benzene shall be calculated from all soil boring test results that are within the PCS excavation area. The application shall be as uniform as practical over the area required.

Table 1

Average concentration of benzene (mg/kg)	Ft^2 of landfarm area per yd^3 of PCS applied	Maximum thickness of unincorporated PCS	Yd^3 of PCS per acre of landfarm
0 < mg/kg ≤ 10	81 ft2	4 inches	537 yd^3
10 < mg/kg ≤ 20	162 ft2	2 inches	268 yd^3
20 < mg/kg	324 ft2	1 inch	134 yd^3

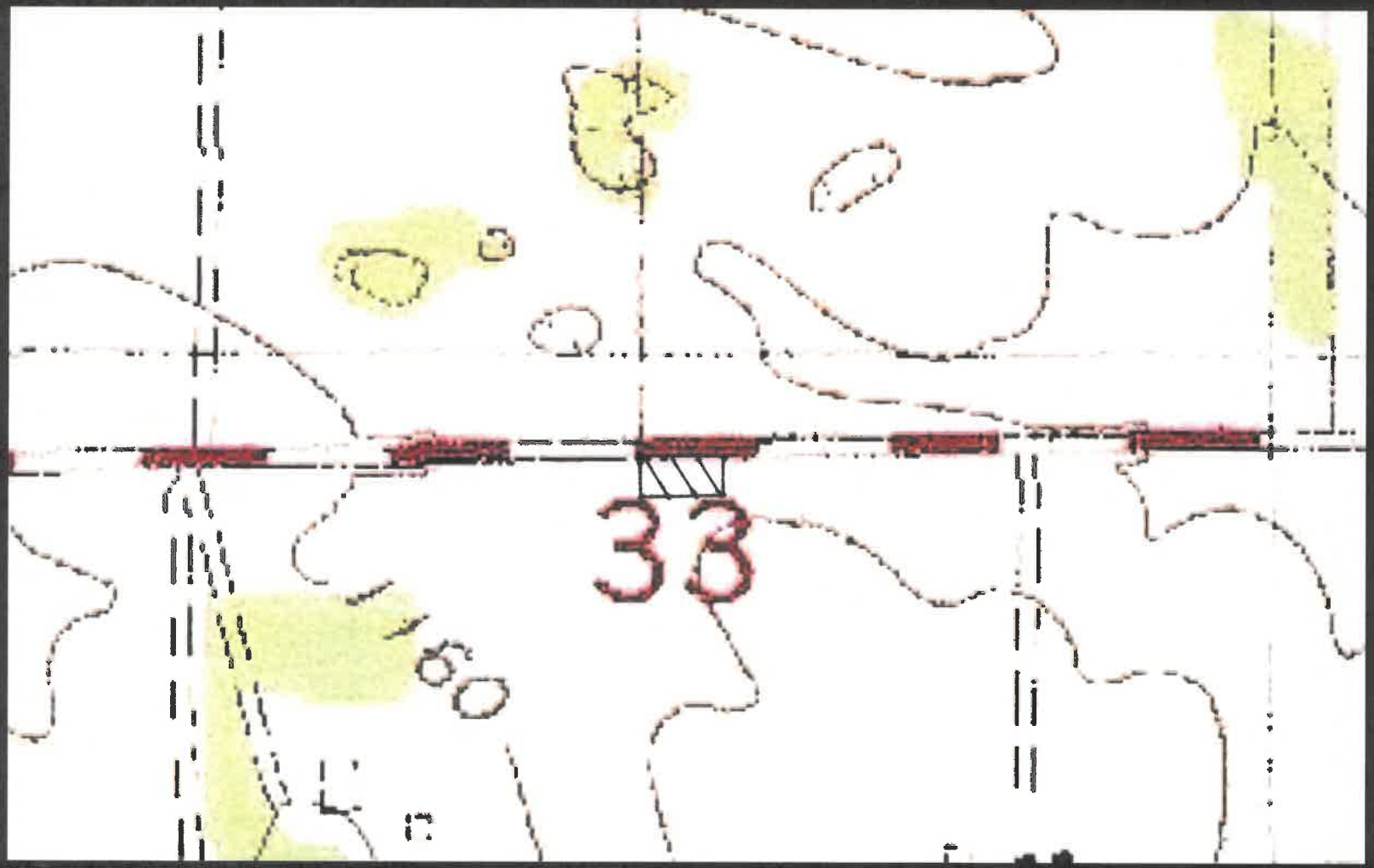
   (2) Toluene, ethylbenzene, xylene, and TEH-diesel. PCS that is not contaminated with benzene or MTBE, but is contaminated with toluene, ethylbenzene, xylene, THE-diesel, or some combination thereof, shall be land applied at a rate of 81 ft^2 of landfarm area per cubic yard (yd3) of PCS. The application shall be as uniform as practical, and no layer of unincorporated PCS shall be thicker than 4 inches.

b. Total heavy metals. PCS that has been tested for heavy metals pursuant to subparagraph 120.6(2)"c"(4) shall be applied at a rate that is as uniform as practical, that results in no layer of PCS is thicker than 4 inches, and that upon incorporation produces a landfarm soil that satisfies the following requirements. This analysis requires prior testing of background levels of heavy metals at the proposed landfarm site.
   (1) Total heavy metals are less than 2,500 milligrams per kilogram (mg/kg).
   (2) Any particular concentration of a heavy metal is less than the appropriate statewide standard for soil developed pursuant to 567—Chapter 137.

SECTION F. CHEMICAL ANALYSIS OF PETROLEUM CONTAMINATED SOIL (APPLICABLE TO SINGLE-USE AND MULTIUSE LANDFARM)

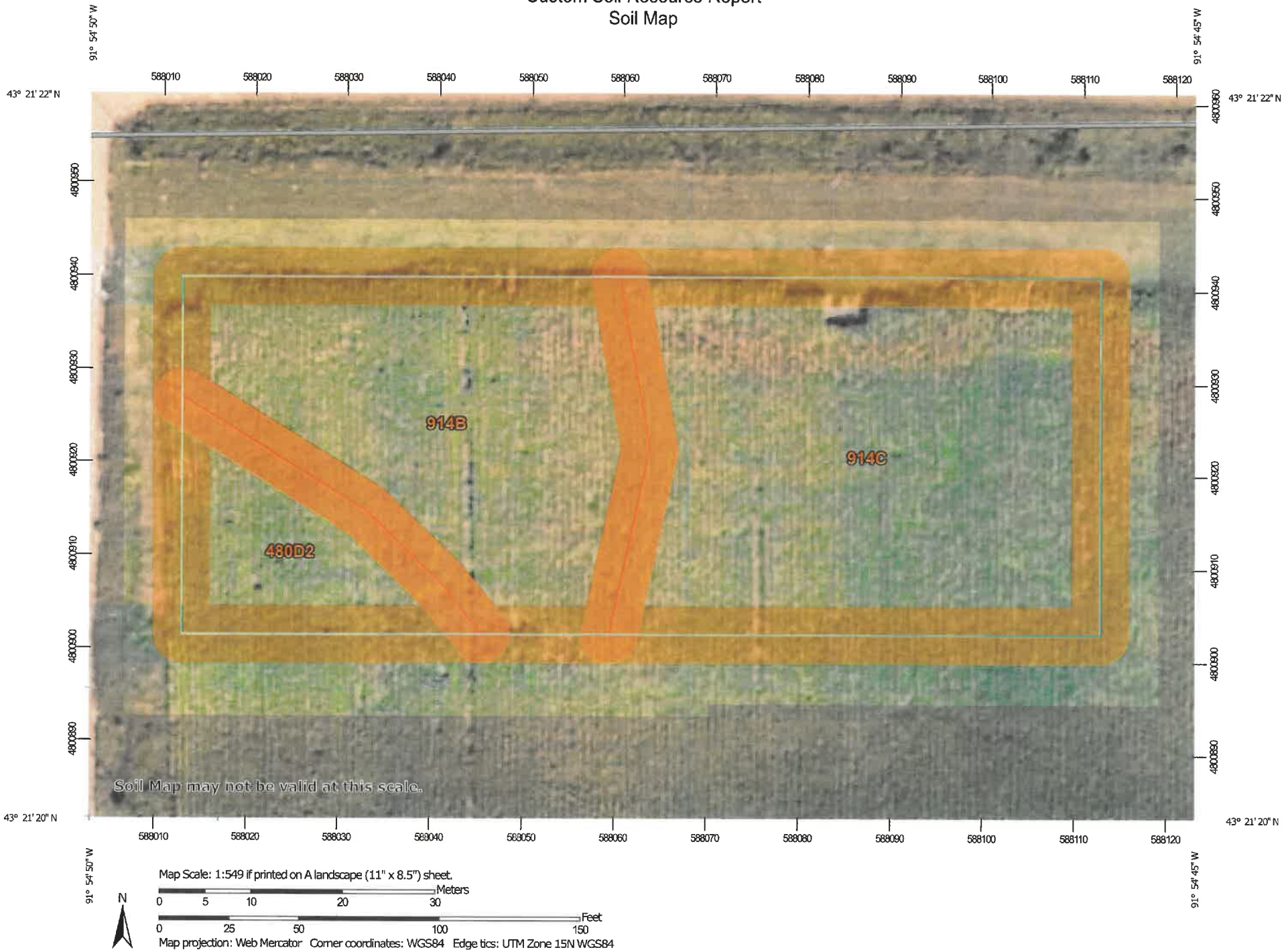
- ✓ The following analyses shall be performed. Samples shall be acquired, stored, handled, tested and reported in accordance with the required methodology and accepted scientific procedures. A laboratory certified for UST petroleum analyses pursuant to IAC 567-Chapter 83 shall test samples. The analysis shall utilize the most recent version of Method OA-1 (GCMS), "Method for Determination of Volatile Petroleum Hydrocarbons (Gasoline)," University of Iowa Hygienic Laboratory.
    a. BTEX testing. The PCS shall be tested for benzene, toluene, ethylbenzene and xylene.
    b. TEH-diesel testing. The PCS shall be tested for total extractable hydrocarbons.
    c. MTBE testing. The PCS shall be tested for methyl tertiary-butyl ether unless prior analysis at the site, pursuant to IAC 567-Chapter 135.15(455B), has shown that MTBE is not present in the soil or groundwater.
    d. Total metals testing. If the history of the petroleum contaminated site is known to have included solvents, batteries, leaded fuel, waste oil or a gas station in operation prior to 1985, then the PCS shall be tested for total Resource Conservation and Recovery Act (RCRA) metals.

