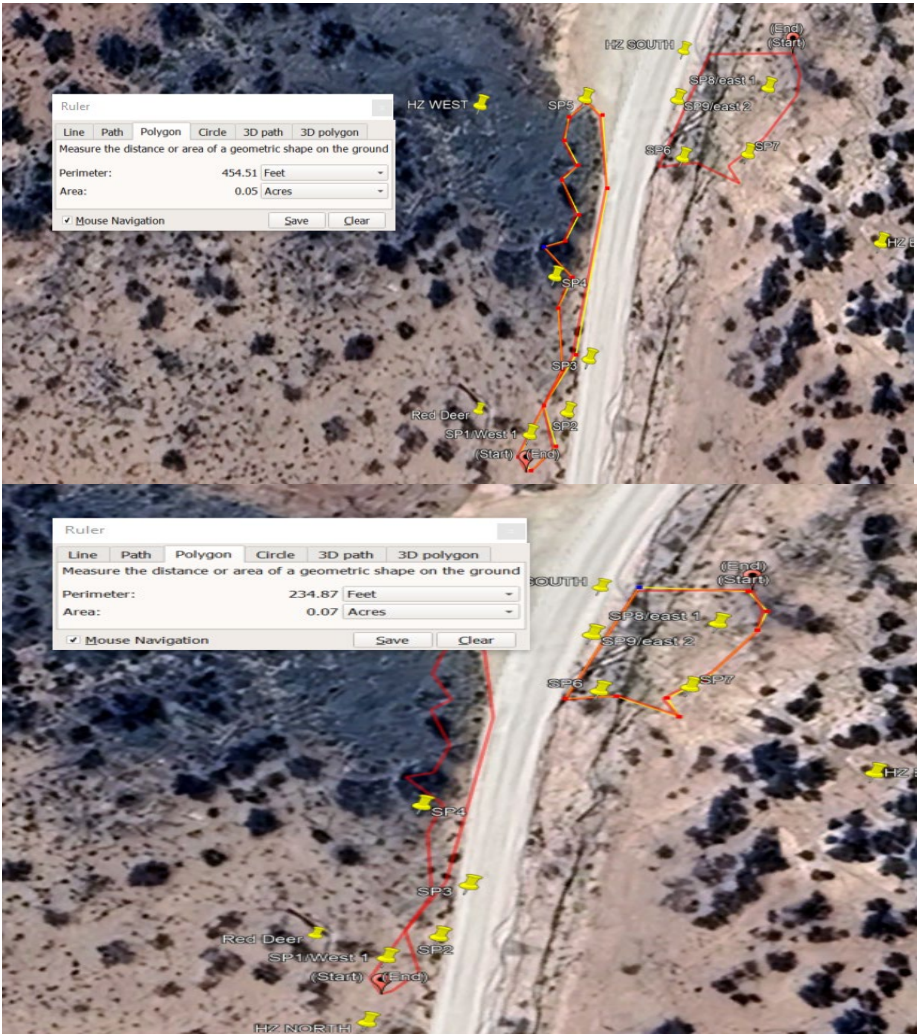


$0.12 \times 325,851 \text{ ac/ft} \times 1 \text{ ft deep} \times 0.1 \text{ inch/inch available water capacity} = 3910 \text{ gal}$

$/42 \text{ BBL} = 93 \text{ BBL}$



Plant-available water holding capacities of various textured soil.

Soil Texture	Plant-Available Water Holding Capacity (inches of water per foot of soil)
Very coarse sands	0.4 - 0.75
Coarse sands, fine sands, loamy sands	0.75 - 1.25
Sandy loams, fine sandy loams	1.25 - 1.75
Very fine sandy loams, loams, silt loams	1.50 - 2.30
Clay loams, silty clay loams, sandy clay loams	1.75 - 2.50
Sandy clays, silty clays, clays	1.60 - 2.50

²Adapted from: Schwankl, L.J. and T. Prichard. 2009. University of California Drought Management Web Site. <http://UCManageDrought.ucdavis.edu>. Viewed Aug. 13, 2009.



Remediation Plan

Red Deer

Chaves County, NM

Units O & J, Section 26 T15S R28E

Latitude 32°58'58.10"N, Longitude 104° 6'1.70"W

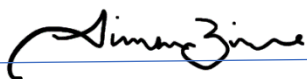
NMOCD Incident # nAPP2327650736

Select Water Solutions, LLC

1502 E Greene St

Carlsbad, NM 88220

April 2024

A handwritten signature in black ink, appearing to read 'Timsan Bricker'.

Timsan Bricker

Environmental Coordinator

tbricker@selectwater.com

A handwritten signature in black ink, appearing to read 'Halie Butler'.

Halie Butler

**Sr. Corporate
Environmental Waste and
Remediation Manager**

hbutler@selectwater.com



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**Background:**

The site is located in Unit Letter O and J (SWSE and NWSE), Section 26, Township 15 South, Range 28 East, approximately thirteen miles northwest of Loco Hills, in Chaves County, New Mexico. The site is located on New Mexico State land. Topographic Map, OSE POD Locations Map, and USGS Well Locations Map are included as Figure 1, Figure 2, and Figure 3, respectively.

The release occurred on an active layflat water line; Latitude 32.98281 North, Longitude - 104.10047 West. The Initial NMOCD Form C-141 indicated that on October 3, 2023, approximately 93 BBL of produced water were released due to a blow out on the water line. A crew was dispatched to the release site and the line was repaired. Previously submitted pages of the NMOCD Form C-141 are available on the NMOCD Imaging System.

NMOCD Site Classification:

A search of the New Mexico Office of the State Engineer (NMOSE) and United States Geological Survey (USGS) groundwater databases was completed in effort to determine the horizontal distance to known water sources within a half mile radius of the Release Site. Depth to groundwater was determined using a search of NMOSE and USGS databases. Karst mapping indicates the site is not located in a Karst designated area. Karst and Wetland Maps are provided as Attachment I. Depth to groundwater information is provided as Attachment IV and the results are depicted on Figures 2 & 3. Due to no reliable groundwater information nearby, NMOCD closure criteria is as follows:

Depth to Groundwater	Constituent	Method	Limit
<50	Chloride	EPA 300.0 or SM4500 CLB	600 mg/kg
	TPH (GRO + DRO + MRO)	EPA SW-846 Method 8015M Ext	100 mg/kg
	GRO + DRO	EPA SW-846 Method 8015M Ext	N/A
	BTEX	EPA SW-846 Methods 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Methods 8021B or 8260B	10 mg/kg

**Delineation:**

On October 10, 2023 Select conducted an initial site assessment consisting of photographing and mapping the release area, as well as taking preliminary surface samples. On October 27, 2023, delineation began and samples were taken from 0-1'. Laboratory analytical results indicated samples S3, S8/East 1, and S9/East 2 were below NMOCD Closure Criteria at 1 ft bgs.

On January 4, 2024 samples were taken to 2.5' before hitting hand auger refusal. Lab analytical results indicated sample S2 was below NMOCD closure criteria at 2' bgs.

On February 6, 2024, Hungry Horse LLC was dispatched to continue sampling down to 4'. During delineation activities, sample test trenches were advanced in the release area in effort to determine the vertical extent of contamination. These sample locations are identified by SP designation. In addition, sample test trenches were advanced along the outside edges of the release area in effort to determine the horizontal extent of contamination. These sample locations are identified by HZ designation. During the advancement of the test trenches, soil samples were collected and field screened for the presence of chloride concentrations utilizing a Hach Quantab® chloride test kit.

Based on field observations and field test data noted above and provided in Attachment V, seven representative soil samples were selected for laboratory analysis. Delineation soil samples SP1, SP4 through SP7, HZ South 0' and HZ South 1', were submitted to the laboratory for analysis of BTEX, TPH, and chloride. Laboratory analytical results indicated contaminant concentrations were below the NMOCD Closure Criteria in each of the submitted samples; HZ South at surface, and SP1, SP4-SP7 at 6' bgs.

Remediation Plan:

Select plans to employ Hungry Horse LLC to complete in-situ remediation through excavation of approximately 1442 cubic yards of contaminated soils and backfill with clean materials sourced locally. Contaminated soils will be disposed of at Gandy-Marley Landfarm in Chaves County. The excavation will then be confirmation sampled through the use of five-point composite sampling every 200 square feet of sidewalls and bottom, and will be tested for all constituents listed in closure criteria.

Restoration, Reclamation, and Re-Vegetation:

Once analytical results confirm that contaminated soils have been successfully remediated, the excavated area will be backfilled and contoured to achieve erosion control and preserve surface water flow. The affected area will be reseeded with an approved seed mixture and monitored for restoration of 75% of initial ground coverage according to NMOCD standards.



Distribution:

New Mexico Energy, Minerals, and Natural Resources Department

Oil Conservation Division, District 2

811 S. First St

Artesia, NM 88210

New Mexico State Land Office

Roswell District

1001 S Atkinson Ave

Roswell, NM 88203



Figures

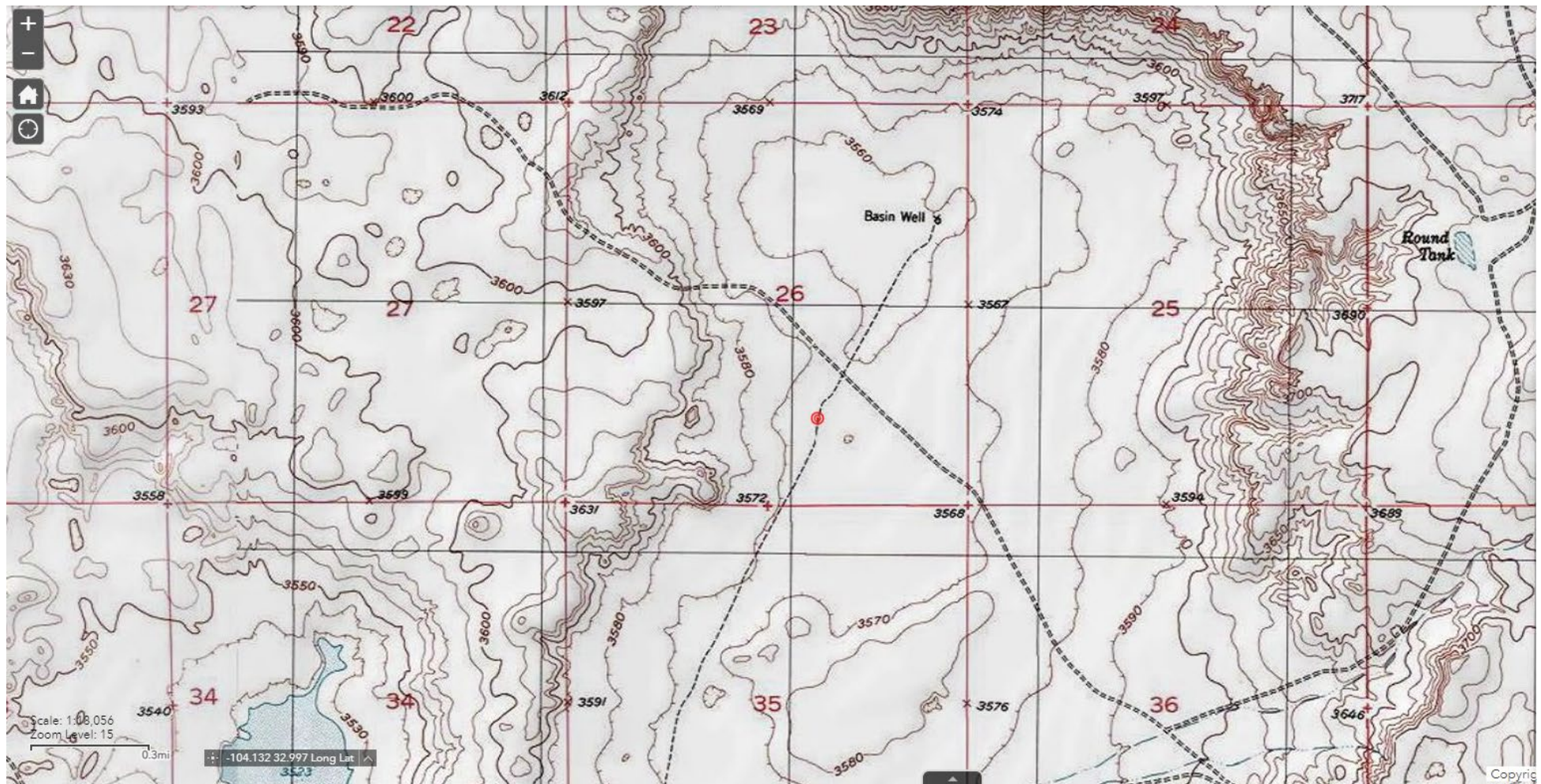


Figure 1
 Topographic Map
 Select Water
 Red Deer
 GPS: 32.98281, -104.10047
 Chaves County

Legend:
 ● Red Deer location

Drafted: TB
 Checked: HB
 Date: 4/05/24



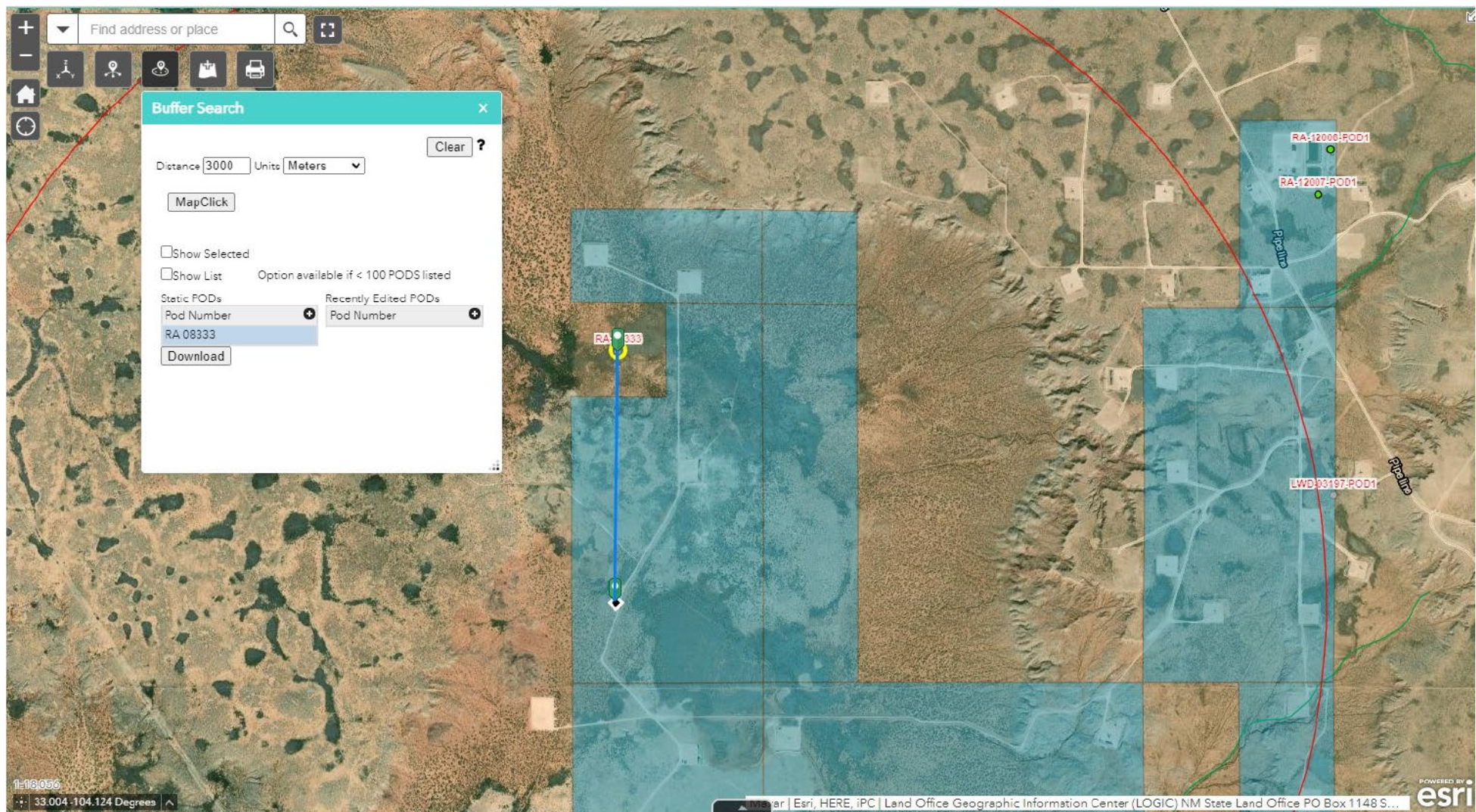



Figure 2
NMOSE POD Map
Select Water
Red Deer
GPS: 32.98281, -104.10047
Chaves County