SECTION A: TOPOGRAPHICAL MAP


33
160

SECTION B: SOIL MAP

Custom Soil Resource Report
Soil Map



Map Scale: 1:549 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 5 10 20 30

Feet
0 25 50 100 150

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 15N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Winneshiek County, Iowa
Survey Area Data: Version 33, Aug 29, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 31, 2020—Sep 2, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
480D2	Orwood silt loam, 9 to 14 percent slopes, moderately eroded	0.1	12.4%
914B	Winneshiek loam, 2 to 5 percent slopes	0.3	36.7%
914C	Winneshiek loam, 5 to 9 percent slopes	0.5	50.9%
Totals for Area of Interest		**1.0**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

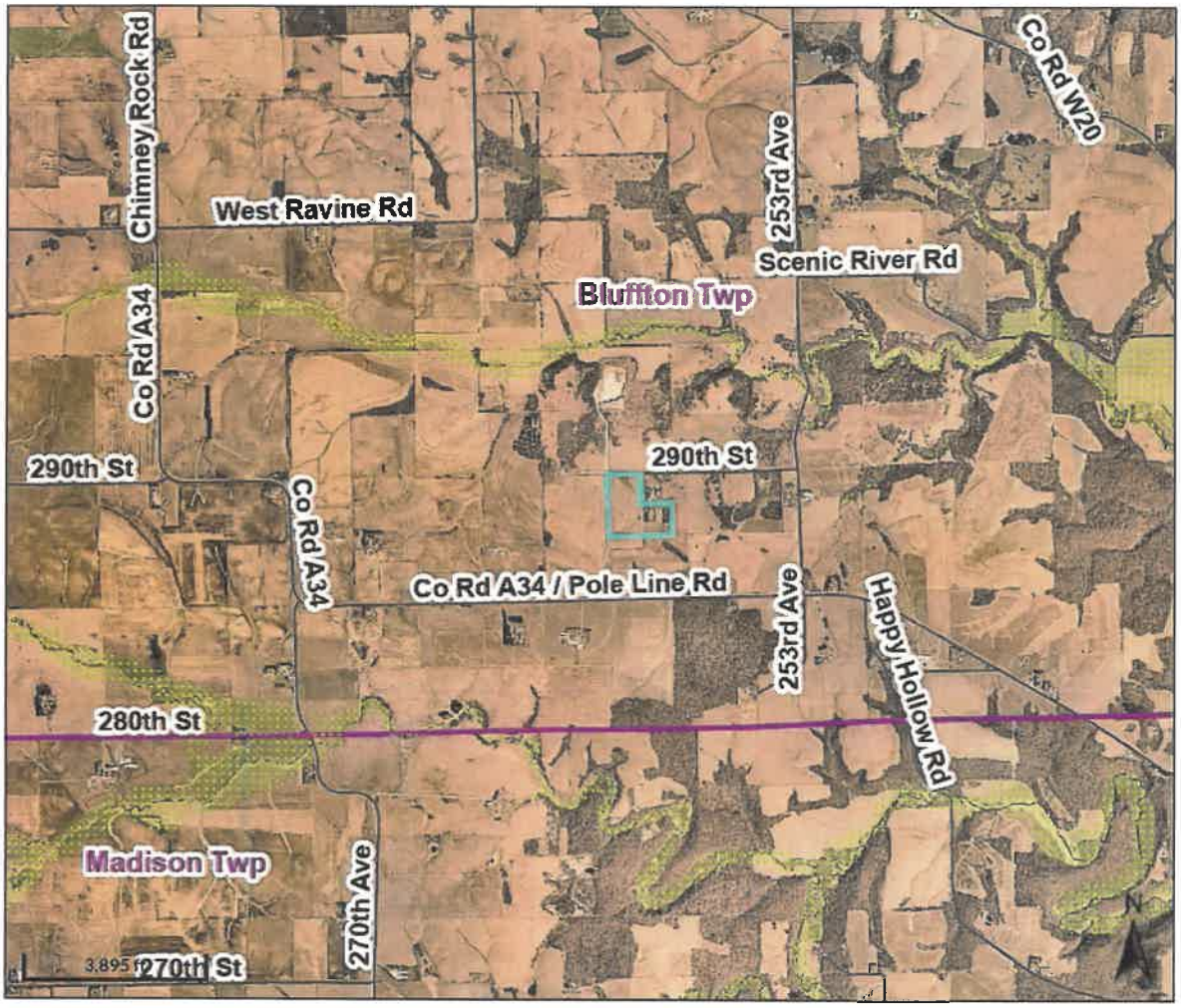
A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or

SECTION C: FLOOD PLAIN MAP

Beacon™ Winneshiek County, IA



Legend

- Corporate Limits
- Political Townships
- Parcels

Flood Zones

- A: Flood Zone
- AE: Floodway
- AE: Floodplain
- AH: 1% Chance Annually of Shallow Flooding

Roads

Parcel ID	063320000500	**Alternate ID**	n/a	**Owner Address**	Schnitzler, Randal
Sec/Twp/Rng	33-99-9	**Class**	A		Schnitzler, Rhonda
Property Address		**Acreage**	30.2		2572 Pine Creek Rd
					Decorah, IA 52101-7745

District BLUFFTON TWP DECORAH COMM.

Brief Tax Description NE NE EXC LOT 1

(Note: Not to be used on legal documents)

Date created: 9/16/2025

Last Data Uploaded: 9/15/2025 11:06:13 PM

Developed by SCHNEIDER GEOSPATIAL

SECTION E: APPLICATION RATE CALCULATIONS

The limiting chemical of concern is benzene.

A large pile of contaminated soil from a UST Closure is ready for transport. Eleven samples collected from the excavated area are shown on the included spreadsheet. Only three of the samples exceeded method detection levels.

D-1	**0.305 mg/kg**
D-2	**0.743 mg/kg**
L-8	**0.750 mg/kg**
	1.798 mg/kg

This equates to a benzene average of 0.60 mg/kg, therefore PCS shall be land applied at a rate of 81 ft^2 of landfarm area per cubic yard of PCS. The application shall be as uniform as practical, and no layer of un-incorporated PCS shall be thicker than 4 inches.

Client: Atlas Technical Consultants LLC
Project:
Project # ENGEN EXPRESS, RIDGEWAY
Sampled: 08/18/2025-08/19/2025
Laboratory: Eurofins Cedar Falls

			Group 1					Group 2	
Lab ID	Sample ID	Sampled Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	Diesel (mg/kg)	Waste Oil (mg/kg)	
310-313757-9	D-1	08/18/2025	0.305	2.64	0.769	4.19	<27.2	<27.2	
310-313757-10	D-2	08/18/2025	0.743	8.28	4.69	28.6	<18.9	26.4	
310-313757-11	D-3	08/18/2025	<0.0962	<0.0962	<0.0962	<0.288	6060	<43.7	
310-313757-1	L-1	08/19/2025	<0.0925	<0.0925	<0.0925	<0.277	<37.7	157	
310-313757-2	L-2	08/19/2025	<0.0968	<0.0968	<0.0968	<0.290	<27.4	<27.4	
310-313757-3	L-3	08/19/2025	<0.0951	<0.0951	<0.0951	<0.285	2220	<20.3	
310-313757-4	L-4	08/19/2025	<0.0951	<0.0951	1.49	4.90	1570	<27.2	
310-313757-5	L-5	08/19/2025	<0.0997	0.387	<0.0997	0.774	<27.9	<27.9	
310-313757-6	L-6	08/19/2025	<0.0966	<0.0966	<0.0966	<0.290	<21.2	<21.2	
310-313757-7	L-7	08/19/2025	<0.0946	<0.0946	<0.0946	<0.284	<29.8	55.0	
310-313757-8	L-8	08/19/2025	0.750	4.55	1.42	11.1	<31.7	58.7	

SECTION F: CHEMICAL ANALYSIS OF PCS

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Gaylen Hiesterman
Atlas Technical Consultants LLC
328 LaPorte Road
Waterloo, Iowa 50702

Generated 9/11/2025 10:53:30 AM Revision 1

JOB DESCRIPTION

Ridgeway UST Closure

JOB NUMBER

310-313757-1

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization

Generated
9/11/2025 10:53:30 AM
Revision 1

Authorized for release by
Conner Calhoun, Client Service Manager
Conner.Calhoun@et.eurofinsus.com
(319)277-2401

Table of Contents

Job Narrative
310-313757-1

REVISION

The report being provided is a revision of the original report sent on 9/2/2025. The report (revision 1) is being revised due to Client added TCLP metals to the project.

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

Receipt
The samples were received on 8/20/2025 10:12 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.8°C.

Hydrocarbons
Method OA1: The following sample(s) was collected in a properly preserved vial; however, the pH was outside the required criteria when verified by the laboratory. The samples were analyzed outside the 7-day holding time specified for unpreserved samples but within the 14-day holding time specified for preserved samples: TMW-1 (310-313757-12), TMW-2 (310-313757-13) and TMW-3 (310-313757-14).

Method OA1: The method requirement for no headspace was not met. The following volatile sample was analyzed with headspace in the sample container(s): TMW-2 (310-313757-13).

Method OA1: Surrogate recovery for the following samples were outside the upper control limit: L-4 (310-313757-4) and L-5 (310-313757-5). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method OA1: Surrogate recovery for the following samples were outside control limits: L-4 (310-313757-4), L-5 (310-313757-5), L-8 (310-313757-8), D-1 (310-313757-9) and D-2 (310-313757-10). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

Diesel Range Organics
Method OA2: Due to the matrix, the initial volume(s) used for the following samples deviated from the standard procedure: L-1 (310-313757-1), L-2 (310-313757-2), L-3 (310-313757-3), L-4 (310-313757-4) and L-5 (310-313757-5). The reporting limits (RLs) have been adjusted proportionately.

Method OA2: Due to the matrix, the initial volume(s) used for the following samples deviated from the standard procedure: L-6 (310-313757-6), L-7 (310-313757-7), L-8 (310-313757-8), D-1 (310-313757-9), D-2 (310-313757-10) and D-3 (310-313757-11). The reporting limits (RLs) have been adjusted proportionately.

Method OA2: Surrogate recovery for the following sample was outside the upper control limit: (MB 310-464753/1-A). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method OA2: The surrogate for laboratory control sample (LCS) for preparation batch 310-464753 and analytical batch 310-464760 recovered outside control limits for the following analytes: n-Octacosane.

Method OA2: Surrogate recovery for the following sample was outside control limits: L-1 (310-313757-1). Evidence of matrix

interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method OA2: Surrogate recovery for the following sample was outside the upper control limit: (MB 310-464857/1-A). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method OA2: The surrogate for the laboratory control sample (LCS) for preparation batch 310-464857 and analytical batch 310-464875 recovered outside control limits for the following analytes: n-Octacosane.

Method OA2: Surrogate recovery for the following samples were outside control limits: L-7 (310-313757-7), (310-313590-A-1-E), (310-313590-A-1-C MS) and (310-313590-A-1-D MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

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

Sample Summary

Client: Atlas Technical Consultants LLC
Project/Site: Ridgeway UST Closure

Job ID: 310-313757-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
310-313757-1	L-1	Solid	08/19/25 11:30	08/20/25 10:12	Iowa
310-313757-2	L-2	Solid	08/19/25 11:35	08/20/25 10:12	Iowa
310-313757-3	L-3	Solid	08/19/25 11:40	08/20/25 10:12	Iowa
310-313757-4	L-4	Solid	08/19/25 11:45	08/20/25 10:12	Iowa
310-313757-5	L-5	Solid	08/19/25 12:50	08/20/25 10:12	Iowa
310-313757-6	L-6	Solid	08/19/25 12:56	08/20/25 10:12	Iowa
310-313757-7	L-7	Solid	08/19/25 13:20	08/20/25 10:12	Iowa
310-313757-8	L-8	Solid	08/19/25 13:35	08/20/25 10:12	Iowa
310-313757-9	D-1	Solid	08/18/25 15:40	08/20/25 10:12	Iowa
310-313757-10	D-2	Solid	08/18/25 16:13	08/20/25 10:12	Iowa
310-313757-11	D-3	Solid	08/18/25 17:15	08/20/25 10:12	Iowa
310-313757-12	TMW-1	Ground Water	08/18/25 15:10	08/20/25 10:12	Iowa
310-313757-13	TMW-2	Ground Water	08/19/25 16:30	08/20/25 10:12	Iowa
310-313757-14	TMW-3	Ground Water	08/19/25 10:10	08/20/25 10:12	Iowa

Detection Summary

Client: Atlas Technical Consultants LLC
Project/Site: Ridgeway UST Closure

Job ID: 310-313757-1

Client Sample ID: L-1 — Lab Sample ID: 310-313757-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Waste Oil	157		37.7		mg/Kg	1		OA-2	Total/NA

Client Sample ID: L-2 — Lab Sample ID: 310-313757-2

No Detections.

Client Sample ID: L-3 — Lab Sample ID: 310-313757-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel	2220		20.3		mg/Kg	1		OA-2	Total/NA

Client Sample ID: L-4 — Lab Sample ID: 310-313757-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ethylbenzene	1.49		0.0951		mg/Kg	1		OA-1 (GC)	Total/NA
Xylenes, Total	4.90		0.285		mg/Kg	1		OA-1 (GC)	Total/NA
Diesel	1570		27.2		mg/Kg	1		OA-2	Total/NA

Client Sample ID: L-5 — Lab Sample ID: 310-313757-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.387		0.0997		mg/Kg	1		OA-1 (GC)	Total/NA
Xylenes, Total	0.774		0.299		mg/Kg	1		OA-1 (GC)	Total/NA

Client Sample ID: L-6 — Lab Sample ID: 310-313757-6

No Detections.

Client Sample ID: L-7 — Lab Sample ID: 310-313757-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Waste Oil	55.0		29.8		mg/Kg	1		OA-2	Total/NA

Client Sample ID: L-8 — Lab Sample ID: 310-313757-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.750		0.0966		mg/Kg	1		OA-1 (GC)	Total/NA
Toluene	4.55		0.0966		mg/Kg	1		OA-1 (GC)	Total/NA
Ethylbenzene	1.42		0.0966		mg/Kg	1		OA-1 (GC)	Total/NA
Xylenes, Total	11.1		0.290		mg/Kg	1		OA-1 (GC)	Total/NA
Gasoline	234		31.7		mg/Kg	1		OA-2	Total/NA
Waste Oil	58.7		31.7		mg/Kg	1		OA-2	Total/NA

Client Sample ID: D-1 — Lab Sample ID: 310-313757-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.305		0.0966		mg/Kg	1		OA-1 (GC)	Total/NA
Toluene	2.64		0.0966		mg/Kg	1		OA-1 (GC)	Total/NA
Ethylbenzene	0.769		0.0966		mg/Kg	1		OA-1 (GC)	Total/NA
Xylenes, Total	4.19		0.290		mg/Kg	1		OA-1 (GC)	Total/NA
Gasoline	122		27.2		mg/Kg	1		OA-2	Total/NA

Client Sample ID: D-2 — Lab Sample ID: 310-313757-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.743		0.0963		mg/Kg	1		OA-1 (GC)	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: D-2 (Continued) — Lab Sample ID: 310-313757-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	8.28		0.0963		mg/Kg	1		OA-1 (GC)	Total/NA
Ethylbenzene	4.69		0.0963		mg/Kg	1		OA-1 (GC)	Total/NA
Xylenes, Total	28.6		0.289		mg/Kg	1		OA-1 (GC)	Total/NA
Gasoline	1140		18.9		mg/Kg	1		OA-2	Total/NA
Waste Oil	26.4		18.9		mg/Kg	1		OA-2	Total/NA
Barium	0.589		0.200		mg/L	1		6010D	TCLP

Client Sample ID: D-3 — Lab Sample ID: 310-313757-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel	6060		43.7		mg/Kg	1		OA-2	Total/NA

Client Sample ID: TMW-1 — Lab Sample ID: 310-313757-12

No Detections.

Client Sample ID: TMW-2 — Lab Sample ID: 310-313757-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diesel	325		319		ug/L	1		OA-2	Total/NA

Client Sample ID: TMW-3 — Lab Sample ID: 310-313757-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.26		2.00		ug/L	1		OA-1 (GC)	Total/NA
Ethylbenzene	33.6		2.00		ug/L	1		OA-1 (GC)	Total/NA
Xylenes, Total	45.8		6.00		ug/L	1		OA-1 (GC)	Total/NA
Diesel	59700		306		ug/L	1		OA-2	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Ridgeway UST Closure

Job ID: 310-313757-1

Client Sample ID: L-1

Date Collected: 08/19/25 11:30
Date Received: 08/20/25 10:12

Lab Sample ID: 310-313757-1

Matrix: Solid

Method: Iowa DNR OA-1 (GC) - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0925		0.0925		mg/Kg		08/27/25 12:01	08/28/25 20:28	1
Toluene	<0.0925		0.0925		mg/Kg		08/27/25 12:01	08/28/25 20:28	1
Ethylbenzene	<0.0925		0.0925		mg/Kg		08/27/25 12:01	08/28/25 20:28	1
Xylenes, Total	<0.277		0.277		mg/Kg		08/27/25 12:01	08/28/25 20:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*47 - 150*	*08/27/25 12:01*	*08/28/25 20:28*	*1*

Method: Iowa DNR OA-2 - Iowa - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel	<37.7		37.7		mg/Kg		08/26/25 09:29	08/26/25 23:06	1
Gasoline	<37.7		37.7		mg/Kg		08/26/25 09:29	08/26/25 23:06	1
Waste Oil	**157**		37.7		mg/Kg		08/26/25 09:29	08/26/25 23:06	1
Total Extractable Hydrocarbons	<56.5		56.5		mg/Kg		08/26/25 09:29	08/26/25 23:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*159*	*S1+*	*12 - 150*	*08/26/25 09:29*	*08/26/25 23:06*	*1*

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Ridgeway UST Closure

Job ID: 310-313757-1

Client Sample ID: L-2

Date Collected: 08/19/25 11:35
Date Received: 08/20/25 10:12

Lab Sample ID: 310-313757-2

Matrix: Solid

Method: Iowa DNR OA-1 (GC) - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0968		0.0968		mg/Kg		08/27/25 12:01	08/28/25 20:54	1
Toluene	<0.0968		0.0968		mg/Kg		08/27/25 12:01	08/28/25 20:54	1
Ethylbenzene	<0.0968		0.0968		mg/Kg		08/27/25 12:01	08/28/25 20:54	1
Xylenes, Total	<0.290		0.290		mg/Kg		08/27/25 12:01	08/28/25 20:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*47 - 150*	*08/27/25 12:01*	*08/28/25 20:54*	*1*

Method: Iowa DNR OA-2 - Iowa - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel	<27.4		27.4		mg/Kg		08/26/25 09:29	08/26/25 23:30	1
Gasoline	<27.4		27.4		mg/Kg		08/26/25 09:29	08/26/25 23:30	1
Waste Oil	<27.4		27.4		mg/Kg		08/26/25 09:29	08/26/25 23:30	1
Total Extractable Hydrocarbons	<41.1		41.1		mg/Kg		08/26/25 09:29	08/26/25 23:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*134*		*12 - 150*	*08/26/25 09:29*	*08/26/25 23:30*	*1*

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Ridgeway UST Closure

Job ID: 310-313757-1

Client Sample ID: L-3

Date Collected: 08/19/25 11:40
Date Received: 08/20/25 10:12

Lab Sample ID: 310-313757-3

Matrix: Solid

Method: Iowa DNR OA-1 (GC) - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0951		0.0951		mg/Kg		08/27/25 12:01	08/28/25 21:20	1
Toluene	<0.0951		0.0951		mg/Kg		08/27/25 12:01	08/28/25 21:20	1
Ethylbenzene	<0.0951		0.0951		mg/Kg		08/27/25 12:01	08/28/25 21:20	1
Xylenes, Total	<0.285		0.285		mg/Kg		08/27/25 12:01	08/28/25 21:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*125*		*47 - 150*	*08/27/25 12:01*	*08/28/25 21:20*	*1*

Method: Iowa DNR OA-2 - Iowa - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel	**2220**		20.3		mg/Kg		08/26/25 09:29	08/26/25 23:55	1
Gasoline	<20.3		20.3		mg/Kg		08/26/25 09:29	08/26/25 23:55	1
Waste Oil	<20.3		20.3		mg/Kg		08/26/25 09:29	08/26/25 23:55	1
Total Extractable Hydrocarbons	<30.4		30.4		mg/Kg		08/26/25 09:29	08/26/25 23:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*139*		*12 - 150*	*08/26/25 09:29*	*08/26/25 23:55*	*1*

Client: Atlas Technical Consultants LLC
Project/Site: Ridgeway UST Closure

Job ID: 310-313757-1

Client Sample ID: L-4

Date Collected: 08/19/25 11:45
Date Received: 08/20/25 10:12

Lab Sample ID: 310-313757-4

Matrix: Solid

Method: Iowa DNR OA-1 (GC) - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0951		0.0951		mg/Kg		08/27/25 12:01	08/28/25 21:46	1
Toluene	<0.0951		0.0951		mg/Kg		08/27/25 12:01	08/28/25 21:46	1
Ethylbenzene	**1.49**		0.0951		mg/Kg		08/29/25 10:47	08/31/25 17:07	1
Xylenes, Total	**4.90**		0.285		mg/Kg		08/29/25 10:47	08/31/25 17:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*304*	*S1+*	*47 - 150*	*08/27/25 12:01*	*08/28/25 21:46*	*1*
4-Bromofluorobenzene (Surr)	*216*	*S1+*	*47 - 150*	*08/29/25 10:47*	*08/31/25 17:07*	*1*

Method: Iowa DNR OA-2 - Iowa - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel	**1570**		27.2		mg/Kg		08/26/25 09:29	08/27/25 00:19	1
Gasoline	<27.2		27.2		mg/Kg		08/26/25 09:29	08/27/25 00:19	1
Waste Oil	<27.2		27.2		mg/Kg		08/26/25 09:29	08/27/25 00:19	1
Total Extractable Hydrocarbons	<40.9		40.9		mg/Kg		08/26/25 09:29	08/27/25 00:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*132*		*12 - 150*	*08/26/25 09:29*	*08/27/25 00:19*	*1*