Legend:
 Release location


Drafted: TB
Checked: HB
Date: 4/05/24

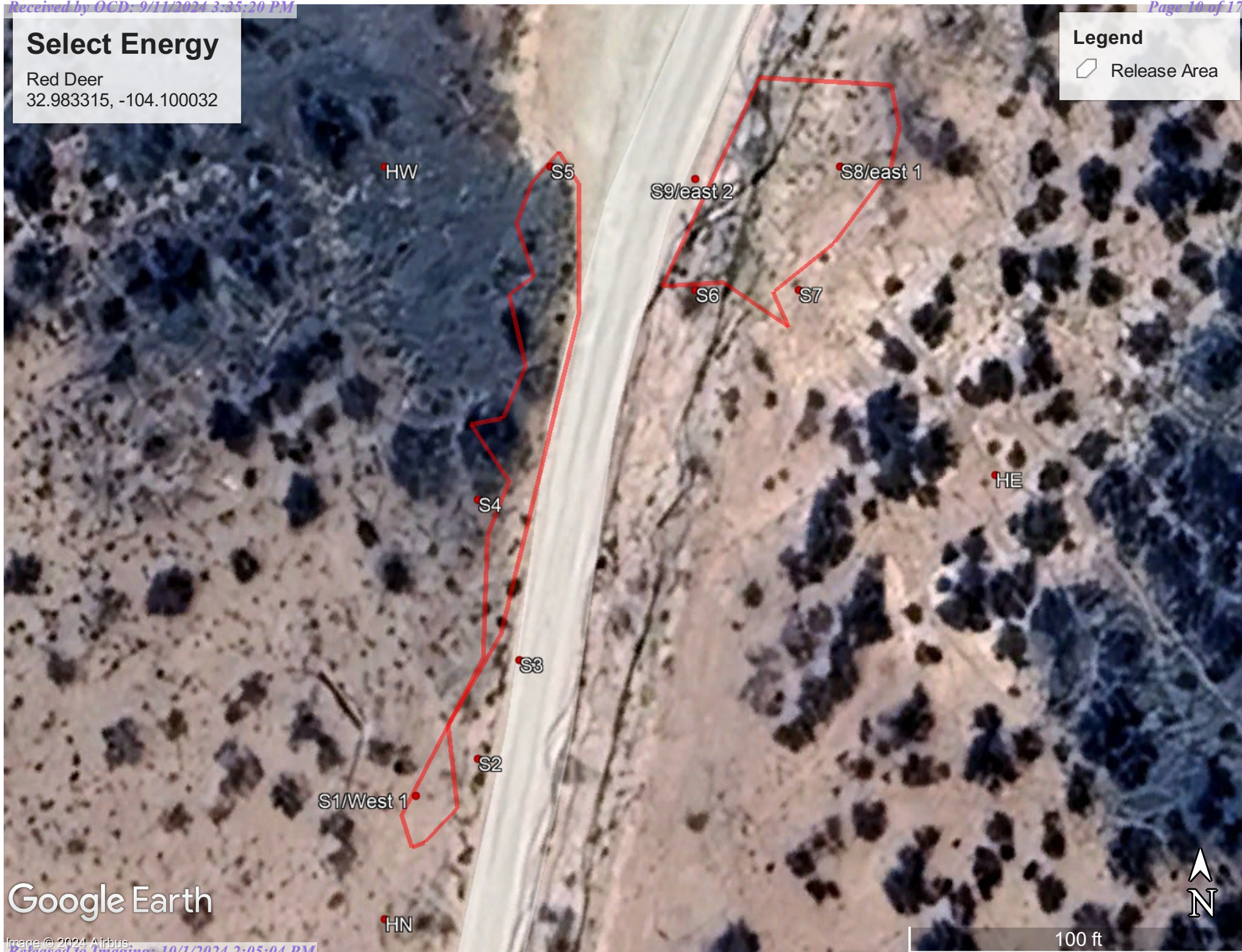


Select Energy

Red Deer
32.983315, -104.100032

Legend

 Release Area



Google Earth

**Figure 5**

Excavation Depth Map

Select Energy

Red Deer - Mack Energy

GPS: 32.983315, -104.100032

Chaves County

Legend:

6 Foot Depth



4 Foot Depth



Drafted: bw

Checked: dd

Date: 2/6/24



Tables



Table 1
Summary of Soil Sample Laboratory Analytical Results

Select Water

Red Deer

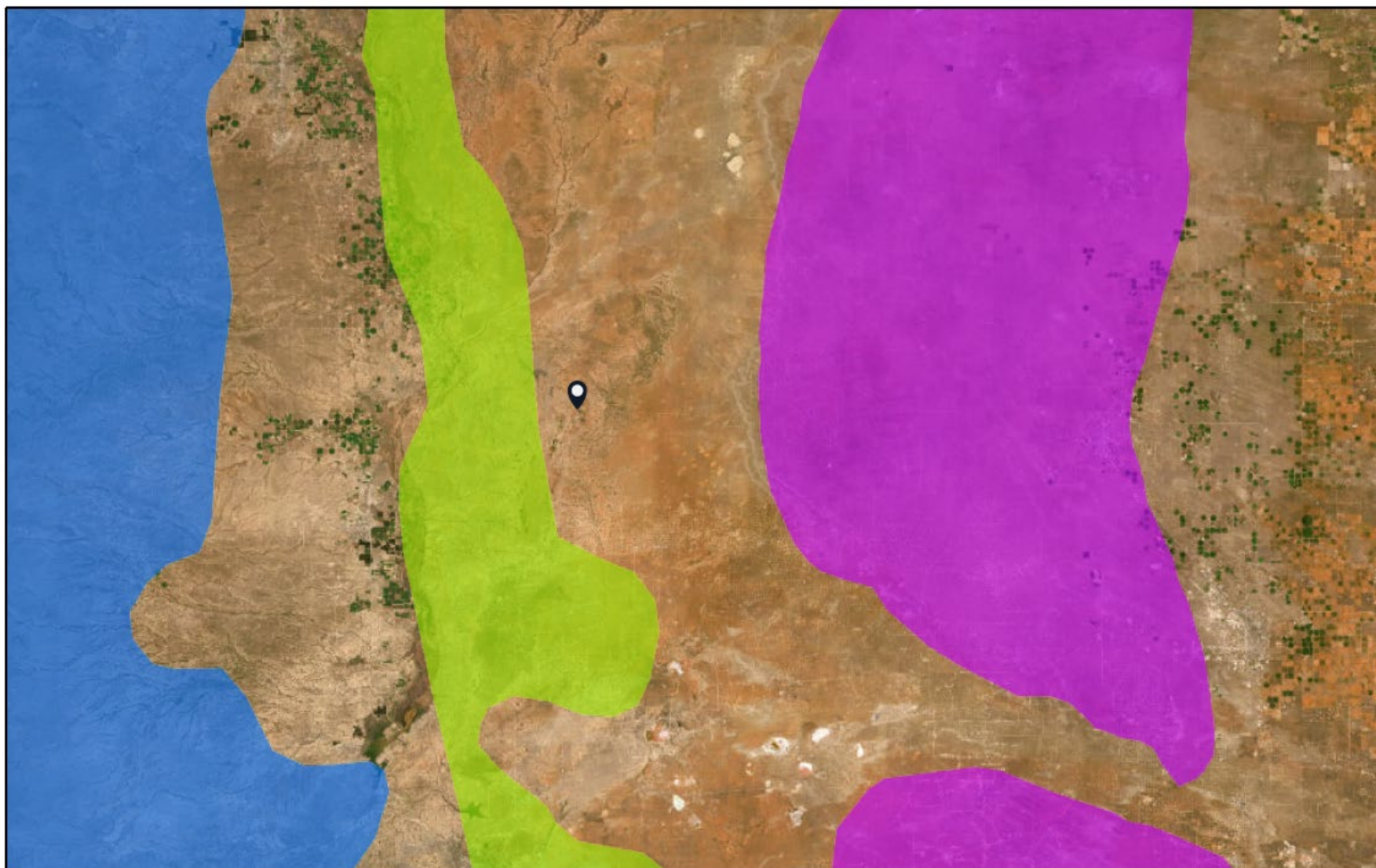
NMOCD Inc# nAPP2327650736

RED DEER - MACK ENERGY 10/2/2023						
SAMPLE ID	DATE	DEPTH	BTEX	DRO+GRO	TPH	CHLORIDE
HZ North	10/27/2023	0	0	<50.0	<50.0	0
	10/27/2023	1	0	<50.0	<50.0	19.1
HZ West	10/27/2023	0	0	<50.0	<50.0	0
	10/27/2023	1	0	<50.0	<50.0	11.3
HZ East	10/27/2023	0	0	<50.0	<50.0	32.6
	10/27/2023	1	0	<50.0	<50.0	693
HZ South	2/6/2024	0	0	<50.0	<50.0	148
	2/6/2024	1	0	<50.0	<50.0	389
SP1/West 1	10/10/2023	0	0	<50.0	<50.0	7330
	10/27/2023	1	0	<50.0	<50.0	8830
	1/4/2024	2.5	0	<50.0	<50.0	700
	2/6/2024	4	0	<50.0	<50.0	919
	6/17/2024	6	0	<50.0	<50.0	275
SP2	10/27/2023	0	0	<50.0	<50.0	5460
	10/27/2023	1	0	<50.0	<50.0	1430
	1/4/2024	2.5	0	<50.0	<50.0	29
SP3	10/27/2023	0	0	<50.0	<50.0	3160
	10/27/2023	1	0	<50.0	<50.0	400
	1/4/2024	2.5	0	<50.0	<50.0	104
SP4	10/27/2023	0	0	<50.0	<50.0	4670
	10/27/2023	1	0	<50.0	<50.0	6300
	1/4/2024	2.5	0	<50.0	<50.0	3660
	2/6/2024	4	0	<50.0	<50.0	7200
	6/17/2024	6	0	<50.0	<50.0	202
SP5/West 2	10/10/2023	0	0	<50.0	<50.0	9820
	10/27/2023	1	0	<50.0	<50.0	6420
	1/4/2024	2.5	0	<50.0	<50.0	722
	2/6/2024	4	0	<50.0	<50.0	1050
	6/17/2024	6	0	<50.0	<50.0	0
SP6	10/27/2023	0	0	<50.0	<50.0	8180
	10/27/2023	1	0	<50.0	<50.0	4350
	1/4/2024	2.5	0	<50.0	<50.0	2270
	2/6/2024	4	0	<50.0	<50.0	2570
	6/17/2024	6		<50.0	<50.0	453
SP7	10/27/2023	0	0	<50.0	<50.0	3620
	10/27/2023	1	0	<50.0	<50.0	1420
	1/4/2024	2.5	0	<50.0	<50.0	1080
	2/6/2024	4	0	<50.0	<50.0	1080
	6/17/2024	6	0	<50.0	<50.0	277
SP8/East 1	10/10/2023	0	0	<50.0	<50.0	5100
	10/27/2023	1	0	<50.0	<50.0	463
SP9/East 2	10/10/2023	0	0	<50.0	<50.0	4030
	10/27/2023	1	0	<50.0	<50.0	401



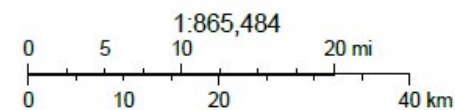
Attachment I
KARST and Wetland Maps

Red Deer



4/5/2024 Karst Type

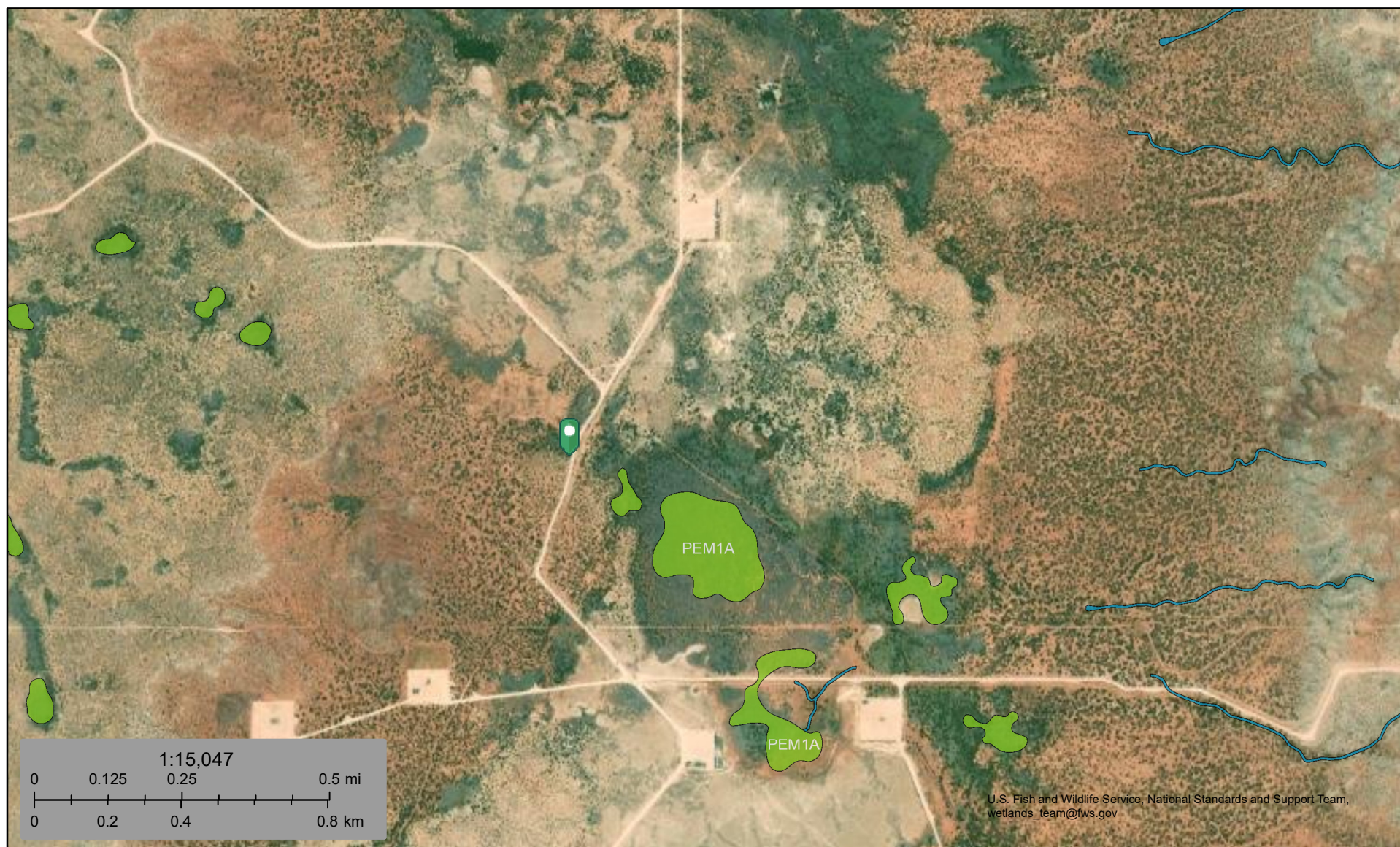
- Carbonate
- Erosional
- Gypsum
- Volcanic



U.S. Geological Survey Open-File Report 2004-1352, Caves and Karst in the U.S. National Park Service, AGI Karst Map of the U.S., Earthstar Geographics



Red Deer



April 5, 2024

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond

- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.