Client: Atlas Technical Consultants LLC
Project/Site: Ridgeway UST Closure

Job ID: 310-313757-1

Client Sample ID: L-5

Date Collected: 08/19/25 12:50
Date Received: 08/20/25 10:12

Lab Sample ID: 310-313757-5

Matrix: Solid

Method: Iowa DNR OA-1 (GC) - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0997		0.0997		mg/Kg		08/27/25 12:01	08/28/25 22:12	1
Toluene	**0.387**		0.0997		mg/Kg		08/29/25 10:47	08/31/25 17:33	1
Ethylbenzene	<0.0997		0.0997		mg/Kg		08/27/25 12:01	08/28/25 22:12	1
Xylenes, Total	**0.774**		0.299		mg/Kg		08/29/25 10:47	08/31/25 17:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*276*	*S1+*	*47 - 150*	*08/27/25 12:01*	*08/28/25 22:12*	*1*
4-Bromofluorobenzene (Surr)	*173*	*S1+*	*47 - 150*	*08/29/25 10:47*	*08/31/25 17:33*	*1*

Method: Iowa DNR OA-2 - Iowa - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel	<27.9		27.9		mg/Kg		08/26/25 09:29	08/27/25 00:44	1
Gasoline	<27.9		27.9		mg/Kg		08/26/25 09:29	08/27/25 00:44	1
Waste Oil	<27.9		27.9		mg/Kg		08/26/25 09:29	08/27/25 00:44	1
Total Extractable Hydrocarbons	<41.9		41.9		mg/Kg		08/26/25 09:29	08/27/25 00:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*124*		*12 - 150*	*08/26/25 09:29*	*08/27/25 00:44*	*1*

Client: Atlas Technical Consultants LLC
Project/Site: Ridgeway UST Closure

Job ID: 310-313757-1

Client Sample ID: L-6

Date Collected: 08/19/25 12:56
Date Received: 08/20/25 10:12

Lab Sample ID: 310-313757-6

Matrix: Solid

Method: Iowa DNR OA-1 (GC) - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0966		0.0966		mg/Kg		08/27/25 12:01	08/28/25 22:37	1
Toluene	<0.0966		0.0966		mg/Kg		08/27/25 12:01	08/28/25 22:37	1
Ethylbenzene	<0.0966		0.0966		mg/Kg		08/27/25 12:01	08/28/25 22:37	1
Xylenes, Total	<0.290		0.290		mg/Kg		08/27/25 12:01	08/28/25 22:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*140*		*47 - 150*	*08/27/25 12:01*	*08/28/25 22:37*	*1*

Method: Iowa DNR OA-2 - Iowa - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel	<21.2		21.2		mg/Kg		08/27/25 08:20	08/27/25 17:54	1
Gasoline	<21.2		21.2		mg/Kg		08/27/25 08:20	08/27/25 17:54	1
Waste Oil	<21.2		21.2		mg/Kg		08/27/25 08:20	08/27/25 17:54	1
Total Extractable Hydrocarbons	<31.8		31.8		mg/Kg		08/27/25 08:20	08/27/25 17:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*98*		*12 - 150*	*08/27/25 08:20*	*08/27/25 17:54*	*1*

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Ridgeway UST Closure

Job ID: 310-313757-1

Client Sample ID: L-7

Date Collected: 08/19/25 13:20
Date Received: 08/20/25 10:12

Lab Sample ID: 310-313757-7

Matrix: Solid

Method: Iowa DNR OA-1 (GC) - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0946		0.0946		mg/Kg		08/27/25 12:01	08/28/25 23:03	1
Toluene	<0.0946		0.0946		mg/Kg		08/27/25 12:01	08/28/25 23:03	1
Ethylbenzene	<0.0946		0.0946		mg/Kg		08/27/25 12:01	08/28/25 23:03	1
Xylenes, Total	<0.284		0.284		mg/Kg		08/27/25 12:01	08/28/25 23:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*123*		*47 - 150*	*08/27/25 12:01*	*08/28/25 23:03*	*1*

Method: Iowa DNR OA-2 - Iowa - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel	<29.8		29.8		mg/Kg		08/27/25 08:20	08/27/25 18:18	1
Gasoline	<29.8		29.8		mg/Kg		08/27/25 08:20	08/27/25 18:18	1
Waste Oil	**55.0**		29.8		mg/Kg		08/27/25 08:20	08/27/25 18:18	1
Total Extractable Hydrocarbons	<44.7		44.7		mg/Kg		08/27/25 08:20	08/27/25 18:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*170*	*S1+*	*12 - 150*	*08/27/25 08:20*	*08/27/25 18:18*	*1*

Client: Atlas Technical Consultants LLC
Project/Site: Ridgeway UST Closure

Job ID: 310-313757-1

Client Sample ID: L-8

Date Collected: 08/19/25 13:35
Date Received: 08/20/25 10:12

Lab Sample ID: 310-313757-8

Matrix: Solid

Method: Iowa DNR OA-1 (GC) - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.750**		0.0966		mg/Kg		08/29/25 10:47	08/31/25 17:59	1
Toluene	**4.55**		0.0966		mg/Kg		08/29/25 10:47	08/31/25 17:59	1
Ethylbenzene	**1.42**		0.0966		mg/Kg		08/29/25 10:47	08/31/25 17:59	1
Xylenes, Total	**11.1**		0.290		mg/Kg		08/29/25 10:47	08/31/25 17:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*202*	*S1+*	*47 - 150*	*08/29/25 10:47*	*08/31/25 17:59*	*1*

Method: Iowa DNR OA-2 - Iowa - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel	<31.7		31.7		mg/Kg		08/27/25 08:20	08/27/25 18:43	1
Gasoline	**234**		31.7		mg/Kg		08/27/25 08:20	08/27/25 18:43	1
Waste Oil	**58.7**		31.7		mg/Kg		08/27/25 08:20	08/27/25 18:43	1
Total Extractable Hydrocarbons	<47.5		47.5		mg/Kg		08/27/25 08:20	08/27/25 18:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*141*		*12 - 150*	*08/27/25 08:20*	*08/27/25 18:43*	*1*

Client: Atlas Technical Consultants LLC
Project/Site: Ridgeway UST Closure

Job ID: 310-313757-1

Client Sample ID: D-1

Date Collected: 08/18/25 15:40
Date Received: 08/20/25 10:12

Lab Sample ID: 310-313757-9

Matrix: Solid

Method: Iowa DNR OA-1 (GC) - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.305**		0.0966		mg/Kg		08/29/25 10:47	08/31/25 18:25	1
Toluene	**2.64**		0.0966		mg/Kg		08/29/25 10:47	08/31/25 18:25	1
Ethylbenzene	**0.769**		0.0966		mg/Kg		08/29/25 10:47	08/31/25 18:25	1
Xylenes, Total	**4.19**		0.290		mg/Kg		08/29/25 10:47	08/31/25 18:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*169*	*S1+*	*47 - 150*	*08/29/25 10:47*	*08/31/25 18:25*	*1*

Method: Iowa DNR OA-2 - Iowa - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel	<27.2		27.2		mg/Kg		08/27/25 08:20	08/27/25 19:07	1
Gasoline	**122**		27.2		mg/Kg		08/27/25 08:20	08/27/25 19:07	1
Waste Oil	<27.2		27.2		mg/Kg		08/27/25 08:20	08/27/25 19:07	1
Total Extractable Hydrocarbons	<40.9		40.9		mg/Kg		08/27/25 08:20	08/27/25 19:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*133*		*12 - 150*	*08/27/25 08:20*	*08/27/25 19:07*	*1*

Client: Atlas Technical Consultants LLC
Project/Site: Ridgeway UST Closure

Job ID: 310-313757-1

Client Sample ID: D-2

Date Collected: 08/18/25 16:13
Date Received: 08/20/25 10:12

Lab Sample ID: 310-313757-10

Matrix: Solid

Method: Iowa DNR OA-1 (GC) - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.743**		0.0963		mg/Kg		08/29/25 10:47	08/31/25 18:50	1
Toluene	**8.28**		0.0963		mg/Kg		08/29/25 10:47	08/31/25 18:50	1
Ethylbenzene	**4.69**		0.0963		mg/Kg		08/29/25 10:47	08/31/25 18:50	1
Xylenes, Total	**28.6**		0.289		mg/Kg		08/29/25 10:47	08/31/25 18:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*541*	*S1+*	*47 - 150*	*08/29/25 10:47*	*08/31/25 18:50*	*1*

Method: Iowa DNR OA-2 - Iowa - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel	<18.9		18.9		mg/Kg		08/27/25 08:20	08/27/25 19:32	1
Gasoline	**1140**		18.9		mg/Kg		08/27/25 08:20	08/27/25 19:32	1
Waste Oil	**26.4**		18.9		mg/Kg		08/27/25 08:20	08/27/25 19:32	1
Total Extractable Hydrocarbons	<28.3		28.3		mg/Kg		08/27/25 08:20	08/27/25 19:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*128*		*12 - 150*	*08/27/25 08:20*	*08/27/25 19:32*	*1*

Method: SW846 6010D - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.100		0.100		mg/L		09/09/25 11:00	09/09/25 16:40	1
Barium	**0.589**		0.200		mg/L		09/09/25 11:00	09/09/25 16:40	1
Cadmium	<0.0200		0.0200		mg/L		09/09/25 11:00	09/09/25 16:40	1
Chromium	<0.0200		0.0200		mg/L		09/09/25 11:00	09/09/25 16:40	1
Lead	<0.100		0.100		mg/L		09/09/25 11:00	09/09/25 16:40	1
Selenium	<0.100		0.100		mg/L		09/09/25 11:00	09/09/25 16:40	1
Silver	<0.0500		0.0500		mg/L		09/09/25 11:00	09/09/25 16:40	1

Method: SW846 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00200		0.00200		mg/L		09/09/25 13:35	09/10/25 12:11	1

Client: Atlas Technical Consultants LLC
Project/Site: Ridgeway UST Closure

Job ID: 310-313757-1

Client Sample ID: D-3

Date Collected: 08/18/25 17:15
Date Received: 08/20/25 10:12

Lab Sample ID: 310-313757-11

Matrix: Solid

Method: Iowa DNR OA-1 (GC) - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0962		0.0962		mg/Kg		08/27/25 12:01	08/29/25 00:47	1
Toluene	<0.0962		0.0962		mg/Kg		08/27/25 12:01	08/29/25 00:47	1
Ethylbenzene	<0.0962		0.0962		mg/Kg		08/27/25 12:01	08/29/25 00:47	1
Xylenes, Total	<0.288		0.288		mg/Kg		08/27/25 12:01	08/29/25 00:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*132*		*47 - 150*	*08/27/25 12:01*	*08/29/25 00:47*	*1*

Method: Iowa DNR OA-2 - Iowa - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel	**6060**		43.7		mg/Kg		08/27/25 08:20	08/27/25 19:56	1
Gasoline	<43.7		43.7		mg/Kg		08/27/25 08:20	08/27/25 19:56	1
Waste Oil	<43.7		43.7		mg/Kg		08/27/25 08:20	08/27/25 19:56	1
Total Extractable Hydrocarbons	<65.5		65.5		mg/Kg		08/27/25 08:20	08/27/25 19:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*140*		*12 - 150*	*08/27/25 08:20*	*08/27/25 19:56*	*1*

Client Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Ridgeway UST Closure

Job ID: 310-313757-1

Client Sample ID: TMW-1

Date Collected: 08/18/25 15:10
Date Received: 08/20/25 10:12

Lab Sample ID: 310-313757-12

Matrix: Ground Water

Method: Iowa DNR OA-1 (GC) - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<2.00		2.00		ug/L			08/26/25 04:34	1
Toluene	<2.00		2.00		ug/L			08/26/25 04:34	1
Ethylbenzene	<2.00		2.00		ug/L			08/26/25 04:34	1
Xylenes, Total	<6.00		6.00		ug/L			08/26/25 04:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*52 - 145*		*08/26/25 04:34*	*1*

Method: Iowa DNR OA-2 - Iowa - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel	<300		300		ug/L		08/25/25 08:46	08/26/25 22:52	1
Gasoline	<300		300		ug/L		08/25/25 08:46	08/26/25 22:52	1
Waste Oil	<300		300		ug/L		08/25/25 08:46	08/26/25 22:52	1
Total Extractable Hydrocarbons	<500		500		ug/L		08/25/25 08:46	08/26/25 22:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*87*		*32 - 144*	*08/25/25 08:46*	*08/26/25 22:52*	*1*

Client: Atlas Technical Consultants LLC
Project/Site: Ridgeway UST Closure

Job ID: 310-313757-1

Client Sample ID: TMW-2

Date Collected: 08/19/25 16:30
Date Received: 08/20/25 10:12

Lab Sample ID: 310-313757-13

Matrix: Ground Water

Method: Iowa DNR OA-1 (GC) - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<2.00		2.00		ug/L			08/26/25 05:03	1
Toluene	<2.00		2.00		ug/L			08/26/25 05:03	1
Ethylbenzene	<2.00		2.00		ug/L			08/26/25 05:03	1
Xylenes, Total	<6.00		6.00		ug/L			08/26/25 05:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*52 - 145*		*08/26/25 05:03*	*1*

Method: Iowa DNR OA-2 - Iowa - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel	**325**		319		ug/L		08/25/25 08:46	08/26/25 23:07	1
Gasoline	<319		319		ug/L		08/25/25 08:46	08/26/25 23:07	1
Waste Oil	<319		319		ug/L		08/25/25 08:46	08/26/25 23:07	1
Total Extractable Hydrocarbons	<532		532		ug/L		08/25/25 08:46	08/26/25 23:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*83*		*32 - 144*	*08/25/25 08:46*	*08/26/25 23:07*	*1*

Client: Atlas Technical Consultants LLC
Project/Site: Ridgeway UST Closure

Job ID: 310-313757-1

Client Sample ID: TMW-3

Date Collected: 08/19/25 10:10
Date Received: 08/20/25 10:12

Lab Sample ID: 310-313757-14

Matrix: Ground Water

Method: Iowa DNR OA-1 (GC) - Volatile Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**2.26**		2.00		ug/L			08/29/25 00:44	1
Toluene	<2.00		2.00		ug/L			08/29/25 00:44	1
Ethylbenzene	**33.6**		2.00		ug/L			08/29/25 00:44	1
Xylenes, Total	**45.8**		6.00		ug/L			08/29/25 00:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*52 - 145*		*08/29/25 00:44*	*1*

Method: Iowa DNR OA-2 - Iowa - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel	**59700**		306		ug/L		08/25/25 08:46	08/26/25 23:22	1
Gasoline	<306		306		ug/L		08/25/25 08:46	08/26/25 23:22	1
Waste Oil	<306		306		ug/L		08/25/25 08:46	08/26/25 23:22	1
Total Extractable Hydrocarbons	<510		510		ug/L		08/25/25 08:46	08/26/25 23:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*93*		*32 - 144*	*08/25/25 08:46*	*08/26/25 23:22*	*1*

Definitions/Glossary

Client: Atlas Technical Consultants LLC
Project/Site: Ridgeway UST Closure

Job ID: 310-313757-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.

GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.

Glossary

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

Surrogate Summary

Client: Atlas Technical Consultants LLC
Project/Site: Ridgeway UST Closure

Job ID: 310-313757-1

Method: OA-1 (GC) - Volatile Petroleum Hydrocarbons (GC)

Matrix: Ground Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	BFB (52-145)
310-313757-12	TMW-1	98
310-313757-13	TMW-2	98
310-313757-14	TMW-3	115

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

Method: OA-1 (GC) - Volatile Petroleum Hydrocarbons (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	BFB (47-150)
310-313757-1	L-1	114
310-313757-2	L-2	113
310-313757-3	L-3	125
310-313757-4	L-4	304 S1+
310-313757-4	L-4	216 S1+
310-313757-5	L-5	276 S1+
310-313757-5	L-5	173 S1+
310-313757-6	L-6	140
310-313757-7	L-7	123
310-313757-8	L-8	202 S1+
310-313757-9	D-1	169 S1+
310-313757-10	D-2	541 S1+
310-313757-11	D-3	132
LCS 310-464930/2-A	Lab Control Sample	106
LCS 310-465192/2-A	Lab Control Sample	106
MB 310-464930/1-A	Method Blank	103
MB 310-465192/1-A	Method Blank	107

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

Method: OA-1 (GC) - Volatile Petroleum Hydrocarbons (GC)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	BFB (52-145)
LCS 310-464627/31	Lab Control Sample	90
LCS 310-464627/5	Lab Control Sample	141
LCS 310-465112/4	Lab Control Sample	89
LCS 310-465112/5	Lab Control Sample	121
MB 310-464627/3	Method Blank	100
MB 310-465112/3	Method Blank	103

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

Surrogate Summary

Client: Atlas Technical Consultants LLC
Job ID: 310-313757-1
Project/Site: Ridgeway UST Closure

Method: OA-2 - Iowa - Extractable Petroleum Hydrocarbons (GC)

Matrix: Ground Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	OTCN (32-144)
310-313757-12	TMW-1	87
310-313757-13	TMW-2	83
310-313757-14	TMW-3	93

Surrogate Legend

OTCN = n-Octacosane

Method: OA-2 - Iowa - Extractable Petroleum Hydrocarbons (GC)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	OTCN (12-150)
310-313757-1	L-1	159 S1+
310-313757-2	L-2	134
310-313757-3	L-3	139
310-313757-4	L-4	132
310-313757-5	L-5	124
310-313757-6	L-6	98
310-313757-7	L-7	170 S1+
310-313757-8	L-8	141
310-313757-9	D-1	133
310-313757-10	D-2	128
310-313757-11	D-3	140
LCS 310-464753/2-A	Lab Control Sample	168 S1+
LCS 310-464857/2-A	Lab Control Sample	177 S1+
MB 310-464753/1-A	Method Blank	175 S1+
MB 310-464857/1-A	Method Blank	174 S1+

Surrogate Legend

OTCN = n-Octacosane

Method: OA-2 - Iowa - Extractable Petroleum Hydrocarbons (GC)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	OTCN (32-144)
LCS 310-464600/2-A	Lab Control Sample	86
LCSD 310-464600/3-A	Lab Control Sample Dup	98
MB 310-464600/1-A	Method Blank	96

Surrogate Legend

OTCN = n-Octacosane

Method: OA-1 (GC) - Volatile Petroleum Hydrocarbons (GC)

Lab Sample ID: MB 310-464627/3
Matrix: Water
Analysis Batch: 464627

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<2.00		2.00		ug/L			08/26/25 01:12	1
Toluene	<2.00		2.00		ug/L			08/26/25 01:12	1
Ethylbenzene	<2.00		2.00		ug/L			08/26/25 01:12	1
Xylenes, Total	<6.00		6.00		ug/L			08/26/25 01:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*52 - 145*		*08/26/25 01:12*	*1*

Lab Sample ID: LCS 310-464627/31
Matrix: Water
Analysis Batch: 464627

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	40.0	35.58		ug/L		89	74 - 120
Toluene	40.0	32.76		ug/L		82	73 - 120
Ethylbenzene	40.0	37.43		ug/L		94	75 - 120
Xylenes, Total	120	108.9		ug/L		91	74 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*90*		*52 - 145*

Lab Sample ID: LCS 310-464627/5
Matrix: Water
Analysis Batch: 464627

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

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*141*		*52 - 145*

Lab Sample ID: MB 310-464930/1-A
Matrix: Solid
Analysis Batch: 465057

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 464930

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0976		0.0976		mg/Kg		08/27/25 12:01	08/29/25 05:57	1
Toluene	<0.0976		0.0976		mg/Kg		08/27/25 12:01	08/29/25 05:57	1
Ethylbenzene	<0.0976		0.0976		mg/Kg		08/27/25 12:01	08/29/25 05:57	1
Xylenes, Total	<0.293		0.293		mg/Kg		08/27/25 12:01	08/29/25 05:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*47 - 150*	*08/27/25 12:01*	*08/29/25 05:57*	*1*

Lab Sample ID: LCS 310-464930/2-A
Matrix: Solid
Analysis Batch: 464933

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 464930

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.89	1.641		mg/Kg		87	67 - 133

Method: OA-1 (GC) - Volatile Petroleum Hydrocarbons (GC) (Continued)

Lab Sample ID: LCS 310-464930/2-A
Matrix: Solid
Analysis Batch: 464933

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 464930

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Toluene	1.89	1.626		mg/Kg		86	67 - 130
Ethylbenzene	1.89	1.613		mg/Kg		85	64 - 135
Xylenes, Total	5.67	4.846		mg/Kg		86	63 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*47 - 150*

Lab Sample ID: MB 310-465112/3
Matrix: Water
Analysis Batch: 465112

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<2.00		2.00		ug/L			08/28/25 23:18	1
Toluene	<2.00		2.00		ug/L			08/28/25 23:18	1
Ethylbenzene	<2.00		2.00		ug/L			08/28/25 23:18	1
Xylenes, Total	<6.00		6.00		ug/L			08/28/25 23:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*52 - 145*		*08/28/25 23:18*	*1*

Lab Sample ID: LCS 310-465112/4
Matrix: Water
Analysis Batch: 465112

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	40.0	34.86		ug/L		87	74 - 120
Toluene	40.0	32.15		ug/L		80	73 - 120
Ethylbenzene	40.0	36.97		ug/L		92	75 - 120
Xylenes, Total	120	107.6		ug/L		90	74 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*52 - 145*

Lab Sample ID: LCS 310-465112/5
Matrix: Water
Analysis Batch: 465112

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

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*121*		*52 - 145*

Lab Sample ID: MB 310-465192/1-A
Matrix: Solid
Analysis Batch: 465194

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 465192

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0922		0.0922		mg/Kg		08/29/25 10:47	08/31/25 14:58	1
Toluene	<0.0922		0.0922		mg/Kg		08/29/25 10:47	08/31/25 14:58	1
Ethylbenzene	<0.0922		0.0922		mg/Kg		08/29/25 10:47	08/31/25 14:58	1