Attachment II
Cultural Clearance



Stephanie Garcia Richard, Commissioner of Public Lands
State of New Mexico

NMSLO Cultural Resources Cover Sheet Exhibit

NMCRIS Activity Number:

(if applicable)

Exhibit Type (select one)

☒ ARMS Inspection/Review - Summarize the results (select one):

- ☒ (A) The entire area of potential effect or project area has been previously surveyed to current standards and no cultural properties were found within the survey area.
- ☐ (B) The entire area of potential effect or project area has been previously surveyed to current standards and cultural properties were found within the survey area.
- ☐ (C) The entire area of potential effect or project area has not been previously surveyed or has not been surveyed to current standards. A complete archaeological survey will be conducted and submitted for review.

☐ Archaeological Survey

Findings:

☐ Negative - No further archaeological review is required.

☐ Positive - Have avoidance and protection measures been devised? Select one:

Comments:

Project Details:

NMSLO Lease Number (if available):

Cultural Resources Consultant: Alissa K. Healy, SWCA Environmental Consultants, Albuquerque NM

Project Proponent (Applicant): Select Water Solutions

Project Title/Description: Red Deer Inadvertent Release Remediation Project on New Mexico State Land
Office lands in Chaves County, NM

Project Location:

County(ies): Chaves

PLSS/Section/Township/Range): S 35, T15S, R28E

For NMSLO Agency Use Only:

NMSLO Lease Number:

Acknowledgment-Only:

☐

Lease Analyst:

Date Exhibit Routed to Cultural Resources Office:

No person may alter the wording of the questions or layout of the cover sheet. The completion of this cover sheet by itself does not authorize anyone to engage in new surface disturbing activity before the review and approvals required by the Cultural Properties Protections Rule.

Form Revised 12 22



ENVIRONMENTAL CONSULTANTS

Sound Science. Creative Solutions.®

7770 Jefferson Street NE, Suite 410
Albuquerque, New Mexico 87109
Tel 505.254.1115 Fax 505.254.1116
www.swca.com

April 4, 2024

TO: Ethan Ortega, Division Director & Archaeologist, New Mexico State Land Office, Santa Fe, New Mexico

FROM: SWCA Environmental Consultants

SUBJECT: Completion of an Archaeological Records Management Section Review for the Red Deer Inadvertent Release Remediation Project on New Mexico State Land Office lands in Chaves County, NM

Company Ref No: None-Provided

PROJECT DESCRIPTION:

Select Water Solutions has requested that SWCA Environmental Consultants (SWCA) conduct an Archaeological Resource Management Section (ARMS) review for the Red Deer release remediation project in Chaves County, New Mexico. The proposed project is on lands managed by the New Mexico State Land Office (NMSLO) approximately 52.9 kilometers (32.9 miles) west of Artesia, NM in Township 15S, Range 28E, Section 35.

A literature and file search were conducted on March 29, 2024, using the New Mexico Cultural Resources Information System (NMCRIS) online database managed by ARMS of the New Mexico Historic Preservation Division (HPD) which included a review of known cultural resources, such as the built environment, archaeological sites, and State/National Register listed properties. Other sources reviewed include the Bureau of Land Management (BLM) General Land Office (GLO) Records web site, <http://www.gloreCORDS.blm.gov>, which include land patent and general land office survey data. As this area was not settled by Spain, land grant records were not reviewed. The review was conducted for the remediation area, consisting of the inadvertent release area and a 100 ft (30 m) buffer around the spill location. The land the proposed project is located on is part of the February 19, 1909: Homestead Entry-Enlarged (35 Stat. 639) patented on February 2, 1922, issued to Ernest E. Hinshaw, as well as the June 20, 1910: New Mexico Enabling Act (36 Stat. 557) patented on October 7, 1919, and March 27, 1924, both of which were issued to the state of New Mexico.

Recommendation:

The project area and surrounding 500 m (0.31 mile) have been subject to eleven (11) cultural resource surveys, nine of which are considered qualifying (completed within the last 10 years), all of which are listed in Table 1. Two (2) previously recorded sites are located within the same 500 m (0.31 mile) area; neither of which will be impacted by the remediation efforts (Table 2). The closest resource is over 350 feet from the spill location. The inadvertent release is entirely located on NMSLO-managed lands. Because the proponent will only be utilizing the existing access road and following the guidance set forth by State Land Office Rule 19.2.5 NMAC and NMAC 14.10.14 the remediation area is fully covered by qualifying survey, no additional survey will be required.

Information regarding the findings can be found in Table 1, Table 2, and Figure 1.

Sincerely,

A handwritten signature in dark ink, appearing to read "Ethan Ortega", is written over a faint, light-colored background.

Archaeologist

Attached: (1) Review Results, (1) ARMS Map, and (1) PLSS Map.



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Archaeological Resources Management Section (ARMS) Review Results

Table 1. Cultural surveys within 500 meters (0.31 mile) of proposed project.

NMCRIS No.	Performing Organization	Date of Investigation	Acres Surveyed	Sites Visited
32444	Agency for Conservation Archaeology Eastern New Mexico University	30-APR-1989	2,209.00	39
94825	Southern NM Archaeological Services	3-NOV-1997	1,236.24	31
130327	Southern NM Archaeological Services	7-APR-2014	26.86	0
132459	Southern NM Archaeological Services	11-NOV-2014	19.75	0
132960	Southern NM Archaeological Services	5-FEB-2015	360.00	11
138435	Double D Oil Field Services, LLC	30-JUN-2017	31.00	2
139682	Double D Oil Field Services, LLC	3-JAN-2018	20.00	0
139861	Double D Oil Field Services, LLC	25-JAN-2018	30.41	1
145002	Double D Oil Field Services, LLC	2-JAN-2020	142.68	4
150560	Double D Oil Field Services, LLC	8JUN-2022	0.54	0
152663	Double D Oil Field Services, LLC	23-FEB-2023	59.12	2

Table 2. Cultural resources within 500 meters (0.31 mile) of proposed project.

LA Number	Site Type	Cultural Affiliation	Eligibility	Within or Outside Survey Area
████	████	████ ████ ████ ████ ████	████ ████ ████	████
████	████ ████	████ ████ ████	████ ████ ████	████



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www.swca.com

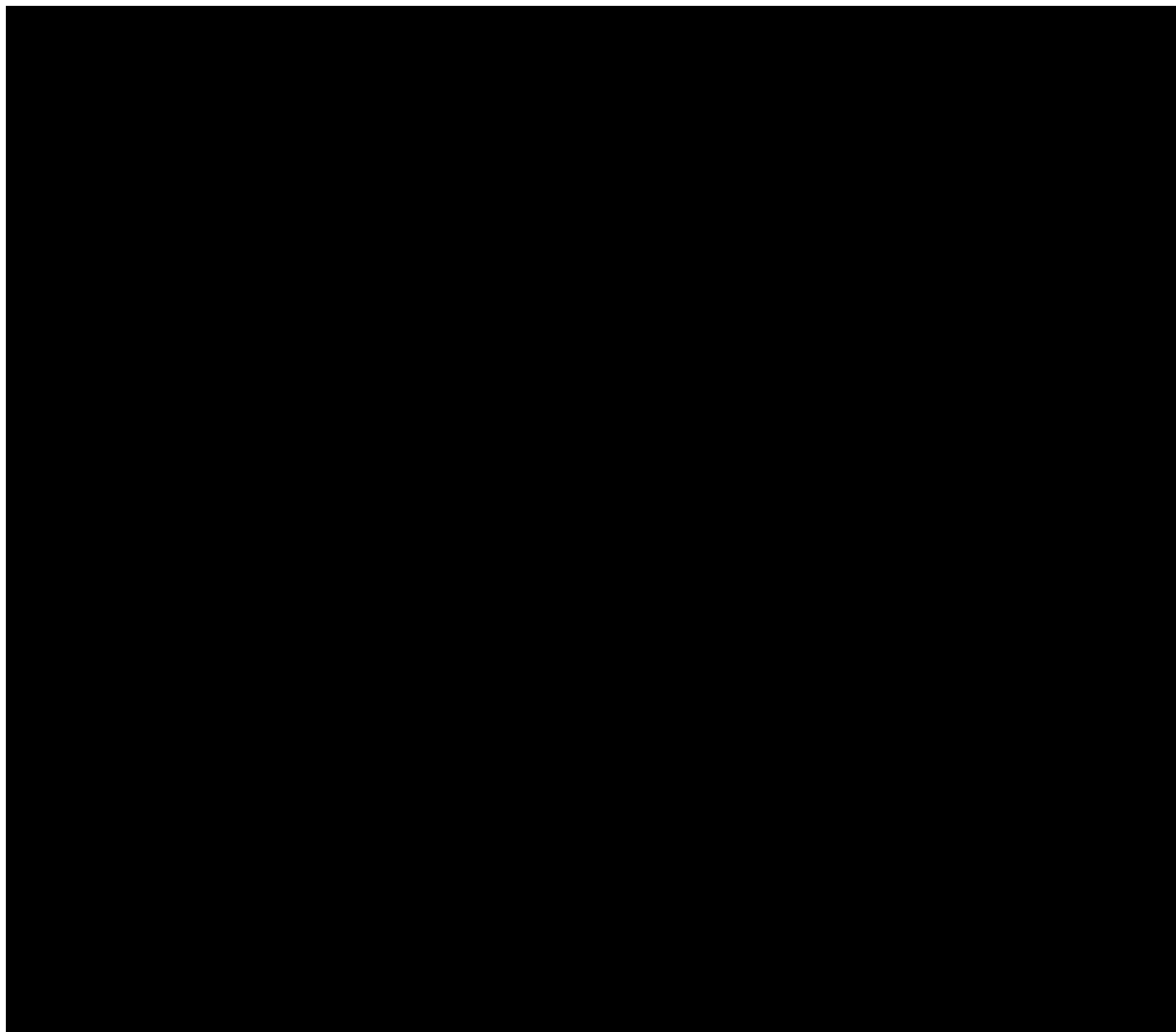


Figure 1. NMCRIS screenshot showing the location of the Red Deer inadvertent release location (green polygon) with a 500 m (0.31 mile) desktop review buffer area (light green circle). The screenshot includes previously conducted survey investigations (dark yellow and brown polygons) and previously recorded cultural resources (tan and red polygons).





NMSLO Cultural Resources Cover Sheet Exhibit

NMCRIS Activity Number:

Exhibit Type (select one)

ARMS Inspection/Review - Summarize the results :

- (A) The entire area of potential effect or project area has been previously surveyed to current standards and **no cultural properties** were found within the survey area.
- (B) The entire area of potential effect or project area has been previously surveyed to current standards and **cultural properties were found** within the survey area.
- (C) The entire area of potential effect or project area has **not** been previously surveyed or **has not been surveyed** to current standards. A complete archaeological survey will be conducted and submitted for review.

Archaeological Survey

Findings:

Negative - No further archaeological review is required.

Positive - Have avoidance and protection measures been devised?

Comments:

Project Details:

Project Location:

For NMSLO Agency Use Only:

No person may alter the wording of the questions or layout of the cover sheet. The completion of this cover sheet by itself does not authorize anyone to engage in new surface disturbing activity before the review and approvals required by the Cultural Properties Protections Rule.

Form Revised 22



Attachment III
NMOCD and NMSLO Correspondence

From: [Timsan Bricker](#)
To: mike.bratcher@state.nm.us
Cc: ocd.enviro@emnrd.nm.gov
Subject: RED DEER RELEASE 10/2/2023 SELECT WATER
Date: Tuesday, October 3, 2023 2:08:00 PM
Attachments: [image001.png](#)

Good afternoon,

This email is to notify OCD of a produced water spill that occurred 10/2/2023 at approx. 6:00 pm as a result of layflat hose failure on NMSLO land. Approximately 93 BBLs were lost with none recovered. NOR has been submitted.

Please contact me with any questions or concerns.

Thank you!

TIMSAN BRICKER

Environmental Coordinator

1502 E Greene St | Carlsbad, NM 88220

M: 575-200-7551

tbricker@selectwater.com



From: OCDOnline@state.nm.us
To: [Timsan Bricker](#)
Subject: The Oil Conservation Division (OCD) has accepted the application, Application ID: 271936
Date: Tuesday, October 3, 2023 2:06:13 PM

External Email: Use caution with links & attachments. The sender of this email is emnrd.ocdonline@emnrd.nm.gov

To whom it may concern (c/o Timsan Bricker for SELECT ENERGY SERVICES, LLC),

The OCD has accepted the submitted *Notification of a release* (NOR), for incident ID (n#) nAPP2327650736,
with the following conditions:

- **When submitting future reports regarding this release, please submit the calculations used or specific justification for the volumes reported on the initial C-141.**

Please reference nAPP2327650736, on all subsequent C-141 submissions and communications regarding the remediation of this release.

NOTE: As of December 2019, NMOCD has discontinued the use of the “RP” number.

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

ocd.enviro@state.nm.us

New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

From: [Griffin, Becky R.](#)
To: [Timsan Bricker](#)
Subject: RE: Select Water Solutions spill in Chaves County
Date: Wednesday, October 4, 2023 3:42:22 PM
Attachments: [image002.png](#)

External Email: Use caution with links & attachments. The sender of this email is bgriffin@slo.state.nm.us

Perfect. Thank you

From: Timsan Bricker <TBricker@selectwater.com>
Sent: Wednesday, October 4, 2023 3:24 PM
To: Griffin, Becky R. <bgriffin@slo.state.nm.us>
Subject: [EXTERNAL] RE: Select Water Solutions spill in Chaves County

Thank you ma'am! The name of the line is Frac Line ROW and permit is #R40609 under Mack Energy.

TIMSAN BRICKER

Environmental Coordinator

1502 E Greene St | Carlsbad, NM 88220

M: 575-200-7551

tbricker@selectwater.com



From: Griffin, Becky R. <bgriffin@slo.state.nm.us>
Sent: Wednesday, October 4, 2023 2:57 PM
To: Timsan Bricker <TBricker@selectwater.com>
Cc: Barnes, Will <wbarnes@slo.state.nm.us>; Knight, Tami C. <tknight@slo.state.nm.us>; Honea, Tammy <thonea@slo.state.nm.us>
Subject: Select Water Solutions spill in Chaves County

External Email: Use caution with links & attachments. The sender of this email is bgriffin@slo.state.nm.us

Hi Timsan,

Thank you for notifying us of the 93 barrel produced water spill in Chaves County through the Web Form. All future notifications and additional information, that we spoke of on this spill, please report to us at spills@slo.state.nm.us unless it is an emergency situation. I have highlighted below information regarding the CPP Rule that we discussed on the phone.

This letter is to confirm that a release notification was received from your office on October 3, 2023. The NMSLO Environmental Compliance Office (ECO) has reviewed the records submitted regarding the subject release. No additional information regarding the subject release is required at this time. Once the release is stopped and contained, your cooperation in completing the subsequent remediation tasks is appreciated:

Cultural Properties Protection Rule (CPP)

For releases that impact State Trust Land surface beyond previously disturbed areas, responsible parties must comply with the CPP Rule prior to proceeding with any earth disturbance activities. The NMSLO Cultural Resources Office (CRO) is always willing to provide recommendations and facilitate project planning. To request planning assistance please email croinfo@slo.state.nm.us or call 505-827-5781. To learn more about the CPP Rule visit: nmstatelands.org/divisions/cultural-resources-office/culturalproperties.

90-Day Remediation and Closure

For releases that are remediated and are closed within 90 days of the discovery date, a written notification of the confirmation sampling event must be submitted to ECO a minimum of two business days from the sampling event. Please submit notifications to eco@slo.state.nm.us with the subject line as follows: (Document Description) Location Name (Incident #) Date of Release. As an example: *(Sampling Notification) Springsteen A State 001 (NAPP0123456789) 06-01-2022*.

The subsequent remediation closure report must be submitted to ECO for review and approval. Please submit the closure report to eco@slo.state.nm.us with the subject line *(Closure Report Submittal) Location Name (Incident #) Date of Release*.

Extended Remediation and Closure

For remediation actions that cannot be completed and closed within 90 days of the discovery date, a written remediation plan must be submitted to ECO for review and approval. Please submit the workplan to eco@slo.state.nm.us with the subject line *(Remediation Plan Submittal) Location Name (Incident #) Date of Release*.

Reclamation

Sites that are remediated and being prepared for reclamation must have a written reclamation plan submitted to ECO for review and approval. Note, it is acceptable to combine the remediation and reclamation plan

into one document for ECO approval. If the document is a standalone reclamation plan, please submit the plan to eco@slo.state.nm.us with the subject line *(Reclamation Plan Submittal) Location Name (Incident #) Date of Release*.

Thank you,
Environmental Compliance Office
Surface Division
New Mexico State Land Office
nmstatelands.org

Please let us know if you have any questions.
Thank you,

Becky

Becky Griffin

Environmental Specialist

Surface Division

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Attachment IV Site Photographs



1 Mid-point looking NE



2 Mid-point looking S on W side



3 N point looking S on E side



4 S point looking N on W side



Attachment V

DTGW Bore



Attachment VI
Lab Analytical Results



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Timsan Bricker
Select Energy Services
7904 W Hwy 80
Midland, Texas 79706

Generated 10/19/2023 1:18:25 PM

JOB DESCRIPTION

Red Deer
SDG NUMBER 2023-014

JOB NUMBER

890-5431-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

Eurofins Carlsbad

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.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



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Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

Client: Select Energy Services
Project/Site: Red Deer

Laboratory Job ID: 890-5431-1
SDG: 2023-014

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Definitions/Glossary

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 890-5431-1
SDG: 2023-014

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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

Case Narrative

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 890-5431-1
SDG: 2023-014

Job ID: 890-5431-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-5431-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method. Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 10/10/2023 2:43 PM. 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 26.0°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: West 1 (890-5431-1), West 2 (890-5431-2), East 1 (890-5431-3) and East 2 (890-5431-4).

GC Semi VOA

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

HPLC/IC

Method 300_ORGFM_28D: The following samples were diluted to bring the concentration of target analytes within the calibration range: West 1 (890-5431-1), West 2 (890-5431-2) and East 1 (890-5431-3). Elevated reporting limits (RLs) are provided.

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

General Chemistry

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

Client Sample Results

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 890-5431-1
SDG: 2023-014

Client Sample ID: West 1
Date Collected: 10/10/23 01:30
Date Received: 10/10/23 14:43

Lab Sample ID: 890-5431-1
Matrix: Solid

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total TPH	<48.5	U	48.5	20.5	mg/Kg			10/17/23 17:18	1	
Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<48.5	U	48.5	20.5	mg/Kg		10/17/23 12:09	10/17/23 17:18	1	
Diesel Range Organics (Over C10-C28)	<48.5	U	48.5	20.5	mg/Kg		10/17/23 12:09	10/17/23 17:18	1	
Oil Range Organics (Over C28-C36)	<48.5	U	48.5	20.5	mg/Kg		10/17/23 12:09	10/17/23 17:18	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1-Chlorooctane	92		65 - 130				10/17/23 12:09	10/17/23 17:18	1	
o-Terphenyl	89		65 - 130				10/17/23 12:09	10/17/23 17:18	1	
Method: EPA 300.0 - Anions, Ion Chromatography										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	7330		99.2	49.6	mg/Kg		10/17/23 16:32	10/17/23 19:07	10	
General Chemistry										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total Solids (SM 2540G)	82.1				%			10/17/23 11:00	1	

Client Sample ID: West 2
Date Collected: 10/10/23 01:35
Date Received: 10/10/23 14:43

Lab Sample ID: 890-5431-2
Matrix: Solid

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total TPH	<48.1	U	48.1	20.3	mg/Kg			10/17/23 16:58	1	
Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<48.1	U	48.1	20.3	mg/Kg		10/17/23 12:09	10/17/23 16:58	1	
Diesel Range Organics (Over C10-C28)	<48.1	U	48.1	20.3	mg/Kg		10/17/23 12:09	10/17/23 16:58	1	
Oil Range Organics (Over C28-C36)	<48.1	U	48.1	20.3	mg/Kg		10/17/23 12:09	10/17/23 16:58	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1-Chlorooctane	80		65 - 130				10/17/23 12:09	10/17/23 16:58	1	
o-Terphenyl	79		65 - 130				10/17/23 12:09	10/17/23 16:58	1	
Method: EPA 300.0 - Anions, Ion Chromatography										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	9820		99.8	49.9	mg/Kg		10/17/23 16:32	10/17/23 19:50	10	
General Chemistry										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total Solids (SM 2540G)	73.2				%			10/17/23 11:00	1	

Client Sample Results

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 890-5431-1
SDG: 2023-014

Client Sample ID: East 1
Date Collected: 10/10/23 01:40
Date Received: 10/10/23 14:43

Lab Sample ID: 890-5431-3
Matrix: Solid

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total TPH	<48.7	U	48.7	20.5	mg/Kg			10/17/23 17:59	1	
Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<48.7	U	48.7	20.5	mg/Kg		10/17/23 12:09	10/17/23 17:59	1	
Diesel Range Organics (Over C10-C28)	<48.7	U	48.7	20.5	mg/Kg		10/17/23 12:09	10/17/23 17:59	1	
Oil Range Organics (Over C28-C36)	<48.7	U	48.7	20.5	mg/Kg		10/17/23 12:09	10/17/23 17:59	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1-Chlorooctane	100		65 - 130				10/17/23 12:09	10/17/23 17:59	1	
o-Terphenyl	101		65 - 130				10/17/23 12:09	10/17/23 17:59	1	
Method: EPA 300.0 - Anions, Ion Chromatography										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	5100		99.6	49.8	mg/Kg		10/17/23 16:32	10/17/23 20:11	10	
General Chemistry										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total Solids (SM 2540G)	84.8				%			10/17/23 11:00	1	

Client Sample ID: East 2
Date Collected: 10/10/23 01:45
Date Received: 10/10/23 14:43

Lab Sample ID: 890-5431-4
Matrix: Solid

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total TPH	<48.7	U	48.7	20.6	mg/Kg			10/17/23 17:39	1	
Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<48.7	U	48.7	20.6	mg/Kg		10/17/23 12:09	10/17/23 17:39	1	
Diesel Range Organics (Over C10-C28)	<48.7	U	48.7	20.6	mg/Kg		10/17/23 12:09	10/17/23 17:39	1	
Oil Range Organics (Over C28-C36)	<48.7	U	48.7	20.6	mg/Kg		10/17/23 12:09	10/17/23 17:39	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1-Chlorooctane	99		65 - 130				10/17/23 12:09	10/17/23 17:39	1	
o-Terphenyl	98		65 - 130				10/17/23 12:09	10/17/23 17:39	1	
Method: EPA 300.0 - Anions, Ion Chromatography										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	4030		9.96	4.98	mg/Kg		10/17/23 16:32	10/17/23 18:13	1	
General Chemistry										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total Solids (SM 2540G)	73.0				%			10/17/23 11:00	1	

Surrogate Summary

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 890-5431-1
SDG: 2023-014

Method: 8015B NM - Diesel Range Organics (DRO) (GC)
Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	1CO1	OTPH1				
		(65-130)	(65-130)				
890-5431-1	West 1	92	89				
890-5431-2	West 2	80	79				
890-5431-3	East 1	100	101				
890-5431-4	East 2	99	98				
LCS 860-126572/2-A	Lab Control Sample	99	94				
LCSD 860-126572/3-A	Lab Control Sample Dup	93	87				
MB 860-126572/1-A	Method Blank	92	90				
Surrogate Legend							
1CO = 1-Chlorooctane							
OTPH = o-Terphenyl							

QC Sample Results

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 890-5431-1
SDG: 2023-014

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 860-126572/1-A

Matrix: Solid

Analysis Batch: 126639

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 126572

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	21.0	mg/Kg		10/16/23 17:16	10/17/23 10:40	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	21.0	mg/Kg		10/16/23 17:16	10/17/23 10:40	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	21.0	mg/Kg		10/16/23 17:16	10/17/23 10:40	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		65 - 130				10/16/23 17:16	10/17/23 10:40	1
o-Terphenyl	90		65 - 130				10/16/23 17:16	10/17/23 10:40	1

Lab Sample ID: LCS 860-126572/2-A

Matrix: Solid

Analysis Batch: 126639

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 126572

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	961	944.5		mg/Kg		98	70 - 135
Diesel Range Organics (Over C10-C28)	952	954.1		mg/Kg		100	70 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	99		65 - 130				
o-Terphenyl	94		65 - 130				

Lab Sample ID: LCSD 860-126572/3-A

Matrix: Solid

Analysis Batch: 126639

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 126572

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	933	870.9		mg/Kg		93	70 - 135	8	35
Diesel Range Organics (Over C10-C28)	925	877.5		mg/Kg		95	70 - 135	8	35
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	93		65 - 130						
o-Terphenyl	87		65 - 130						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-126786/1-A

Matrix: Solid

Analysis Batch: 126721

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 126786

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0	5.00	mg/Kg		10/17/23 16:32	10/17/23 16:47	1

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QC Sample Results

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 890-5431-1
SDG: 2023-014

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 860-126786/2-A				Client Sample ID: Lab Control Sample							
Matrix: Solid				Prep Type: Total/NA							
Analysis Batch: 126721				Prep Batch: 126786							
Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			50.0	48.48		mg/Kg		97	80 - 120		

Lab Sample ID: LCSD 860-126786/3-A				Client Sample ID: Lab Control Sample Dup							
Matrix: Solid				Prep Type: Total/NA							
Analysis Batch: 126721				Prep Batch: 126786							
Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Chloride			50.0	48.48		mg/Kg		97	80 - 120	0	20

Lab Sample ID: 890-5431-4 MS				Client Sample ID: East 2							
Matrix: Solid				Prep Type: Total/NA							
Analysis Batch: 126721				Prep Batch: 126786							
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	4030		49.8	4013	4	mg/Kg		-33	80 - 120		

Lab Sample ID: 890-5431-4 MSD				Client Sample ID: East 2							
Matrix: Solid				Prep Type: Total/NA							
Analysis Batch: 126721				Prep Batch: 126786							
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Chloride	4030		49.7	4000	4	mg/Kg		-59	80 - 120	0	15

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: MB 860-126769/1				Client Sample ID: Method Blank							
Matrix: Solid				Prep Type: Total/NA							
Analysis Batch: 126769											
Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac		
Total Solids	100.0				%			10/17/23 11:00	1		

Lab Sample ID: 890-5431-1 DU				Client Sample ID: West 1							
Matrix: Solid				Prep Type: Total/NA							
Analysis Batch: 126769											
Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	Limit
Total Solids	82.1			82.15		%				0.08	10

QC Association Summary

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 890-5431-1
SDG: 2023-014

GC Semi VOA

Analysis Batch: 123288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5431-1	West 1	Total/NA	Solid	8015 NM	
890-5431-2	West 2	Total/NA	Solid	8015 NM	
890-5431-3	East 1	Total/NA	Solid	8015 NM	
890-5431-4	East 2	Total/NA	Solid	8015 NM	

Prep Batch: 126572

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5431-1	West 1	Total/NA	Solid	8015NM Prep	
890-5431-2	West 2	Total/NA	Solid	8015NM Prep	
890-5431-3	East 1	Total/NA	Solid	8015NM Prep	
890-5431-4	East 2	Total/NA	Solid	8015NM Prep	
MB 860-126572/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 860-126572/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 860-126572/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 126639

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 860-126572/1-A	Method Blank	Total/NA	Solid	8015B NM	126572
LCS 860-126572/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	126572
LCSD 860-126572/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	126572

Analysis Batch: 126645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5431-1	West 1	Total/NA	Solid	8015B NM	126572
890-5431-2	West 2	Total/NA	Solid	8015B NM	126572

Analysis Batch: 126650

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5431-3	East 1	Total/NA	Solid	8015B NM	126572
890-5431-4	East 2	Total/NA	Solid	8015B NM	126572

HPLC/IC

Analysis Batch: 126721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5431-1	West 1	Total/NA	Solid	300.0	126786
890-5431-2	West 2	Total/NA	Solid	300.0	126786
890-5431-3	East 1	Total/NA	Solid	300.0	126786
890-5431-4	East 2	Total/NA	Solid	300.0	126786
MB 860-126786/1-A	Method Blank	Total/NA	Solid	300.0	126786
LCS 860-126786/2-A	Lab Control Sample	Total/NA	Solid	300.0	126786
LCSD 860-126786/3-A	Lab Control Sample Dup	Total/NA	Solid	300.0	126786
890-5431-4 MS	East 2	Total/NA	Solid	300.0	126786
890-5431-4 MSD	East 2	Total/NA	Solid	300.0	126786

Prep Batch: 126786

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5431-1	West 1	Total/NA	Solid	300_Prep	
890-5431-2	West 2	Total/NA	Solid	300_Prep	
890-5431-3	East 1	Total/NA	Solid	300_Prep	
890-5431-4	East 2	Total/NA	Solid	300_Prep	

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QC Association Summary

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 890-5431-1
SDG: 2023-014

HPLC/IC (Continued)

Prep Batch: 126786 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 860-126786/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 860-126786/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
LCSD 860-126786/3-A	Lab Control Sample Dup	Total/NA	Solid	300_Prep	
890-5431-4 MS	East 2	Total/NA	Solid	300_Prep	
890-5431-4 MSD	East 2	Total/NA	Solid	300_Prep	

General Chemistry

Analysis Batch: 126769

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5431-1	West 1	Total/NA	Solid	SM 2540G	
890-5431-2	West 2	Total/NA	Solid	SM 2540G	
890-5431-3	East 1	Total/NA	Solid	SM 2540G	
890-5431-4	East 2	Total/NA	Solid	SM 2540G	
MB 860-126769/1	Method Blank	Total/NA	Solid	SM 2540G	
890-5431-1 DU	West 1	Total/NA	Solid	SM 2540G	

Lab Chronicle

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 890-5431-1
SDG: 2023-014

Client Sample ID: West 1
Date Collected: 10/10/23 01:30
Date Received: 10/10/23 14:43

Lab Sample ID: 890-5431-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			123288	10/17/23 17:18	CZT	EET HOU
Total/NA	Prep	8015NM Prep			10.30 g	10 mL	126572	10/17/23 12:09	SYB	EET HOU
Total/NA	Analysis	8015B NM		1			126645	10/17/23 17:18	T1S	EET HOU
Total/NA	Prep	300_Prep			5.04 g	50 mL	126786	10/17/23 16:32	RBNS	EET HOU
Total/NA	Analysis	300.0		10			126721	10/17/23 19:07	RBNS	EET HOU
Total/NA	Analysis	SM 2540G		1			126769	10/17/23 11:00	JM	EET HOU

Client Sample ID: West 2
Date Collected: 10/10/23 01:35
Date Received: 10/10/23 14:43

Lab Sample ID: 890-5431-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			123288	10/17/23 16:58	CZT	EET HOU
Total/NA	Prep	8015NM Prep			10.40 g	10 mL	126572	10/17/23 12:09	SYB	EET HOU
Total/NA	Analysis	8015B NM		1			126645	10/17/23 16:58	T1S	EET HOU
Total/NA	Prep	300_Prep			5.01 g	50 mL	126786	10/17/23 16:32	RBNS	EET HOU
Total/NA	Analysis	300.0		10			126721	10/17/23 19:50	RBNS	EET HOU
Total/NA	Analysis	SM 2540G		1			126769	10/17/23 11:00	JM	EET HOU

Client Sample ID: East 1
Date Collected: 10/10/23 01:40
Date Received: 10/10/23 14:43

Lab Sample ID: 890-5431-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			123288	10/17/23 17:59	CZT	EET HOU
Total/NA	Prep	8015NM Prep			10.27 g	10 mL	126572	10/17/23 12:09	SYB	EET HOU
Total/NA	Analysis	8015B NM		1			126650	10/17/23 17:59	T1S	EET HOU
Total/NA	Prep	300_Prep			5.02 g	50 mL	126786	10/17/23 16:32	RBNS	EET HOU
Total/NA	Analysis	300.0		10			126721	10/17/23 20:11	RBNS	EET HOU
Total/NA	Analysis	SM 2540G		1			126769	10/17/23 11:00	JM	EET HOU

Client Sample ID: East 2
Date Collected: 10/10/23 01:45
Date Received: 10/10/23 14:43