Method: OA-1 (GC) - Volatile Petroleum Hydrocarbons (GC) (Continued)

Lab Sample ID: MB 310-465192/1-A
Matrix: Solid
Analysis Batch: 465194

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 465192

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	<0.277		0.277		mg/Kg		08/29/25 10:47	08/31/25 14:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*47 - 150*	*08/29/25 10:47*	*08/31/25 14:58*	*1*

Lab Sample ID: LCS 310-465192/2-A
Matrix: Solid
Analysis Batch: 465194

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 465192

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	1.92	1.716		mg/Kg		89	67 - 133
Toluene	1.92	1.686		mg/Kg		88	67 - 130
Ethylbenzene	1.92	1.677		mg/Kg		87	64 - 135
Xylenes, Total	5.76	5.030		mg/Kg		87	63 - 135

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*47 - 150*

Method: OA-2 - Iowa - Extractable Petroleum Hydrocarbons (GC)

Lab Sample ID: MB 310-464600/1-A
Matrix: Water
Analysis Batch: 464759

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 464600

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel	<300		300		ug/L		08/25/25 08:46	08/26/25 19:23	1
Gasoline	<300		300		ug/L		08/25/25 08:46	08/26/25 19:23	1
Waste Oil	<300		300		ug/L		08/25/25 08:46	08/26/25 19:23	1
Total Extractable Hydrocarbons	<500		500		ug/L		08/25/25 08:46	08/26/25 19:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*96*		*32 - 144*	*08/25/25 08:46*	*08/26/25 19:23*	*1*

Lab Sample ID: LCS 310-464600/2-A
Matrix: Water
Analysis Batch: 464759

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 464600

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel	4000	3425		ug/L		86	42 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
n-Octacosane	*86*		*32 - 144*

Method: OA-2 - Iowa - Extractable Petroleum Hydrocarbons (GC) (Continued)

Lab Sample ID: LCSD 310-464600/3-A
Matrix: Water
Analysis Batch: 464759

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 464600

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Diesel			4000	3417		ug/L		85	42 - 121	0	34

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
n-Octacosane	*98*		*32 - 144*

Lab Sample ID: MB 310-464753/1-A
Matrix: Solid
Analysis Batch: 464760

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 464753

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel	<9.66		9.66		mg/Kg		08/26/25 09:29	08/26/25 18:13	1
Gasoline	<9.66		9.66		mg/Kg		08/26/25 09:29	08/26/25 18:13	1
Waste Oil	<9.66		9.66		mg/Kg		08/26/25 09:29	08/26/25 18:13	1
Total Extractable Hydrocarbons	<14.5		14.5		mg/Kg		08/26/25 09:29	08/26/25 18:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*175*	*S1+*	*12 - 150*	*08/26/25 09:29*	*08/26/25 18:13*	*1*

Lab Sample ID: LCS 310-464753/2-A
Matrix: Solid
Analysis Batch: 464760

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 464753

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel			128	136.7		mg/Kg		107	54 - 121		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
n-Octacosane	*168*	*S1+*	*12 - 150*

Lab Sample ID: MB 310-464857/1-A
Matrix: Solid
Analysis Batch: 464875

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 464857

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel	<9.61		9.61		mg/Kg		08/27/25 08:20	08/27/25 15:28	1
Gasoline	<9.61		9.61		mg/Kg		08/27/25 08:20	08/27/25 15:28	1
Waste Oil	<9.61		9.61		mg/Kg		08/27/25 08:20	08/27/25 15:28	1
Total Extractable Hydrocarbons	<14.4		14.4		mg/Kg		08/27/25 08:20	08/27/25 15:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*174*	*S1+*	*12 - 150*	*08/27/25 08:20*	*08/27/25 15:28*	*1*

Lab Sample ID: LCS 310-464857/2-A
Matrix: Solid
Analysis Batch: 464875

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 464857

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel			129	143.8		mg/Kg		111	54 - 121		

Method: OA-2 - Iowa - Extractable Petroleum Hydrocarbons (GC) (Continued)

Lab Sample ID: LCS 310-464857/2-A
Matrix: Solid
Analysis Batch: 464875

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 464857

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
n-Octacosane	*177*	*S1+*	*12 - 150*

Method: 6010D - Metals (ICP)

Lab Sample ID: LB 310-465984/1-C
Matrix: Solid
Analysis Batch: 466307

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 466077

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.100		0.100		mg/L		09/09/25 11:00	09/09/25 16:38	1
Barium	<0.200		0.200		mg/L		09/09/25 11:00	09/09/25 16:38	1
Cadmium	<0.0200		0.0200		mg/L		09/09/25 11:00	09/09/25 16:38	1
Chromium	<0.0200		0.0200		mg/L		09/09/25 11:00	09/09/25 16:38	1
Lead	<0.100		0.100		mg/L		09/09/25 11:00	09/09/25 16:38	1
Selenium	<0.100		0.100		mg/L		09/09/25 11:00	09/09/25 16:38	1
Silver	<0.0500		0.0500		mg/L		09/09/25 11:00	09/09/25 16:38	1

Lab Sample ID: LCS 310-465984/2-B
Matrix: Solid
Analysis Batch: 466307

Client Sample ID: Lab Control Sample
Prep Type: TCLP
Prep Batch: 466077

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	4.00	4.045		mg/L		101	80 - 120
Barium	2.00	2.034		mg/L		102	80 - 120
Cadmium	2.00	1.910		mg/L		96	80 - 120
Chromium	2.00	1.903		mg/L		95	80 - 120
Lead	4.00	3.753		mg/L		94	80 - 120
Selenium	8.00	8.114		mg/L		101	80 - 120
Silver	2.00	1.946		mg/L		97	80 - 120

Lab Sample ID: 310-313757-10 MS
Matrix: Solid
Analysis Batch: 466307

Client Sample ID: D-2
Prep Type: TCLP
Prep Batch: 466077

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Arsenic	<0.100		4.00	4.084		mg/L		102	75 - 125
Barium	0.589		2.00	2.595		mg/L		100	75 - 125
Cadmium	<0.0200		2.00	1.849		mg/L		92	75 - 125
Chromium	<0.0200		2.00	1.898		mg/L		95	75 - 125
Lead	<0.100		4.00	3.624		mg/L		91	75 - 125
Selenium	<0.100		8.00	8.136		mg/L		102	75 - 125
Silver	<0.0500		2.00	1.948		mg/L		97	75 - 125

QC Sample Results

Client: Atlas Technical Consultants LLC
Project/Site: Ridgeway UST Closure

Job ID: 310-313757-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: LB 310-465984/1-D
Matrix: Solid
Analysis Batch: 466273

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 466089

Analyte	LB Result	LB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00200		0.00200		mg/L		09/09/25 13:35	09/10/25 12:07	1

Lab Sample ID: LCS 310-465984/2-C
Matrix: Solid
Analysis Batch: 466273

Client Sample ID: Lab Control Sample
Prep Type: TCLP
Prep Batch: 466089

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.0167	0.01898		mg/L		114	80 - 120		

Lab Sample ID: 310-313757-10 MS
Matrix: Solid
Analysis Batch: 466273

Client Sample ID: D-2
Prep Type: TCLP
Prep Batch: 466089

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	<0.00200		0.0167	0.01825		mg/L		109	80 - 120		

GC VOA

Analysis Batch: 464627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-313757-12	TMW-1	Total/NA	Ground Water	OA-1 (GC)	
310-313757-13	TMW-2	Total/NA	Ground Water	OA-1 (GC)	
MB 310-464627/3	Method Blank	Total/NA	Water	OA-1 (GC)	
LCS 310-464627/31	Lab Control Sample	Total/NA	Water	OA-1 (GC)	
LCS 310-464627/5	Lab Control Sample	Total/NA	Water	OA-1 (GC)	

Prep Batch: 464930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-313757-1	L-1	Total/NA	Solid	5030B	
310-313757-2	L-2	Total/NA	Solid	5030B	
310-313757-3	L-3	Total/NA	Solid	5030B	
310-313757-4	L-4	Total/NA	Solid	5030B	
310-313757-5	L-5	Total/NA	Solid	5030B	
310-313757-6	L-6	Total/NA	Solid	5030B	
310-313757-7	L-7	Total/NA	Solid	5030B	
310-313757-11	D-3	Total/NA	Solid	5030B	
MB 310-464930/1-A	Method Blank	Total/NA	Solid	5030B	
LCS 310-464930/2-A	Lab Control Sample	Total/NA	Solid	5030B	

Analysis Batch: 464933

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-313757-1	L-1	Total/NA	Solid	OA-1 (GC)	464930
310-313757-2	L-2	Total/NA	Solid	OA-1 (GC)	464930
310-313757-3	L-3	Total/NA	Solid	OA-1 (GC)	464930
310-313757-4	L-4	Total/NA	Solid	OA-1 (GC)	464930
310-313757-5	L-5	Total/NA	Solid	OA-1 (GC)	464930
310-313757-6	L-6	Total/NA	Solid	OA-1 (GC)	464930
310-313757-7	L-7	Total/NA	Solid	OA-1 (GC)	464930
310-313757-11	D-3	Total/NA	Solid	OA-1 (GC)	464930
LCS 310-464930/2-A	Lab Control Sample	Total/NA	Solid	OA-1 (GC)	464930

Analysis Batch: 465057

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 310-464930/1-A	Method Blank	Total/NA	Solid	OA-1 (GC)	464930

Analysis Batch: 465112

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-313757-14	TMW-3	Total/NA	Ground Water	OA-1 (GC)	
MB 310-465112/3	Method Blank	Total/NA	Water	OA-1 (GC)	
LCS 310-465112/4	Lab Control Sample	Total/NA	Water	OA-1 (GC)	
LCS 310-465112/5	Lab Control Sample	Total/NA	Water	OA-1 (GC)	

Prep Batch: 465192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-313757-4	L-4	Total/NA	Solid	5030B	
310-313757-5	L-5	Total/NA	Solid	5030B	
310-313757-8	L-8	Total/NA	Solid	5030B	
310-313757-9	D-1	Total/NA	Solid	5030B	
310-313757-10	D-2	Total/NA	Solid	5030B	
MB 310-465192/1-A	Method Blank	Total/NA	Solid	5030B	
LCS 310-465192/2-A	Lab Control Sample	Total/NA	Solid	5030B	

GC VOA

Analysis Batch: 465194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-313757-4	L-4	Total/NA	Solid	OA-1 (GC)	465192
310-313757-5	L-5	Total/NA	Solid	OA-1 (GC)	465192
310-313757-8	L-8	Total/NA	Solid	OA-1 (GC)	465192
310-313757-9	D-1	Total/NA	Solid	OA-1 (GC)	465192
310-313757-10	D-2	Total/NA	Solid	OA-1 (GC)	465192
MB 310-465192/1-A	Method Blank	Total/NA	Solid	OA-1 (GC)	465192
LCS 310-465192/2-A	Lab Control Sample	Total/NA	Solid	OA-1 (GC)	465192

GC Semi VOA

Prep Batch: 464600

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-313757-12	TMW-1	Total/NA	Ground Water	3510C	
310-313757-13	TMW-2	Total/NA	Ground Water	3510C	
310-313757-14	TMW-3	Total/NA	Ground Water	3510C	
MB 310-464600/1-A	Method Blank	Total/NA	Water	3510C	
LCS 310-464600/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 310-464600/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Prep Batch: 464753

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-313757-1	L-1	Total/NA	Solid	3546	
310-313757-2	L-2	Total/NA	Solid	3546	
310-313757-3	L-3	Total/NA	Solid	3546	
310-313757-4	L-4	Total/NA	Solid	3546	
310-313757-5	L-5	Total/NA	Solid	3546	
MB 310-464753/1-A	Method Blank	Total/NA	Solid	3546	
LCS 310-464753/2-A	Lab Control Sample	Total/NA	Solid	3546	

Analysis Batch: 464759

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-313757-12	TMW-1	Total/NA	Ground Water	OA-2	464600
310-313757-13	TMW-2	Total/NA	Ground Water	OA-2	464600
310-313757-14	TMW-3	Total/NA	Ground Water	OA-2	464600
MB 310-464600/1-A	Method Blank	Total/NA	Water	OA-2	464600
LCS 310-464600/2-A	Lab Control Sample	Total/NA	Water	OA-2	464600
LCSD 310-464600/3-A	Lab Control Sample Dup	Total/NA	Water	OA-2	464600

Analysis Batch: 464760

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-313757-1	L-1	Total/NA	Solid	OA-2	464753
310-313757-2	L-2	Total/NA	Solid	OA-2	464753
310-313757-3	L-3	Total/NA	Solid	OA-2	464753
310-313757-4	L-4	Total/NA	Solid	OA-2	464753
310-313757-5	L-5	Total/NA	Solid	OA-2	464753
MB 310-464753/1-A	Method Blank	Total/NA	Solid	OA-2	464753
LCS 310-464753/2-A	Lab Control Sample	Total/NA	Solid	OA-2	464753

Prep Batch: 464857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-313757-6	L-6	Total/NA	Solid	3546	

GC Semi VOA (Continued)

Prep Batch: 464857 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-313757-7	L-7	Total/NA	Solid	3546	
310-313757-8	L-8	Total/NA	Solid	3546	
310-313757-9	D-1	Total/NA	Solid	3546	
310-313757-10	D-2	Total/NA	Solid	3546	
310-313757-11	D-3	Total/NA	Solid	3546	
MB 310-464857/1-A	Method Blank	Total/NA	Solid	3546	
LCS 310-464857/2-A	Lab Control Sample	Total/NA	Solid	3546	

Analysis Batch: 464875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-313757-6	L-6	Total/NA	Solid	OA-2	464857
310-313757-7	L-7	Total/NA	Solid	OA-2	464857
310-313757-8	L-8	Total/NA	Solid	OA-2	464857
310-313757-9	D-1	Total/NA	Solid	OA-2	464857
310-313757-10	D-2	Total/NA	Solid	OA-2	464857
310-313757-11	D-3	Total/NA	Solid	OA-2	464857
MB 310-464857/1-A	Method Blank	Total/NA	Solid	OA-2	464857
LCS 310-464857/2-A	Lab Control Sample	Total/NA	Solid	OA-2	464857

Metals

Leach Batch: 465984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-313757-10	D-2	TCLP	Solid	1311	
LB 310-465984/1-C	Method Blank	TCLP	Solid	1311	
LB 310-465984/1-D	Method Blank	TCLP	Solid	1311	
LCS 310-465984/2-B	Lab Control Sample	TCLP	Solid	1311	
LCS 310-465984/2-C	Lab Control Sample	TCLP	Solid	1311	
310-313757-10 MS	D-2	TCLP	Solid	1311	

Prep Batch: 466077

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-313757-10	D-2	TCLP	Solid	3010A	465984
LB 310-465984/1-C	Method Blank	TCLP	Solid	3010A	465984
LCS 310-465984/2-B	Lab Control Sample	TCLP	Solid	3010A	465984
310-313757-10 MS	D-2	TCLP	Solid	3010A	465984

Prep Batch: 466089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-313757-10	D-2	TCLP	Solid	7470A	465984
LB 310-465984/1-D	Method Blank	TCLP	Solid	7470A	465984
LCS 310-465984/2-C	Lab Control Sample	TCLP	Solid	7470A	465984
310-313757-10 MS	D-2	TCLP	Solid	7470A	465984

Analysis Batch: 466273

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-313757-10	D-2	TCLP	Solid	7470A	466089
LB 310-465984/1-D	Method Blank	TCLP	Solid	7470A	466089
LCS 310-465984/2-C	Lab Control Sample	TCLP	Solid	7470A	466089
310-313757-10 MS	D-2	TCLP	Solid	7470A	466089

Metals

Analysis Batch: 466307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-313757-10	D-2	TCLP	Solid	6010D	466077
LB 310-465984/1-C	Method Blank	TCLP	Solid	6010D	466077
LCS 310-465984/2-B	Lab Control Sample	TCLP	Solid	6010D	466077
310-313757-10 MS	D-2	TCLP	Solid	6010D	466077

Lab Chronicle

Client: Atlas Technical Consultants LLC
Project/Site: Ridgeway UST Closure

Job ID: 310-313757-1

Client Sample ID: L-1
Date Collected: 08/19/25 11:30
Date Received: 08/20/25 10:12

Lab Sample ID: 310-313757-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030B			464930	GP2V	EET CF	08/27/25 12:01
Total/NA	Analysis	OA-1 (GC)		1	464933	MZR8	EET CF	08/28/25 20:28
Total/NA	Prep	3546			464753	BDJ4	EET CF	08/26/25 09:29
Total/NA	Analysis	OA-2		1	464760	C3AA	EET CF	08/26/25 23:06

Client Sample ID: L-2
Date Collected: 08/19/25 11:35
Date Received: 08/20/25 10:12

Lab Sample ID: 310-313757-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030B			464930	GP2V	EET CF	08/27/25 12:01
Total/NA	Analysis	OA-1 (GC)		1	464933	MZR8	EET CF	08/28/25 20:54
Total/NA	Prep	3546			464753	BDJ4	EET CF	08/26/25 09:29
Total/NA	Analysis	OA-2		1	464760	C3AA	EET CF	08/26/25 23:30

Client Sample ID: L-3
Date Collected: 08/19/25 11:40
Date Received: 08/20/25 10:12

Lab Sample ID: 310-313757-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030B			464930	GP2V	EET CF	08/27/25 12:01
Total/NA	Analysis	OA-1 (GC)		1	464933	MZR8	EET CF	08/28/25 21:20
Total/NA	Prep	3546			464753	BDJ4	EET CF	08/26/25 09:29
Total/NA	Analysis	OA-2		1	464760	C3AA	EET CF	08/26/25 23:55

Client Sample ID: L-4
Date Collected: 08/19/25 11:45
Date Received: 08/20/25 10:12

Lab Sample ID: 310-313757-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030B			464930	GP2V	EET CF	08/27/25 12:01
Total/NA	Analysis	OA-1 (GC)		1	464933	MZR8	EET CF	08/28/25 21:46
Total/NA	Prep	5030B			465192	GP2V	EET CF	08/29/25 10:47
Total/NA	Analysis	OA-1 (GC)		1	465194	D2YP	EET CF	08/31/25 17:07
Total/NA	Prep	3546			464753	BDJ4	EET CF	08/26/25 09:29
Total/NA	Analysis	OA-2		1	464760	C3AA	EET CF	08/27/25 00:19

Client Sample ID: L-5
Date Collected: 08/19/25 12:50
Date Received: 08/20/25 10:12

Lab Sample ID: 310-313757-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030B			464930	GP2V	EET CF	08/27/25 12:01
Total/NA	Analysis	OA-1 (GC)		1	464933	MZR8	EET CF	08/28/25 22:12
Total/NA	Prep	5030B			465192	GP2V	EET CF	08/29/25 10:47
Total/NA	Analysis	OA-1 (GC)		1	465194	D2YP	EET CF	08/31/25 17:33

Lab Chronicle

Client: Atlas Technical Consultants LLC
Project/Site: Ridgeway UST Closure

Job ID: 310-313757-1

Client Sample ID: L-5
Date Collected: 08/19/25 12:50
Date Received: 08/20/25 10:12

Lab Sample ID: 310-313757-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3546			464753	BDJ4	EET CF	08/26/25 09:29
Total/NA	Analysis	OA-2		1	464760	C3AA	EET CF	08/27/25 00:44

Client Sample ID: L-6
Date Collected: 08/19/25 12:56
Date Received: 08/20/25 10:12

Lab Sample ID: 310-313757-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030B			464930	GP2V	EET CF	08/27/25 12:01
Total/NA	Analysis	OA-1 (GC)		1	464933	MZR8	EET CF	08/28/25 22:37
Total/NA	Prep	3546			464857	BDJ4	EET CF	08/27/25 08:20
Total/NA	Analysis	OA-2		1	464875	C3AA	EET CF	08/27/25 17:54

Client Sample ID: L-7
Date Collected: 08/19/25 13:20
Date Received: 08/20/25 10:12

Lab Sample ID: 310-313757-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030B			464930	GP2V	EET CF	08/27/25 12:01
Total/NA	Analysis	OA-1 (GC)		1	464933	MZR8	EET CF	08/28/25 23:03
Total/NA	Prep	3546			464857	BDJ4	EET CF	08/27/25 08:20
Total/NA	Analysis	OA-2		1	464875	C3AA	EET CF	08/27/25 18:18

Client Sample ID: L-8
Date Collected: 08/19/25 13:35
Date Received: 08/20/25 10:12

Lab Sample ID: 310-313757-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030B			465192	GP2V	EET CF	08/29/25 10:47
Total/NA	Analysis	OA-1 (GC)		1	465194	D2YP	EET CF	08/31/25 17:59
Total/NA	Prep	3546			464857	BDJ4	EET CF	08/27/25 08:20
Total/NA	Analysis	OA-2		1	464875	C3AA	EET CF	08/27/25 18:43

Client Sample ID: D-1
Date Collected: 08/18/25 15:40
Date Received: 08/20/25 10:12

Lab Sample ID: 310-313757-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030B			465192	GP2V	EET CF	08/29/25 10:47
Total/NA	Analysis	OA-1 (GC)		1	465194	D2YP	EET CF	08/31/25 18:25
Total/NA	Prep	3546			464857	BDJ4	EET CF	08/27/25 08:20
Total/NA	Analysis	OA-2		1	464875	C3AA	EET CF	08/27/25 19:07