Lab Sample ID: 890-5431-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			123288	10/17/23 17:39	CZT	EET HOU
Total/NA	Prep	8015NM Prep			10.26 g	10 mL	126572	10/17/23 12:09	SYB	EET HOU
Total/NA	Analysis	8015B NM		1			126650	10/17/23 17:39	T1S	EET HOU
Total/NA	Prep	300_Prep			5.02 g	50 mL	126786	10/17/23 16:32	RBNS	EET HOU
Total/NA	Analysis	300.0		1			126721	10/17/23 18:13	RBNS	EET HOU
Total/NA	Analysis	SM 2540G		1			126769	10/17/23 11:00	JM	EET HOU

Laboratory References:
EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Eurofins Carlsbad

Accreditation/Certification Summary

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 890-5431-1
SDG: 2023-014

Laboratory: Eurofins Houston

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215-23-53	06-30-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
8015B NM	8015NM Prep	Solid	Diesel Range Organics (Over C10-C28)
8015B NM	8015NM Prep	Solid	Gasoline Range Organics (GRO)-C6-C10
8015B NM	8015NM Prep	Solid	Oil Range Organics (Over C28-C36)

Method Summary

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 890-5431-1
SDG: 2023-014

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET HOU
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET HOU
300.0	Anions, Ion Chromatography	EPA	EET HOU
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET HOU
300_Prep	Anions, Ion Chromatography, 10% Wt/Vol	EPA	EET HOU
8015NM Prep	Microextraction	SW846	EET HOU

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Laboratory References:

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 890-5431-1
SDG: 2023-014

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-5431-1	West 1	Solid	10/10/23 01:30	10/10/23 14:43
890-5431-2	West 2	Solid	10/10/23 01:35	10/10/23 14:43
890-5431-3	East 1	Solid	10/10/23 01:40	10/10/23 14:43
890-5431-4	East 2	Solid	10/10/23 01:45	10/10/23 14:43

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Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3333
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199



Environment Testing

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Page _____ of _____
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Work Order Comments											
Program:		UST/PST	<input type="checkbox"/>	PRP	<input type="checkbox"/>	Brownfields	<input type="checkbox"/>	RRC	<input type="checkbox"/>	Superfund	<input type="checkbox"/>
State of Project:											
Reporting:		Level II	<input type="checkbox"/>	Level III	<input type="checkbox"/>	PST/UST	<input type="checkbox"/>	TRRP	<input type="checkbox"/>	Level IV	<input type="checkbox"/>
Deliverables:		EDD	<input type="checkbox"/>					ADaPT	<input type="checkbox"/>	Other:	

Project Manager:	TIMOTHY BLACKER		Bill to: (if different)
Company Name:	SELECT		Company Name:
Address:	1502 E GREENE ST		Address:
City, State ZIP:	CHARLOTTE NC 28220		City, State ZIP:
	FAX: 904-2551		Email:
			THOMASBLACKER@SELECT.COM

ANALYSIS REQUEST

Project Name:		Turn Around		Pres. Code	ANALYSIS REQUEST					Preservative Codes	
Project Number:	Project Location:	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Rush								
RED DEER	2023-014	CHAVES CD	Due Date:							None: NO	DI Water: H ₂ O
Sampler's Name:	TIA SAN BLICKER			TAT starts the day received by the lab, if received by 4:30pm						Cool: Cool	MeOH: Me
PO #:										HCL: HC	HNO ₃ : HN
SAMPLE RECEIPT				Temp Blank:		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Wet Ice:		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	H ₂ S ₂ O ₄ : H ₂	NaOH: Na
Samples Received Intact:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Thermometer ID:		TMA 607					H ₃ PO ₄ : HP	
Cooler Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Correction Factor:		-0.2					NaHSO ₄ : NABIS	
Sample Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Temperature Reading:		26.2					Na ₂ S ₂ O ₃ : NaSO ₃	
				Generated Temperature:		26.0				Zn Acetate+NaOH: Zn	
										NaOH+Ascorbic Acid: SACP	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont
WEST 1	S	10/10	1:30	0		
WEST 2	S	10/10	1:35	0		
EAST 1	S	10/10	1:40	0		
EAST 7	S	10/10	1:45	0		

[illegible][illegible]

Notice: Signature of this document constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of the client.

[illegible]

Revised Date: 08/25/2020 Rev. 2020 2

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Eurofins Carlsbad

1089 N Canal St.
Carlsbad, NM 88220
Phone: 575-988-3199 Fax: 575-988-3199

Chain of Custody Record



Environment Testing

Client Information (Sub Contract Lab)		Sampler	Lab Pk:	Carrier Tracking No(s):	COC No:							
Client Contact:	Phone:		Kramer Jessica		890-1612.1							
Shipping/Receiving:	E-Mail:		Jessica.Kramer@eurofins.com	State of Origin:	Page 1 of 1							
				New Mexico								
Eurofins Environment Testing South Cent		Due Date Requested:	Accreditations Required (See note):		Job #:							
4145 Greenbriar Dr		10/16/2023	NELAP Texas		890-5431.1							
City:	TAT Requested (days):	Analysis Requested										
Stafford												
State, Zip:	PO #:											
TX, 77477												
Phone:	WFO #:											
281-240-4200(he)												
Email:	Project #:											
	88001304											
Project Name:	SSOW#:											
Red Deer												
Site:												
Sample Identification Client ID (Lab ID)		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Wwwer, Ssoll, O-metabol)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_Cale	8015MOD_NM/8015NM_S_Prep Full TPH	2640G	Total Number of containers	Special Instructions/Note:
West 1 (890-5431-1)	10/10/23	01:30	Mountain	Solid		X	X	X			1	
West 2 (890-5431-2)	10/10/23	01:35	Mountain	Solid		X	X	X			1	
East 1 (890-5431-3)	10/10/23	01:40	Mountain	Solid		X	X	X			1	
East 2 (890-5431-4)	10/10/23	01:45	Mountain	Solid		X	X	X			1	
Temp: 1.0 IR ID-HOU-369 C/F: 0.0 Corrected Temp: 1.0												
Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/method being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central, LLC.												
Possible Hazard Identification												
Unconfirmed												
Deliverable Requested: I II III, IV Other (specify)												
Primary Deliverable Rank: 2												
Empty Kit Relinquished by:												
Relinquished by: <i>[Signature]</i> Date/Time: Company:												
Relinquished by: Date/Time: Company:												
Relinquished by: Date/Time: Company:												
Custody Seals Intact: Custody Seal No.												
Cooler Temperature(s) °C and Other Remarks:												
Special Instructions/QC Requirements:												
<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For Months												
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)												
Method of Shipment:												
Received by: <i>[Signature]</i> Date/Time: Company:												
Received by: <i>[Signature]</i> Date/Time: Company:												
Received by: <i>[Signature]</i> Date/Time: Company:												
EX												

Login Sample Receipt Checklist

Client: Select Energy Services

Job Number: 890-5431-1

SDG Number: 2023-014

Login Number: 5431

List Number: 1

Creator: Lopez, Abraham

List Source: Eurofins Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the 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.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
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").	N/A	

Login Sample Receipt Checklist

Client: Select Energy Services

Job Number: 890-5431-1

SDG Number: 2023-014

Login Number: 5431

List Number: 2

Creator: Baker, Jeremiah

List Source: Eurofins Houston

List Creation: 10/12/23 11:27 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the 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	



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ANALYTICAL REPORT

PREPARED FOR

Attn: Timsan Bricker
Select Energy Services
7904 W Hwy 80
Midland, Texas 79706

Generated 1/12/2024 3:38:22 PM

JOB DESCRIPTION

Redaeer

JOB NUMBER

890-5895-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

Eurofins Carlsbad

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.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



Generated
1/12/2024 3:38:22 PM

Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

Client: Select Energy Services
Project/Site: Redaeer

Laboratory Job ID: 890-5895-1

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Definitions/Glossary

Client: Select Energy Services
Project/Site: Redaeer

Job ID: 890-5895-1

Qualifiers

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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

Case Narrative

Client: Select Energy Services
Project: Redaeer

Job ID: 890-5895-1

Job ID: 890-5895-1

Eurofins Carlsbad

Job Narrative 890-5895-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 1/5/2024 8:19 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 3.0°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: S1 WEST 1 (890-5895-1), S2 (890-5895-2), S3 (890-5895-3), S4 (890-5895-4), S5/WEST 2 (890-5895-5), S6 (890-5895-6), S7 (890-5895-7), HN (890-5895-8), HW (890-5895-9) and HE (890-5895-10).

GC Semi VOA

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

HPLC/IC

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

General Chemistry

Method 2540G: The sample duplicate (DUP) precision for analytical batch 860-139841 was outside control limits. Sample non-homogeneity is suspected.

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

Eurofins Carlsbad

Client Sample Results

Client: Select Energy Services
Project/Site: Redaeer

Job ID: 890-5895-1

Client Sample ID: S1 WEST 1
Date Collected: 01/04/24 11:35
Date Received: 01/05/24 08:19
Sample Depth: 2.5

Lab Sample ID: 890-5895-1
Matrix: Solid

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total TPH	<49.8	U	49.8	21.0	mg/Kg	-		01/09/24 18:14	1	
Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	21.0	mg/Kg	-	01/09/24 09:40	01/09/24 18:14	1	
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	21.0	mg/Kg	-	01/09/24 09:40	01/09/24 18:14	1	
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	21.0	mg/Kg	-	01/09/24 09:40	01/09/24 18:14	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1-Chlorooctane	97		65 - 130				01/09/24 09:40	01/09/24 18:14	1	
o-Terphenyl	96		65 - 130				01/09/24 09:40	01/09/24 18:14	1	
Method: EPA 300.0 - Anions, Ion Chromatography										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	700		9.90	4.95	mg/Kg	-	01/11/24 18:30	01/11/24 21:16	1	
General Chemistry										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total Solids (SM 2540G)	91.3				%	-		01/09/24 11:00	1	

Client Sample ID: S2
Date Collected: 01/04/24 11:40
Date Received: 01/05/24 08:19
Sample Depth: 2.5

Lab Sample ID: 890-5895-2
Matrix: Solid

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total TPH	<49.8	U	49.8	21.0	mg/Kg	-		01/09/24 18:35	1	
Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	21.0	mg/Kg	-	01/09/24 09:40	01/09/24 18:35	1	
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	21.0	mg/Kg	-	01/09/24 09:40	01/09/24 18:35	1	
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	21.0	mg/Kg	-	01/09/24 09:40	01/09/24 18:35	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1-Chlorooctane	100		65 - 130				01/09/24 09:40	01/09/24 18:35	1	
o-Terphenyl	103		65 - 130				01/09/24 09:40	01/09/24 18:35	1	
Method: EPA 300.0 - Anions, Ion Chromatography										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	28.9		9.98	4.99	mg/Kg	-	01/11/24 18:30	01/11/24 21:46	1	
General Chemistry										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total Solids (SM 2540G)	85.1				%	-		01/09/24 11:00	1	

Eurofins Carlsbad

Client Sample Results

Client: Select Energy Services
Project/Site: Redaeer

Job ID: 890-5895-1

Client Sample ID: S3
Date Collected: 01/04/24 11:45
Date Received: 01/05/24 08:19
Sample Depth: 2.5

Lab Sample ID: 890-5895-3
Matrix: Solid

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total TPH	<50.0	U	50.0	21.1	mg/Kg	-		01/09/24 18:56	1	
Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	21.1	mg/Kg	-	01/09/24 09:40	01/09/24 18:56	1	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	21.1	mg/Kg	-	01/09/24 09:40	01/09/24 18:56	1	
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	21.1	mg/Kg	-	01/09/24 09:40	01/09/24 18:56	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1-Chlorooctane	87		65 - 130				01/09/24 09:40	01/09/24 18:56	1	
o-Terphenyl	89		65 - 130				01/09/24 09:40	01/09/24 18:56	1	
Method: EPA 300.0 - Anions, Ion Chromatography										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	104		9.96	4.98	mg/Kg	-	01/11/24 18:30	01/11/24 21:55	1	
General Chemistry										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total Solids (SM 2540G)	90.5				%	-		01/09/24 11:00	1	

Client Sample ID: S4
Date Collected: 01/04/24 11:50
Date Received: 01/05/24 08:19
Sample Depth: 2.5

Lab Sample ID: 890-5895-4
Matrix: Solid

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total TPH	<50.0	U	50.0	21.1	mg/Kg	-		01/09/24 15:47	1	
Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	21.1	mg/Kg	-	01/09/24 09:40	01/09/24 15:47	1	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	21.1	mg/Kg	-	01/09/24 09:40	01/09/24 15:47	1	
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	21.1	mg/Kg	-	01/09/24 09:40	01/09/24 15:47	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1-Chlorooctane	68		65 - 130				01/09/24 09:40	01/09/24 15:47	1	
o-Terphenyl	73		65 - 130				01/09/24 09:40	01/09/24 15:47	1	
Method: EPA 300.0 - Anions, Ion Chromatography										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	3660		9.90	4.95	mg/Kg	-	01/11/24 18:30	01/11/24 22:05	1	
General Chemistry										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total Solids (SM 2540G)	78.2				%	-		01/09/24 11:00	1	

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Client Sample Results

Client: Select Energy Services
Project/Site: Redaeer

Job ID: 890-5895-1

Client Sample ID: S5/WEST 2
Date Collected: 01/04/24 11:55
Date Received: 01/05/24 08:19
Sample Depth: 2.5

Lab Sample ID: 890-5895-5
Matrix: Solid

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total TPH	<49.8	U	49.8	21.0	mg/Kg	-		01/09/24 16:08	1	
Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	21.0	mg/Kg	-	01/09/24 09:40	01/09/24 16:08	1	
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	21.0	mg/Kg	-	01/09/24 09:40	01/09/24 16:08	1	
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	21.0	mg/Kg	-	01/09/24 09:40	01/09/24 16:08	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1-Chlorooctane	95		65 - 130				01/09/24 09:40	01/09/24 16:08	1	
o-Terphenyl	97		65 - 130				01/09/24 09:40	01/09/24 16:08	1	
Method: EPA 300.0 - Anions, Ion Chromatography										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	722		9.96	4.98	mg/Kg	-	01/11/24 18:30	01/11/24 22:54	1	
General Chemistry										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total Solids (SM 2540G)	85.5				%	-		01/09/24 11:00	1	

Client Sample ID: S6
Date Collected: 01/04/24 12:00
Date Received: 01/05/24 08:19
Sample Depth: 2.5

Lab Sample ID: 890-5895-6
Matrix: Solid

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total TPH	<50.0	U	50.0	21.1	mg/Kg	-		01/09/24 16:29	1	
Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	21.1	mg/Kg	-	01/09/24 09:40	01/09/24 16:29	1	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	21.1	mg/Kg	-	01/09/24 09:40	01/09/24 16:29	1	
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	21.1	mg/Kg	-	01/09/24 09:40	01/09/24 16:29	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1-Chlorooctane	97		65 - 130				01/09/24 09:40	01/09/24 16:29	1	
o-Terphenyl	99		65 - 130				01/09/24 09:40	01/09/24 16:29	1	
Method: EPA 300.0 - Anions, Ion Chromatography										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	2270		9.96	4.98	mg/Kg	-	01/11/24 18:30	01/11/24 23:04	1	
General Chemistry										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total Solids (SM 2540G)	78.0				%	-		01/09/24 11:00	1	

Client Sample Results

Client: Select Energy Services
Project/Site: Redaeer

Job ID: 890-5895-1

Client Sample ID: S7
Date Collected: 01/04/24 12:05
Date Received: 01/05/24 08:19
Sample Depth: 2.5

Lab Sample ID: 890-5895-7
Matrix: Solid

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total TPH	<49.9	U	49.9	21.1	mg/Kg			01/09/24 16:49	1	
Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	21.1	mg/Kg		01/09/24 09:40	01/09/24 16:49	1	
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	21.1	mg/Kg		01/09/24 09:40	01/09/24 16:49	1	
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	21.1	mg/Kg		01/09/24 09:40	01/09/24 16:49	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1-Chlorooctane	100		65 - 130				01/09/24 09:40	01/09/24 16:49	1	
o-Terphenyl	101		65 - 130				01/09/24 09:40	01/09/24 16:49	1	
Method: EPA 300.0 - Anions, Ion Chromatography										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	1080		9.98	4.99	mg/Kg		01/11/24 18:30	01/11/24 23:14	1	
General Chemistry										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total Solids (SM 2540G)	85.1				%			01/09/24 11:00	1	

Client Sample ID: HN
Date Collected: 01/04/24 11:30
Date Received: 01/05/24 08:19
Sample Depth: 1

Lab Sample ID: 890-5895-8
Matrix: Solid

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	21.1	mg/Kg			01/09/24 17:31	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	21.1	mg/Kg		01/09/24 09:40	01/09/24 17:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	21.1	mg/Kg		01/09/24 09:40	01/09/24 17:31	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	21.1	mg/Kg		01/09/24 09:40	01/09/24 17:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		65 - 130				01/09/24 09:40	01/09/24 17:31	1
o-Terphenyl	97		65 - 130				01/09/24 09:40	01/09/24 17:31	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19.1		9.94	4.97	mg/Kg		01/11/24 18:30	01/11/24 23:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	94.8				%			01/09/24 11:00	1

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Client Sample Results

Client: Select Energy Services
Project/Site: Redaeer

Job ID: 890-5895-1

Client Sample ID: HW
Date Collected: 01/04/24 12:10
Date Received: 01/05/24 08:19
Sample Depth: 1

Lab Sample ID: 890-5895-9
Matrix: Solid

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total TPH	<49.9	U	49.9	21.0	mg/Kg			01/09/24 17:52	1	
Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	21.0	mg/Kg		01/09/24 09:40	01/09/24 17:52	1	
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	21.0	mg/Kg		01/09/24 09:40	01/09/24 17:52	1	
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	21.0	mg/Kg		01/09/24 09:40	01/09/24 17:52	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1-Chlorooctane	89		65 - 130				01/09/24 09:40	01/09/24 17:52	1	
o-Terphenyl	92		65 - 130				01/09/24 09:40	01/09/24 17:52	1	
Method: EPA 300.0 - Anions, Ion Chromatography										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	11.3		9.92	4.96	mg/Kg		01/11/24 18:30	01/11/24 23:34	1	
General Chemistry										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total Solids (SM 2540G)	92.7				%			01/09/24 11:00	1	

Client Sample ID: HE
Date Collected: 01/04/24 12:15
Date Received: 01/05/24 08:19
Sample Depth: 1

Lab Sample ID: 890-5895-10
Matrix: Solid

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total TPH	21.1	J	49.9	21.1	mg/Kg			01/11/24 14:03	1	
Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	21.1	mg/Kg		01/10/24 09:57	01/11/24 14:03	1	
Diesel Range Organics (Over C10-C28)	21.1	J	49.9	21.1	mg/Kg		01/10/24 09:57	01/11/24 14:03	1	
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	21.1	mg/Kg		01/10/24 09:57	01/11/24 14:03	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1-Chlorooctane	102		65 - 130				01/10/24 09:57	01/11/24 14:03	1	
o-Terphenyl	104		65 - 130				01/10/24 09:57	01/11/24 14:03	1	
Method: EPA 300.0 - Anions, Ion Chromatography										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	693		9.90	4.95	mg/Kg		01/11/24 18:30	01/11/24 23:44	1	
General Chemistry										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total Solids (SM 2540G)	91.6				%			01/09/24 11:00	1	

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Surrogate Summary

Client: Select Energy Services
Project/Site: Redaeer

Job ID: 890-5895-1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)
Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1	OTPH1
		(65-130)	(65-130)
890-5895-1	S1 WEST 1	97	96
890-5895-2	S2	100	103
890-5895-3	S3	87	89
890-5895-4	S4	68	73
890-5895-5	S5/WEST 2	95	97
890-5895-6	S6	97	99
890-5895-7	S7	100	101
890-5895-8	HN	95	97
890-5895-9	HW	89	92
890-5895-10	HE	102	104
LCS 860-139797/2-A	Lab Control Sample	85	69
LCS 860-139972/2-A	Lab Control Sample	113	91
LCSD 860-139797/3-A	Lab Control Sample Dup	86	69
LCSD 860-139972/3-A	Lab Control Sample Dup	115	94
MB 860-139797/1-A	Method Blank	76	68
MB 860-139972/1-A	Method Blank	102	102
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Select Energy Services
Project/Site: Redaeer

Job ID: 890-5895-1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 860-139797/1-A

Matrix: Solid

Analysis Batch: 140011

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 139797

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	21.1	mg/Kg		01/09/24 09:40	01/10/24 15:30	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	21.1	mg/Kg		01/09/24 09:40	01/10/24 15:30	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	21.1	mg/Kg		01/09/24 09:40	01/10/24 15:30	1
Surrogate	MB	MB	Limits				Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
1-Chlorooctane	76		65 - 130				01/09/24 09:40	01/10/24 15:30	1
o-Terphenyl	68		65 - 130				01/09/24 09:40	01/10/24 15:30	1

Lab Sample ID: LCS 860-139797/2-A

Matrix: Solid

Analysis Batch: 140011

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 139797

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	999	824.7		mg/Kg		83	70 - 135
Diesel Range Organics (Over C10-C28)	999	888.6		mg/Kg		89	70 - 135
Surrogate	LCS	LCS	Limits				
	%Recovery	Qualifier					
1-Chlorooctane	85		65 - 130				
o-Terphenyl	69		65 - 130				

Lab Sample ID: LCSD 860-139797/3-A

Matrix: Solid

Analysis Batch: 140011

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 139797

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	999	834.1		mg/Kg		83	70 - 135	1	35
Diesel Range Organics (Over C10-C28)	999	902.8		mg/Kg		90	70 - 135	2	35
Surrogate	LCSD	LCSD	Limits						
	%Recovery	Qualifier							
1-Chlorooctane	86		65 - 130						
o-Terphenyl	69		65 - 130						

Lab Sample ID: MB 860-139972/1-A

Matrix: Solid

Analysis Batch: 140118

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 139972

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	21.1	mg/Kg		01/10/24 09:57	01/11/24 12:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	21.1	mg/Kg		01/10/24 09:57	01/11/24 12:47	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	21.1	mg/Kg		01/10/24 09:57	01/11/24 12:47	1

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QC Sample Results

Client: Select Energy Services
Project/Site: Redaeer

Job ID: 890-5895-1

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 860-139972/1-A

Matrix: Solid

Analysis Batch: 140118

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 139972

	MB	MB							
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil	Fac		
1-Chlorooctane	102		65 - 130	01/10/24 09:57	01/11/24 12:47	1			
o-Terphenyl	102		65 - 130	01/10/24 09:57	01/11/24 12:47	1			

Lab Sample ID: LCS 860-139972/2-A

Matrix: Solid

Analysis Batch: 140118

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 139972

			Spike	LCS	LCS				%Rec		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (GRO)-C6-C10			999	980.6		mg/Kg		98	70 - 135		
Diesel Range Organics (Over C10-C28)			999	1246		mg/Kg		125	70 - 135		

	LCS	LCS									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	113		65 - 130								
o-Terphenyl	91		65 - 130								

Lab Sample ID: LCSD 860-139972/3-A

Matrix: Solid

Analysis Batch: 140118

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 139972

			Spike	LCSD	LCSD				%Rec		RPD	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10			999	977.7		mg/Kg		98	70 - 135	0	35	
Diesel Range Organics (Over C10-C28)			999	1221		mg/Kg		122	70 - 135	2	35	

	LCSD	LCSD										
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	115		65 - 130									
o-Terphenyl	94		65 - 130									

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-140296/1-A

Matrix: Solid

Analysis Batch: 140291

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 140296

	MB	MB									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil	Fac	
Chloride	<10.0	U	10.0	5.00	mg/Kg		01/11/24 18:30	01/11/24 18:39	1		

Lab Sample ID: LCS 860-140296/2-A

Matrix: Solid

Analysis Batch: 140291

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 140296

			Spike	LCS	LCS				%Rec		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride			100	99.80		mg/Kg		100	80 - 120		

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QC Sample Results

Client: Select Energy Services
Project/Site: Redaeer

Job ID: 890-5895-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 860-140296/3-A				Client Sample ID: Lab Control Sample Dup							
Matrix: Solid				Prep Type: Total/NA							
Analysis Batch: 140291				Prep Batch: 140296							
Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			100	100.3		mg/Kg		100	80 - 120	1	20

Lab Sample ID: 890-5895-1 MS				Client Sample ID: S1 WEST 1							
Matrix: Solid				Prep Type: Total/NA							
Analysis Batch: 140291				Prep Batch: 140296							
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	700		99.2	813.7	4	mg/Kg		115	80 - 120		

Lab Sample ID: 890-5895-1 MSD				Client Sample ID: S1 WEST 1							
Matrix: Solid				Prep Type: Total/NA							
Analysis Batch: 140291				Prep Batch: 140296							
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	700		99.4	818.2	4	mg/Kg		119	80 - 120	1	15

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: MB 860-139841/1				Client Sample ID: Method Blank							
Matrix: Solid				Prep Type: Total/NA							
Analysis Batch: 139841											
Analyte	MB Result	MB Qualifier		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total Solids	100.0					%			01/09/24 11:00	1	

Lab Sample ID: 890-5895-1 DU				Client Sample ID: S1 WEST 1							
Matrix: Solid				Prep Type: Total/NA							
Analysis Batch: 139841											
Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Solids	91.3			89.75		%				2	10

QC Association Summary

Client: Select Energy Services
Project/Site: Redaeer

Job ID: 890-5895-1

GC Semi VOA

Analysis Batch: 130308

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5895-1	S1 WEST 1	Total/NA	Solid	8015 NM	
890-5895-2	S2	Total/NA	Solid	8015 NM	
890-5895-3	S3	Total/NA	Solid	8015 NM	
890-5895-4	S4	Total/NA	Solid	8015 NM	
890-5895-5	S5/WEST 2	Total/NA	Solid	8015 NM	
890-5895-6	S6	Total/NA	Solid	8015 NM	
890-5895-7	S7	Total/NA	Solid	8015 NM	
890-5895-8	HN	Total/NA	Solid	8015 NM	
890-5895-9	HW	Total/NA	Solid	8015 NM	
890-5895-10	HE	Total/NA	Solid	8015 NM	

Analysis Batch: 139750

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5895-1	S1 WEST 1	Total/NA	Solid	8015B NM	139797
890-5895-2	S2	Total/NA	Solid	8015B NM	139797
890-5895-3	S3	Total/NA	Solid	8015B NM	139797
890-5895-4	S4	Total/NA	Solid	8015B NM	139797
890-5895-5	S5/WEST 2	Total/NA	Solid	8015B NM	139797
890-5895-6	S6	Total/NA	Solid	8015B NM	139797
890-5895-7	S7	Total/NA	Solid	8015B NM	139797
890-5895-8	HN	Total/NA	Solid	8015B NM	139797
890-5895-9	HW	Total/NA	Solid	8015B NM	139797

Prep Batch: 139797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5895-1	S1 WEST 1	Total/NA	Solid	8015NM Prep	
890-5895-2	S2	Total/NA	Solid	8015NM Prep	
890-5895-3	S3	Total/NA	Solid	8015NM Prep	
890-5895-4	S4	Total/NA	Solid	8015NM Prep	
890-5895-5	S5/WEST 2	Total/NA	Solid	8015NM Prep	
890-5895-6	S6	Total/NA	Solid	8015NM Prep	
890-5895-7	S7	Total/NA	Solid	8015NM Prep	
890-5895-8	HN	Total/NA	Solid	8015NM Prep	
890-5895-9	HW	Total/NA	Solid	8015NM Prep	
MB 860-139797/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 860-139797/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 860-139797/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Prep Batch: 139972

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5895-10	HE	Total/NA	Solid	8015NM Prep	
MB 860-139972/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 860-139972/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 860-139972/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 140011

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 860-139797/1-A	Method Blank	Total/NA	Solid	8015B NM	139797
LCS 860-139797/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	139797
LCSD 860-139797/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	139797

Eurofins Carlsbad

QC Association Summary

Client: Select Energy Services
Project/Site: Redaeer

Job ID: 890-5895-1

GC Semi VOA

Analysis Batch: 140118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5895-10	HE	Total/NA	Solid	8015B NM	139972
MB 860-139972/1-A	Method Blank	Total/NA	Solid	8015B NM	139972
LCS 860-139972/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	139972
LCSD 860-139972/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	139972

HPLC/IC

Analysis Batch: 140291

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5895-1	S1 WEST 1	Total/NA	Solid	300.0	140296
890-5895-2	S2	Total/NA	Solid	300.0	140296
890-5895-3	S3	Total/NA	Solid	300.0	140296
890-5895-4	S4	Total/NA	Solid	300.0	140296
890-5895-5	S5/WEST 2	Total/NA	Solid	300.0	140296
890-5895-6	S6	Total/NA	Solid	300.0	140296
890-5895-7	S7	Total/NA	Solid	300.0	140296
890-5895-8	HN	Total/NA	Solid	300.0	140296
890-5895-9	HW	Total/NA	Solid	300.0	140296
890-5895-10	HE	Total/NA	Solid	300.0	140296
MB 860-140296/1-A	Method Blank	Total/NA	Solid	300.0	140296
LCS 860-140296/2-A	Lab Control Sample	Total/NA	Solid	300.0	140296
LCSD 860-140296/3-A	Lab Control Sample Dup	Total/NA	Solid	300.0	140296
890-5895-1 MS	S1 WEST 1	Total/NA	Solid	300.0	140296
890-5895-1 MSD	S1 WEST 1	Total/NA	Solid	300.0	140296

Prep Batch: 140296

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5895-1	S1 WEST 1	Total/NA	Solid	300_Prep	
890-5895-2	S2	Total/NA	Solid	300_Prep	
890-5895-3	S3	Total/NA	Solid	300_Prep	
890-5895-4	S4	Total/NA	Solid	300_Prep	
890-5895-5	S5/WEST 2	Total/NA	Solid	300_Prep	
890-5895-6	S6	Total/NA	Solid	300_Prep	
890-5895-7	S7	Total/NA	Solid	300_Prep	
890-5895-8	HN	Total/NA	Solid	300_Prep	
890-5895-9	HW	Total/NA	Solid	300_Prep	
890-5895-10	HE	Total/NA	Solid	300_Prep	
MB 860-140296/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 860-140296/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
LCSD 860-140296/3-A	Lab Control Sample Dup	Total/NA	Solid	300_Prep	
890-5895-1 MS	S1 WEST 1	Total/NA	Solid	300_Prep	
890-5895-1 MSD	S1 WEST 1	Total/NA	Solid	300_Prep	

General Chemistry

Analysis Batch: 139841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5895-1	S1 WEST 1	Total/NA	Solid	SM 2540G	
890-5895-2	S2	Total/NA	Solid	SM 2540G	
890-5895-3	S3	Total/NA	Solid	SM 2540G	
890-5895-4	S4	Total/NA	Solid	SM 2540G	
890-5895-5	S5/WEST 2	Total/NA	Solid	SM 2540G	

Eurofins Carlsbad

QC Association Summary

Client: Select Energy Services
Project/Site: Redaeer

Job ID: 890-5895-1

General Chemistry (Continued)

Analysis Batch: 139841 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5895-6	S6	Total/NA	Solid	SM 2540G	
890-5895-7	S7	Total/NA	Solid	SM 2540G	
890-5895-8	HN	Total/NA	Solid	SM 2540G	
890-5895-9	HW	Total/NA	Solid	SM 2540G	
890-5895-10	HE	Total/NA	Solid	SM 2540G	
MB 860-139841/1	Method Blank	Total/NA	Solid	SM 2540G	
890-5895-1 DU	S1 WEST 1	Total/NA	Solid	SM 2540G	

Lab Chronicle

Client: Select Energy Services
Project/Site: Redaeer

Job ID: 890-5895-1

Client Sample ID: S1 WEST 1
Date Collected: 01/04/24 11:35
Date Received: 01/05/24 08:19

Lab Sample ID: 890-5895-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			130308	01/09/24 18:14	ELJ	EET HOU
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	139797	01/09/24 09:40	DS	EET HOU
Total/NA	Analysis	8015B NM		1			139750	01/09/24 18:14	T1S	EET HOU
Total/NA	Prep	300_Prep			5.05 g	50 mL	140296	01/11/24 18:30	RBNS	EET HOU
Total/NA	Analysis	300.0		1			140291	01/11/24 21:16	A1S	EET HOU
Total/NA	Analysis	SM 2540G		1			139841	01/09/24 11:00	JM	EET HOU