Client Sample ID: D-2

Lab Sample ID: 310-313757-10

Date Collected: 08/18/25 16:13

Matrix: Solid

Date Received: 08/20/25 10:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030B			465192	GP2V	EET CF	08/29/25 10:47
Total/NA	Analysis	OA-1 (GC)		1	465194	D2YP	EET CF	08/31/25 18:50
Total/NA	Prep	3546			464857	BDJ4	EET CF	08/27/25 08:20
Total/NA	Analysis	OA-2		1	464875	C3AA	EET CF	08/27/25 19:32
TCLP	Leach	1311			465984	U8FK	EET CF	09/08/25 15:00 - 09/09/25 07:00 [1]
TCLP	Prep	3010A			466077	QTZ5	EET CF	09/09/25 11:00
TCLP	Analysis	6010D		1	466307	ZRI4	EET CF	09/09/25 16:40
TCLP	Leach	1311			465984	U8FK	EET CF	09/08/25 15:00 - 09/09/25 07:00 [1]
TCLP	Prep	7470A			466089	RLT9	EET CF	09/09/25 13:35
TCLP	Analysis	7470A		1	466273	RLT9	EET CF	09/10/25 12:11

Client Sample ID: D-3

Lab Sample ID: 310-313757-11

Date Collected: 08/18/25 17:15

Matrix: Solid

Date Received: 08/20/25 10:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5030B			464930	GP2V	EET CF	08/27/25 12:01
Total/NA	Analysis	OA-1 (GC)		1	464933	MZR8	EET CF	08/29/25 00:47
Total/NA	Prep	3546			464857	BDJ4	EET CF	08/27/25 08:20
Total/NA	Analysis	OA-2		1	464875	C3AA	EET CF	08/27/25 19:56

Client Sample ID: TMW-1

Lab Sample ID: 310-313757-12

Date Collected: 08/18/25 15:10

Matrix: Ground Water

Date Received: 08/20/25 10:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	OA-1 (GC)		1	464627	D2YP	EET CF	08/26/25 04:34
Total/NA	Prep	3510C			464600	J5BR	EET CF	08/25/25 08:46
Total/NA	Analysis	OA-2		1	464759	C3AA	EET CF	08/26/25 22:52

Client Sample ID: TMW-2

Lab Sample ID: 310-313757-13

Date Collected: 08/19/25 16:30

Matrix: Ground Water

Date Received: 08/20/25 10:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	OA-1 (GC)		1	464627	D2YP	EET CF	08/26/25 05:03
Total/NA	Prep	3510C			464600	J5BR	EET CF	08/25/25 08:46
Total/NA	Analysis	OA-2		1	464759	C3AA	EET CF	08/26/25 23:07

Client Sample ID: TMW-3

Lab Sample ID: 310-313757-14

Date Collected: 08/19/25 10:10

Matrix: Ground Water

Date Received: 08/20/25 10:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	OA-1 (GC)		1	465112	D2YP	EET CF	08/29/25 00:44

Lab Chronicle

Client: Atlas Technical Consultants LLC
Project/Site: Ridgeway UST Closure

Job ID: 310-313757-1

Client Sample ID: TMW-3

Date Collected: 08/19/25 10:10
Date Received: 08/20/25 10:12

Lab Sample ID: 310-313757-14

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			464600	J5BR	EET CF	08/25/25 08:46
Total/NA	Analysis	OA-2		1	464759	C3AA	EET CF	08/26/25 23:22

[1] This procedure uses a method stipulated length of time for the process. Both start and end times are displayed.

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

Accreditation/Certification Summary

Client: Atlas Technical Consultants LLC
Job ID: 310-313757-1
Project/Site: Ridgeway UST Closure

Laboratory: Eurofins Cedar Falls

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-25

Method Summary

Client: Atlas Technical Consultants LLC
Project/Site: Ridgeway UST Closure

Job ID: 310-313757-1

Method	Method Description	Protocol	Laboratory
OA-1 (GC)	Volatile Petroleum Hydrocarbons (GC)	Iowa DNR	EET CF
OA-2	Iowa - Extractable Petroleum Hydrocarbons (GC)	Iowa DNR	EET CF
6010D	Metals (ICP)	SW846	EET CF
7470A	Mercury (CVAA)	SW846	EET CF
1311	TCLP Extraction	SW846	EET CF
3010A	Preparation, Total Metals	SW846	EET CF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET CF
3546	Microwave Extraction	SW846	EET CF
5030B	Purge and Trap	SW846	EET CF
7470A	Preparation, Mercury	SW846	EET CF

Protocol References:

Iowa DNR = Iowa Department of Natural Resources

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

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

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310-313757 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information

Client. Atlas

City/State. CITY Des Moines STATE IA. Project:

Receipt Information

Date/Time Received DATE 8/20/25 TIME 10:12 Received By. JL

Delivery Type: ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee ☐ Lab Courier ☐ Lab Field Services ☑ Client Drop-off ☐ Other:

Condition of Cooler/Containers

Sample(s) received in Cooler?	☑ Yes	☐ No	*If yes:* Cooler ID
Multiple Coolers?	☐ Yes	☑ No	*If yes:* Cooler # _____ of _____
Cooler Custody Seals Present? No	☐ Yes	☑ No	*If yes.* Cooler custody seals intact? ☐ Yes ☐
Sample Custody Seals Present? No	☐ Yes	☑ No	*If yes:* Sample custody seals intact? ☐ Yes ☐
Trip Blank Present?	☐ Yes	☑ No	*If yes:* Which VOA samples are in cooler?

Temperature Record

Coolant: ☑ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other:_____ ☐ NONE

Thermometer ID: 4 Correction Factor (°C). 0

• **Temp Blank Temperature** – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C) 4.8 Corrected Temp (°C): 4.8

• **Sample Container Temperature**

	CONTAINER 1	CONTAINER 2
Container(s) used:		
Uncorrected Temp (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☐ No

NOTE If yes, contact PM before proceeding If no, proceed with login

Additional Comments

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Cedar Falls Division
3019 Venture Way
Cedar Falls, IA 50613

TestAmerica Des Moines SC
214

Phone. 319 - 277 - 2401 or 1 - 800 - 750 - 2401
Fax: 319 - 277 - 2425

Company. Atlas Technical Consultants
Your PO #:

Send Report To: Gaylen Hiesterman
Invoice To: Gaylen Hiesterman

Address: 4503 E 50th Street, Suite 800
Project Name: Ridgeway UST Closure

City/State/Zip Code: Des Moines, IA 50317
Project Number:

Telephone Number: 1 515 981 4528 Fax:
Email Address: gaylen.hiesterman@oneatlas.com

Sampled by: (Print Name) Chris Nicolet
CC.

(Signature)

Sample ID	Date Sampled	Time Sampled	# of containers shipped	Grab	Composite	Field Filtered	Preservative: Ice	HNO_3 (Red & White Label)	HCl (Blue & White Label)	NaOH (Orange & White Label)	H_2SO_4 Plastic (Yellow & White La	H_2SO_4 Glass(Yellow & White Labe	None (Black & White Label)	Other (Specify)	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other Specify:Stormwater	Analyze For: GA1	GA2	RUSH TAT (Must call ahe	Standard TAT	E-mail results	Fax Results	Send QC with report
L-1	8/19	1130	1	X			X						X						X		X	X		X	X		X
L-2	8/19	1135	1	X			X						X						X		X	X		X	X		X
L-3	8/19	1240	1	X			X						X						X		X	X		X	X		X
L-4	8/19	1145	1	X			X						X						X		X	X		X	X		X
L-5	8/19	1250	1	X			X						X						X		X	X		X	X		X
L-6	8/19	1256	1	X			X						X						X		X	X		X	X		X
L-7	8/19	1320	1	X			X						X						X		X	X		X	X		X
L-8	8/19	1335	1	X			X						X						X		X	X		X	X		X
D-1	8/18/25	1540	1	X			X						X						X		X	X		X	X		X
D-2	8/18/25	1613	1	X			X						X						X		X	X		X	X		X

NOTE: All turn around times are calculated from the time of receipt at TestAmerica.
NOTICE: Pre-Arrangements must be made *AT LEAST 48 Hours in ADVANCE* to receive results with RUSH turn around time commitments; *additional charges* may be assessed.
NOTE: There may be a charge assessed for TestAmerica disposing of sample remainders.

NOTES: Please fill in shaded areas

Relinquished by:	Date	Time	Received by:	Date	Time	Relinquished by:	Date	Time
	8/19/25	1902		8/19/25	1902			
Relinquished by:	Date	Time	Received by:	Date	Time	Relinquished by:	Date	Time
	08/20/25			8/20/25	0612			
Shipped Via:			Comments.			Shipped Via.		
Received for TestAmerica by:	Date	Time	Temperature Upon Receipt:			Laboratory Comments.		

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Cedar Falls Division
3019 Venture Way
Cedar Falls, IA 50613

TestAmerica Des Moines SC
214

Phone: 319 - 277 - 2401 or 1 - 800 - 750 - 2401
Fax: 319 - 277 - 2425

Company: Atlas Technical Consultants
Send Report To: Gaylen Hiestermann
Address: 4503 E 50th Street, Suite 800
City/State/Zip Code: Des Moines, IA 50317
Telephone Number: 1 515 981 4528 Fax:
Sampled by: (Print Name) Chris Nealer
(Signature)

Your PO #:
Invoice To: Gaylen Hiestermann
Project Name: Ridgeway UST Closure
Project Number:
Email Address: Gaylen.hiestermann@oneatlas.com
CC:

Sample ID	Date Sampled	Time Sampled	# of containers shipped	Grab	Composite	Field Filtered	Preservative: Ice	HNO_3 (Red & White Label)	HCl (Blue & White Label)	NaOH (Orange & White Label)	H_2SO_4 Plastic (Yellow & White La	H_2SO_4 Glass(Yellow & White Labe	None (Black & White Label)	Other (Specify)	Matrix: Groundwater	Wastewater	Drinking Water	Sludge	Soil	Other Specify-Stormwater	Analyze For: OA1	OA2	RUSH TAT (Must call ahe	Standard TAT	E-mail results	Fax Results	Send QC with report
D-3	8/18/25	1715	1	X			4						4						4		X	X		X	X		
TMW-1	8/18/25	1510	7	X			X		X				X		X						X	XX		X	X		X
TMW-2	8/19/25	1630	7	X			X		X				X		X						X	XX		X	X		X
TMW-3	8/19/25	1010	8	X			X		X				X		X						X	X		X	X		X

NOTE: All turn around times are calculated from the time of receipt at TestAmerica.
NOTICE: **Pre-Arrangements must be made *AT LEAST 48 Hours in ADVANCE* to receive results with RUSH turn around time commitments; *additional charges* may be assessed.**
NOTE: There may be a charge assessed for TestAmerica disposing of sample remainders.

NOTES: Please fill in shaded areas

Relinquished by	Date	Time	Received by:	Date	Time	Relinquished by:	Date	Time
	8/19/25	1902		8/19/25	1902			
Relinquished by	Date	Time	Received by:	Date	Time	Relinquished by:	Date	Time
	08/20/25			8/20/25	10:12			
Shipped Via:			Comments:			Shipped Via.		
Received for TestAmerica by	Date	Time	Temperature Upon Receipt:	Laboratory Comments.				

Login Sample Receipt Checklist

Client: Atlas Technical Consultants LLC

Job Number: 310-313757-1

Login Number: 313757
List Number: 1
Creator: Schaufenbuel, Erin

List Source: Eurofins Cedar Falls

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	