Client Sample ID: S2
Date Collected: 01/04/24 11:40
Date Received: 01/05/24 08:19

Lab Sample ID: 890-5895-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			130308	01/09/24 18:35	ELJ	EET HOU
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	139797	01/09/24 09:40	DS	EET HOU
Total/NA	Analysis	8015B NM		1			139750	01/09/24 18:35	T1S	EET HOU
Total/NA	Prep	300_Prep			5.01 g	50 mL	140296	01/11/24 18:30	RBNS	EET HOU
Total/NA	Analysis	300.0		1			140291	01/11/24 21:46	A1S	EET HOU
Total/NA	Analysis	SM 2540G		1			139841	01/09/24 11:00	JM	EET HOU

Client Sample ID: S3
Date Collected: 01/04/24 11:45
Date Received: 01/05/24 08:19

Lab Sample ID: 890-5895-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			130308	01/09/24 18:56	ELJ	EET HOU
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	139797	01/09/24 09:40	DS	EET HOU
Total/NA	Analysis	8015B NM		1			139750	01/09/24 18:56	T1S	EET HOU
Total/NA	Prep	300_Prep			5.02 g	50 mL	140296	01/11/24 18:30	RBNS	EET HOU
Total/NA	Analysis	300.0		1			140291	01/11/24 21:55	A1S	EET HOU
Total/NA	Analysis	SM 2540G		1			139841	01/09/24 11:00	JM	EET HOU

Client Sample ID: S4
Date Collected: 01/04/24 11:50
Date Received: 01/05/24 08:19

Lab Sample ID: 890-5895-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			130308	01/09/24 15:47	ELJ	EET HOU
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	139797	01/09/24 09:40	DS	EET HOU
Total/NA	Analysis	8015B NM		1			139750	01/09/24 15:47	T1S	EET HOU
Total/NA	Prep	300_Prep			5.05 g	50 mL	140296	01/11/24 18:30	RBNS	EET HOU
Total/NA	Analysis	300.0		1			140291	01/11/24 22:05	A1S	EET HOU
Total/NA	Analysis	SM 2540G		1			139841	01/09/24 11:00	JM	EET HOU

Eurofins Carlsbad

Lab Chronicle

Client: Select Energy Services
Project/Site: Redaeer

Job ID: 890-5895-1

Client Sample ID: S5/WEST 2
Date Collected: 01/04/24 11:55
Date Received: 01/05/24 08:19

Lab Sample ID: 890-5895-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			130308	01/09/24 16:08	ELJ	EET HOU
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	139797	01/09/24 09:40	DS	EET HOU
Total/NA	Analysis	8015B NM		1			139750	01/09/24 16:08	T1S	EET HOU
Total/NA	Prep	300_Prep			5.02 g	50 mL	140296	01/11/24 18:30	RBNS	EET HOU
Total/NA	Analysis	300.0		1			140291	01/11/24 22:54	A1S	EET HOU
Total/NA	Analysis	SM 2540G		1			139841	01/09/24 11:00	JM	EET HOU

Client Sample ID: S6
Date Collected: 01/04/24 12:00
Date Received: 01/05/24 08:19

Lab Sample ID: 890-5895-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			130308	01/09/24 16:29	ELJ	EET HOU
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	139797	01/09/24 09:40	DS	EET HOU
Total/NA	Analysis	8015B NM		1			139750	01/09/24 16:29	T1S	EET HOU
Total/NA	Prep	300_Prep			5.02 g	50 mL	140296	01/11/24 18:30	RBNS	EET HOU
Total/NA	Analysis	300.0		1			140291	01/11/24 23:04	A1S	EET HOU
Total/NA	Analysis	SM 2540G		1			139841	01/09/24 11:00	JM	EET HOU

Client Sample ID: S7
Date Collected: 01/04/24 12:05
Date Received: 01/05/24 08:19

Lab Sample ID: 890-5895-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			130308	01/09/24 16:49	ELJ	EET HOU
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	139797	01/09/24 09:40	DS	EET HOU
Total/NA	Analysis	8015B NM		1			139750	01/09/24 16:49	T1S	EET HOU
Total/NA	Prep	300_Prep			5.01 g	50 mL	140296	01/11/24 18:30	RBNS	EET HOU
Total/NA	Analysis	300.0		1			140291	01/11/24 23:14	A1S	EET HOU
Total/NA	Analysis	SM 2540G		1			139841	01/09/24 11:00	JM	EET HOU

Client Sample ID: HN
Date Collected: 01/04/24 11:30
Date Received: 01/05/24 08:19

Lab Sample ID: 890-5895-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			130308	01/09/24 17:31	ELJ	EET HOU
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	139797	01/09/24 09:40	DS	EET HOU
Total/NA	Analysis	8015B NM		1			139750	01/09/24 17:31	T1S	EET HOU
Total/NA	Prep	300_Prep			5.03 g	50 mL	140296	01/11/24 18:30	RBNS	EET HOU
Total/NA	Analysis	300.0		1			140291	01/11/24 23:24	A1S	EET HOU
Total/NA	Analysis	SM 2540G		1			139841	01/09/24 11:00	JM	EET HOU

Eurofins Carlsbad

Lab Chronicle

Client: Select Energy Services
Project/Site: Redaeer

Job ID: 890-5895-1

Client Sample ID: HW
Date Collected: 01/04/24 12:10
Date Received: 01/05/24 08:19

Lab Sample ID: 890-5895-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			130308	01/09/24 17:52	ELJ	EET HOU
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	139797	01/09/24 09:40	DS	EET HOU
Total/NA	Analysis	8015B NM		1			139750	01/09/24 17:52	T1S	EET HOU
Total/NA	Prep	300_Prep			5.04 g	50 mL	140296	01/11/24 18:30	RBNS	EET HOU
Total/NA	Analysis	300.0		1			140291	01/11/24 23:34	A1S	EET HOU
Total/NA	Analysis	SM 2540G		1			139841	01/09/24 11:00	JM	EET HOU

Client Sample ID: HE
Date Collected: 01/04/24 12:15
Date Received: 01/05/24 08:19

Lab Sample ID: 890-5895-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			130308	01/11/24 14:03	ELJ	EET HOU
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	139972	01/10/24 09:57	DS	EET HOU
Total/NA	Analysis	8015B NM		1			140118	01/11/24 14:03	T1S	EET HOU
Total/NA	Prep	300_Prep			5.05 g	50 mL	140296	01/11/24 18:30	RBNS	EET HOU
Total/NA	Analysis	300.0		1			140291	01/11/24 23:44	A1S	EET HOU
Total/NA	Analysis	SM 2540G		1			139841	01/09/24 11:00	JM	EET HOU

Laboratory References:

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

Client: Select Energy Services
Project/Site: Redaeer

Job ID: 890-5895-1

Laboratory: Eurofins Houston

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215-23-53	06-30-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
8015B NM	8015NM Prep	Solid	Diesel Range Organics (Over C10-C28)
8015B NM	8015NM Prep	Solid	Gasoline Range Organics (GRO)-C6-C10
8015B NM	8015NM Prep	Solid	Oil Range Organics (Over C28-C36)

Method Summary

Client: Select Energy Services
Project/Site: Redaeer

Job ID: 890-5895-1

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET HOU
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET HOU
300.0	Anions, Ion Chromatography	EPA	EET HOU
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET HOU
300_Prep	Anions, Ion Chromatography, 10% Wt/Vol	EPA	EET HOU
8015NM Prep	Microextraction	SW846	EET HOU

Protocol References:

EPA = US Environmental Protection Agency

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Laboratory References:

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

Client: Select Energy Services
Project/Site: Redaeer

Job ID: 890-5895-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-5895-1	S1 WEST 1	Solid	01/04/24 11:35	01/05/24 08:19	2.5
890-5895-2	S2	Solid	01/04/24 11:40	01/05/24 08:19	2.5
890-5895-3	S3	Solid	01/04/24 11:45	01/05/24 08:19	2.5
890-5895-4	S4	Solid	01/04/24 11:50	01/05/24 08:19	2.5
890-5895-5	S5/WEST 2	Solid	01/04/24 11:55	01/05/24 08:19	2.5
890-5895-6	S6	Solid	01/04/24 12:00	01/05/24 08:19	2.5
890-5895-7	S7	Solid	01/04/24 12:05	01/05/24 08:19	2.5
890-5895-8	HN	Solid	01/04/24 11:30	01/05/24 08:19	1
890-5895-9	HW	Solid	01/04/24 12:10	01/05/24 08:19	1
890-5895-10	HE	Solid	01/04/24 12:15	01/05/24 08:19	1

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- 2
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- 14

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199
Little Rock, AR (501) 224-5060



Environment Testing

Work Order No:

Page of

Project Manager:	TIMSAN BRICKER	Bill to: (if different)	
Company Name:	SELECTA WATER	Company Name:	
Address:	1502 E GREENE ST	Address:	
City, State ZIP:	CARLSBAD NM 88220	City, State ZIP:	
Phone:	575-700-7551	Email:	tbricker@selectawater.com

Project Name:	RED AER	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush
Project Number:		Due Date:	
Project Location:	CHAVESCO	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	TIMSAN BRICKER		
PO #:			

SAMPLE RECEIPT	Temp Blank:	Yes No	Wet loc:	Yes No
Samples Received Inact:	Yes No	Thermometer ID:		
Cooler Custody Seals:	Yes No	Correction Factor:		
Sample Custody Seals:	Yes No	Temperature Reading:		
Total Containers:		Corrected Temperature:		

Project Name:	RED AER	ANALYSIS REQUEST	
Project Number:			
Project Location:	CHAVESCO		
Sampler's Name:	TIMSAN BRICKER		
PO #:			

SAMPLE RECEIPT	Temp Blank:	Yes No	Wet loc:	Yes No
Samples Received Inact:	Yes No	Thermometer ID:		
Cooler Custody Seals:	Yes No	Correction Factor:		
Sample Custody Seals:	Yes No	Temperature Reading:		
Total Containers:		Corrected Temperature:		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont
SJ WEST 1	S	1/12/24	11:35 a	2.5'		
S2	S		11:40 a			
S3	S		11:45 a			
S4	S		11:50 a			
S5 WEST 2	S		11:55 a			
S6	S		12:00 p			
S7	S		12:05 p			
HU	S		11:30 a	1'		
HW	S		12:10 p	1'		
HE	S		12:15 p	1'		

Total 200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed	TCLP / SPLP 6010: 8RCRA	Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Date/Time
		1/12/24	14:43
3	4		
5	6		

Login Sample Receipt Checklist

Client: Select Energy Services

Job Number: 890-5895-1

Login Number: 5895
List Number: 1
Creator: Lopez, Abraham

List Source: Eurofins Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the 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.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
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").	N/A	

Login Sample Receipt Checklist

Client: Select Energy Services

Job Number: 890-5895-1

Login Number: 5895

List Source: Eurofins Houston

List Number: 2

List Creation: 01/08/24 04:54 PM

Creator: Jimenez, Nicanor

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
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	



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Timsan Bricker
Select Energy Services
7904 W Hwy 80
Midland, Texas 79706

Generated 11/6/2023 2:53:19 PM

JOB DESCRIPTION

Red Deer
SDG NUMBER Chaves Co

JOB NUMBER

880-35079-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701



Eurofins Midland

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.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



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11/6/2023 2:53:19 PM

Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

Client: Select Energy Services
Project/Site: Red Deer

Laboratory Job ID: 880-35079-1
SDG: Chaves Co

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Definitions/Glossary

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 880-35079-1
SDG: Chaves Co

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

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

Case Narrative

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 880-35079-1
SDG: Chaves Co

Job ID: 880-35079-1

Laboratory: Eurofins Midland

Narrative

Job Narrative
880-35079-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method. Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 10/31/2023 11:30 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 1.5°C

GC/MS VOA

Method 8260D: Sample is in a bulk jar.

S2 (880-35079-6), S3 (880-35079-7), S3 (880-35079-8), S4 (880-35079-9), S4 (880-35079-10), S6 (880-35079-12), S6 (880-35079-13), S7 (880-35079-14), S7 (880-35079-15), S8/EAST1 (880-35079-16) and S9/EAST2 (880-35079-17)

Method 8260D: Sample is in a bulk jar.

HN (880-35079-1), HW (880-35079-2), HE (880-35079-3), S1/WEST 1 (880-35079-4) and S2 (880-35079-5)

Method 8260D: Sample is in a bulk jar.

S5/WEST 2 (880-35079-11)

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following sample was outside the upper control limit: HE (880-35079-3). This sample did not contain any target analytes; 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.

HPLC/IC

Method 300_ORGFM_28D: The following samples were diluted to bring the concentration of target analytes within the calibration range: S1/WEST 1 (880-35079-4), S2 (880-35079-5), S4 (880-35079-10), S5/WEST 2 (880-35079-11) and S6 (880-35079-12). Elevated reporting limits (RLs) are provided.

Method 300_ORGFM_28D: Due to the high concentration of Chloride the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 860-129184 and analytical batch 860-129182 could not be evaluated for accuracy and precision. The associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) met acceptance criteria.

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

General Chemistry

Method 2540G: The sample duplicate (DUP) precision for analytical batch 860-129437 was outside control limits. Sample

Case Narrative

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 880-35079-1
SDG: Chaves Co

Job ID: 880-35079-1 (Continued)

Laboratory: Eurofins Midland (Continued)

non-homogeneity is suspected.

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

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Client Sample Results

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 880-35079-1
SDG: Chaves Co

Client Sample ID: HN

Lab Sample ID: 880-35079-1

Date Collected: 10/27/23 13:25

Matrix: Solid

Date Received: 10/31/23 11:30

Sample Depth: 0'

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000381	U	0.000996	0.000381	mg/Kg		11/01/23 14:56	11/03/23 15:38	1
Toluene	<0.00121	U	0.00498	0.00121	mg/Kg		11/01/23 14:56	11/03/23 15:38	1
Ethylbenzene	<0.000303	U	0.000996	0.000303	mg/Kg		11/01/23 14:56	11/03/23 15:38	1
m,p-Xylenes	<0.000431	U	0.00199	0.000431	mg/Kg		11/01/23 14:56	11/03/23 15:38	1
o-Xylene	<0.000315	U	0.000996	0.000315	mg/Kg		11/01/23 14:56	11/03/23 15:38	1
Xylenes, Total	<0.000431	U	0.00199	0.000431	mg/Kg		11/01/23 14:56	11/03/23 15:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		56 - 150	11/01/23 14:56	11/03/23 15:38	1
4-Bromofluorobenzene (Surr)	104		68 - 152	11/01/23 14:56	11/03/23 15:38	1
Dibromofluoromethane (Surr)	102		53 - 142	11/01/23 14:56	11/03/23 15:38	1
Toluene-d8 (Surr)	96		70 - 130	11/01/23 14:56	11/03/23 15:38	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000431	U	0.00199	0.000431	mg/Kg			11/03/23 15:38	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<21.1	U	50.1	21.1	mg/Kg			11/03/23 14:07	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<21.1	U	50.1	21.1	mg/Kg		11/02/23 13:17	11/03/23 14:07	1
Diesel Range Organics (Over C10-C28)	<21.1	U	50.1	21.1	mg/Kg		11/02/23 13:17	11/03/23 14:07	1
Oil Range Organics (Over C28-C36)	<21.1	U	50.1	21.1	mg/Kg		11/02/23 13:17	11/03/23 14:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		65 - 130				11/02/23 13:17	11/03/23 14:07	1
o-Terphenyl	94		65 - 130				11/02/23 13:17	11/03/23 14:07	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.98	U	9.96	4.98	mg/Kg		11/02/23 11:31	11/02/23 13:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	93.6				%			11/03/23 14:22	1

Client Sample ID: HW

Lab Sample ID: 880-35079-2

Date Collected: 10/27/23 13:30

Matrix: Solid

Date Received: 10/31/23 11:30

Sample Depth: 0'

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000381	U	0.000996	0.000381	mg/Kg		11/01/23 14:56	11/03/23 16:00	1
Toluene	<0.00121	U	0.00498	0.00121	mg/Kg		11/01/23 14:56	11/03/23 16:00	1
Ethylbenzene	<0.000303	U	0.000996	0.000303	mg/Kg		11/01/23 14:56	11/03/23 16:00	1

Eurofins Midland

Client Sample Results

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 880-35079-1
SDG: Chaves Co

Client Sample ID: HW

Lab Sample ID: 880-35079-2

Date Collected: 10/27/23 13:30

Matrix: Solid

Date Received: 10/31/23 11:30

Sample Depth: 0'

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m,p-Xylenes	<0.000431	U	0.00199	0.000431	mg/Kg		11/01/23 14:56	11/03/23 16:00	1
o-Xylene	<0.000315	U	0.000996	0.000315	mg/Kg		11/01/23 14:56	11/03/23 16:00	1
Xylenes, Total	<0.000431	U	0.00199	0.000431	mg/Kg		11/01/23 14:56	11/03/23 16:00	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		56 - 150				11/01/23 14:56	11/03/23 16:00	1
4-Bromofluorobenzene (Surr)	103		68 - 152				11/01/23 14:56	11/03/23 16:00	1
Dibromofluoromethane (Surr)	100		53 - 142				11/01/23 14:56	11/03/23 16:00	1
Toluene-d8 (Surr)	98		70 - 130				11/01/23 14:56	11/03/23 16:00	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000431	U	0.00199	0.000431	mg/Kg			11/03/23 16:00	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<21.1	U	50.0	21.1	mg/Kg			11/03/23 14:28	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<21.1	U	50.0	21.1	mg/Kg		11/02/23 13:17	11/03/23 14:28	1
Diesel Range Organics (Over C10-C28)	<21.1	U	50.0	21.1	mg/Kg		11/02/23 13:17	11/03/23 14:28	1
Oil Range Organics (Over C28-C36)	<21.1	U	50.0	21.1	mg/Kg		11/02/23 13:17	11/03/23 14:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		65 - 130				11/02/23 13:17	11/03/23 14:28	1
o-Terphenyl	119		65 - 130				11/02/23 13:17	11/03/23 14:28	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.99	U	9.98	4.99	mg/Kg		11/02/23 11:31	11/02/23 13:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	93.9				%			11/03/23 14:22	1

Client Sample ID: HE

Lab Sample ID: 880-35079-3

Date Collected: 10/27/23 13:35

Matrix: Solid

Date Received: 10/31/23 11:30

Sample Depth: 0'

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000386	U	0.00101	0.000386	mg/Kg		11/01/23 14:56	11/03/23 16:22	1
Toluene	<0.00122	U	0.00504	0.00122	mg/Kg		11/01/23 14:56	11/03/23 16:22	1
Ethylbenzene	<0.000307	U	0.00101	0.000307	mg/Kg		11/01/23 14:56	11/03/23 16:22	1
m,p-Xylenes	<0.000436	U	0.00202	0.000436	mg/Kg		11/01/23 14:56	11/03/23 16:22	1
o-Xylene	<0.000319	U	0.00101	0.000319	mg/Kg		11/01/23 14:56	11/03/23 16:22	1
Xylenes, Total	<0.000436	U	0.00202	0.000436	mg/Kg		11/01/23 14:56	11/03/23 16:22	1

Eurofins Midland

Client Sample Results

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 880-35079-1
SDG: Chaves Co

Client Sample ID: HE

Lab Sample ID: 880-35079-3

Date Collected: 10/27/23 13:35

Matrix: Solid

Date Received: 10/31/23 11:30

Sample Depth: 0'

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	116		56 - 150	11/01/23 14:56	11/03/23 16:22	1
4-Bromofluorobenzene (Surr)	103		68 - 152	11/01/23 14:56	11/03/23 16:22	1
Dibromofluoromethane (Surr)	104		53 - 142	11/01/23 14:56	11/03/23 16:22	1
Toluene-d8 (Surr)	96		70 - 130	11/01/23 14:56	11/03/23 16:22	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000436	U	0.00202	0.000436	mg/Kg			11/03/23 16:22	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<21.1	U	50.0	21.1	mg/Kg			11/03/23 15:09	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<21.1	U	50.0	21.1	mg/Kg		11/02/23 13:17	11/03/23 15:09	1
Diesel Range Organics (Over C10-C28)	<21.1	U	50.0	21.1	mg/Kg		11/02/23 13:17	11/03/23 15:09	1
Oil Range Organics (Over C28-C36)	<21.1	U	50.0	21.1	mg/Kg		11/02/23 13:17	11/03/23 15:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		65 - 130				11/02/23 13:17	11/03/23 15:09	1
o-Terphenyl	135	S1+	65 - 130				11/02/23 13:17	11/03/23 15:09	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	32.6		10.1	5.03	mg/Kg		11/02/23 11:31	11/02/23 13:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	89.7				%			11/03/23 14:22	1

Client Sample ID: S1/WEST 1

Lab Sample ID: 880-35079-4

Date Collected: 10/27/23 11:00

Matrix: Solid

Date Received: 10/31/23 11:30

Sample Depth: 1'

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00100	0.000383	mg/Kg		11/01/23 14:56	11/03/23 16:43	1
Toluene	<0.00121	U	0.00500	0.00121	mg/Kg		11/01/23 14:56	11/03/23 16:43	1
Ethylbenzene	<0.000304	U	0.00100	0.000304	mg/Kg		11/01/23 14:56	11/03/23 16:43	1
m,p-Xylenes	<0.000433	U	0.00200	0.000433	mg/Kg		11/01/23 14:56	11/03/23 16:43	1
o-Xylene	<0.000316	U	0.00100	0.000316	mg/Kg		11/01/23 14:56	11/03/23 16:43	1
Xylenes, Total	<0.000433	U	0.00200	0.000433	mg/Kg		11/01/23 14:56	11/03/23 16:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	115		56 - 150				11/01/23 14:56	11/03/23 16:43	1
4-Bromofluorobenzene (Surr)	105		68 - 152				11/01/23 14:56	11/03/23 16:43	1
Dibromofluoromethane (Surr)	102		53 - 142				11/01/23 14:56	11/03/23 16:43	1
Toluene-d8 (Surr)	95		70 - 130				11/01/23 14:56	11/03/23 16:43	1

Eurofins Midland

Client Sample Results

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 880-35079-1
SDG: Chaves Co

Client Sample ID: S1/WEST 1

Lab Sample ID: 880-35079-4

Date Collected: 10/27/23 11:00

Matrix: Solid

Date Received: 10/31/23 11:30

Sample Depth: 1'

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000433	U	0.00200	0.000433	mg/Kg			11/03/23 16:43	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<21.0	U	49.8	21.0	mg/Kg			11/03/23 15:30	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<21.0	U	49.8	21.0	mg/Kg		11/02/23 13:17	11/03/23 15:30	1
Diesel Range Organics (Over C10-C28)	<21.0	U	49.8	21.0	mg/Kg		11/02/23 13:17	11/03/23 15:30	1
Oil Range Organics (Over C28-C36)	<21.0	U	49.8	21.0	mg/Kg		11/02/23 13:17	11/03/23 15:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		65 - 130				11/02/23 13:17	11/03/23 15:30	1
o-Terphenyl	129		65 - 130				11/02/23 13:17	11/03/23 15:30	1

Method: EPA 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8830		100	50.1	mg/Kg		11/02/23 11:31	11/02/23 14:15	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	91.1				%			11/03/23 14:22	1

Client Sample ID: S2

Lab Sample ID: 880-35079-5

Date Collected: 10/27/23 11:05

Matrix: Solid

Date Received: 10/31/23 11:30

Sample Depth: 0'

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U	0.00100	0.000384	mg/Kg		11/01/23 14:56	11/03/23 17:05	1
Toluene	<0.00122	U	0.00502	0.00122	mg/Kg		11/01/23 14:56	11/03/23 17:05	1
Ethylbenzene	<0.000306	U	0.00100	0.000306	mg/Kg		11/01/23 14:56	11/03/23 17:05	1
m,p-Xylenes	<0.000435	U	0.00201	0.000435	mg/Kg		11/01/23 14:56	11/03/23 17:05	1
o-Xylene	<0.000317	U	0.00100	0.000317	mg/Kg		11/01/23 14:56	11/03/23 17:05	1
Xylenes, Total	<0.000435	U	0.00201	0.000435	mg/Kg		11/01/23 14:56	11/03/23 17:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	118		56 - 150				11/01/23 14:56	11/03/23 17:05	1
4-Bromofluorobenzene (Surr)	102		68 - 152				11/01/23 14:56	11/03/23 17:05	1
Dibromofluoromethane (Surr)	105		53 - 142				11/01/23 14:56	11/03/23 17:05	1
Toluene-d8 (Surr)	94		70 - 130				11/01/23 14:56	11/03/23 17:05	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000435	U	0.00201	0.000435	mg/Kg			11/03/23 17:05	1

Eurofins Midland

Client Sample Results

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 880-35079-1
SDG: Chaves Co

Client Sample ID: S2
Date Collected: 10/27/23 11:05
Date Received: 10/31/23 11:30
Sample Depth: 0'

Lab Sample ID: 880-35079-5
Matrix: Solid

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total TPH	<21.2	U	50.2	21.2	mg/Kg			11/03/23 15:50	1	
Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<21.2	U	50.2	21.2	mg/Kg		11/02/23 13:17	11/03/23 15:50	1	
Diesel Range Organics (Over C10-C28)	<21.2	U	50.2	21.2	mg/Kg		11/02/23 13:17	11/03/23 15:50	1	
Oil Range Organics (Over C28-C36)	<21.2	U	50.2	21.2	mg/Kg		11/02/23 13:17	11/03/23 15:50	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1-Chlorooctane	103		65 - 130				11/02/23 13:17	11/03/23 15:50	1	
o-Terphenyl	119		65 - 130				11/02/23 13:17	11/03/23 15:50	1	
Method: EPA 300.0 - Anions, Ion Chromatography - DL										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	5460		99.8	49.9	mg/Kg		11/02/23 11:31	11/02/23 15:13	10	
General Chemistry										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total Solids (SM 2540G)	92.1				%			11/03/23 14:22	1	

Client Sample ID: S2
Date Collected: 10/27/23 11:10
Date Received: 10/31/23 11:30
Sample Depth: 1'

Lab Sample ID: 880-35079-6
Matrix: Solid

Method: SW846 8260D - Volatile Organic Compounds by GC/MS									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000386	U	0.00101	0.000386	mg/Kg		11/02/23 09:36	11/02/23 14:02	1
Toluene	<0.00122	U	0.00504	0.00122	mg/Kg		11/02/23 09:36	11/02/23 14:02	1
Ethylbenzene	<0.000307	U	0.00101	0.000307	mg/Kg		11/02/23 09:36	11/02/23 14:02	1
m,p-Xylenes	<0.000436	U	0.00202	0.000436	mg/Kg		11/02/23 09:36	11/02/23 14:02	1
o-Xylene	<0.000319	U	0.00101	0.000319	mg/Kg		11/02/23 09:36	11/02/23 14:02	1
Xylenes, Total	<0.000436	U	0.00202	0.000436	mg/Kg		11/02/23 09:36	11/02/23 14:02	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		56 - 150				11/02/23 09:36	11/02/23 14:02	1
4-Bromofluorobenzene (Surr)	109		68 - 152				11/02/23 09:36	11/02/23 14:02	1
Dibromofluoromethane (Surr)	97		53 - 142				11/02/23 09:36	11/02/23 14:02	1
Toluene-d8 (Surr)	105		70 - 130				11/02/23 09:36	11/02/23 14:02	1
Method: TAL SOP Total BTEX - Total BTEX Calculation									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000436	U	0.00202	0.000436	mg/Kg			11/02/23 14:02	1
Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<21.1	U	50.1	21.1	mg/Kg			11/03/23 18:35	1

Eurofins Midland

Client Sample Results

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 880-35079-1
SDG: Chaves Co

Client Sample ID: S2

Lab Sample ID: 880-35079-6

Date Collected: 10/27/23 11:10

Matrix: Solid

Date Received: 10/31/23 11:30

Sample Depth: 1'

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<21.1	U	50.1	21.1	mg/Kg		11/02/23 13:17	11/03/23 18:35	1
Diesel Range Organics (Over C10-C28)	<21.1	U	50.1	21.1	mg/Kg		11/02/23 13:17	11/03/23 18:35	1
Oil Range Organics (Over C28-C36)	<21.1	U	50.1	21.1	mg/Kg		11/02/23 13:17	11/03/23 18:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		65 - 130				11/02/23 13:17	11/03/23 18:35	1
o-Terphenyl	109		65 - 130				11/02/23 13:17	11/03/23 18:35	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1430		10.0	5.02	mg/Kg		11/02/23 11:31	11/02/23 15:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	93.3				%			11/03/23 14:22	1

Client Sample ID: S3

Lab Sample ID: 880-35079-7

Date Collected: 10/27/23 11:15

Matrix: Solid

Date Received: 10/31/23 11:30

Sample Depth: 0'

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000386	U	0.00101	0.000386	mg/Kg		11/02/23 09:36	11/02/23 14:23	1
Toluene	<0.00122	U	0.00505	0.00122	mg/Kg		11/02/23 09:36	11/02/23 14:23	1
Ethylbenzene	<0.000307	U	0.00101	0.000307	mg/Kg		11/02/23 09:36	11/02/23 14:23	1
m,p-Xylenes	<0.000437	U	0.00202	0.000437	mg/Kg		11/02/23 09:36	11/02/23 14:23	1
o-Xylene	<0.000319	U	0.00101	0.000319	mg/Kg		11/02/23 09:36	11/02/23 14:23	1
Xylenes, Total	<0.000437	U	0.00202	0.000437	mg/Kg		11/02/23 09:36	11/02/23 14:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		56 - 150				11/02/23 09:36	11/02/23 14:23	1
4-Bromofluorobenzene (Surr)	110		68 - 152				11/02/23 09:36	11/02/23 14:23	1
Dibromofluoromethane (Surr)	99		53 - 142				11/02/23 09:36	11/02/23 14:23	1
Toluene-d8 (Surr)	107		70 - 130				11/02/23 09:36	11/02/23 14:23	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000437	U	0.00202	0.000437	mg/Kg			11/02/23 14:23	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<21.1	U	50.1	21.1	mg/Kg			11/03/23 16:11	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<21.1	U	50.1	21.1	mg/Kg		11/02/23 13:17	11/03/23 16:11	1
Diesel Range Organics (Over C10-C28)	<21.1	U	50.1	21.1	mg/Kg		11/02/23 13:17	11/03/23 16:11	1

Eurofins Midland

Client Sample Results

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 880-35079-1
SDG: Chaves Co

Client Sample ID: S3

Lab Sample ID: 880-35079-7

Date Collected: 10/27/23 11:15

Matrix: Solid

Date Received: 10/31/23 11:30

Sample Depth: 0'

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<21.1	U	50.1	21.1	mg/Kg		11/02/23 13:17	11/03/23 16:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		65 - 130				11/02/23 13:17	11/03/23 16:11	1
o-Terphenyl	117		65 - 130				11/02/23 13:17	11/03/23 16:11	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3160		10.0	5.02	mg/Kg		11/02/23 11:31	11/02/23 15:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	94.3				%			11/03/23 14:22	1

Client Sample ID: S3

Lab Sample ID: 880-35079-8

Date Collected: 10/27/23 11:20

Matrix: Solid

Date Received: 10/31/23 11:30

Sample Depth: 1'

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000380	U	0.000994	0.000380	mg/Kg		11/02/23 09:36	11/02/23 14:44	1
Toluene	<0.00120	U	0.00497	0.00120	mg/Kg		11/02/23 09:36	11/02/23 14:44	1
Ethylbenzene	<0.000303	U	0.000994	0.000303	mg/Kg		11/02/23 09:36	11/02/23 14:44	1
m,p-Xylenes	<0.000430	U	0.00199	0.000430	mg/Kg		11/02/23 09:36	11/02/23 14:44	1
o-Xylene	<0.000314	U	0.000994	0.000314	mg/Kg		11/02/23 09:36	11/02/23 14:44	1
Xylenes, Total	<0.000430	U	0.00199	0.000430	mg/Kg		11/02/23 09:36	11/02/23 14:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		56 - 150				11/02/23 09:36	11/02/23 14:44	1
4-Bromofluorobenzene (Surr)	105		68 - 152				11/02/23 09:36	11/02/23 14:44	1
Dibromofluoromethane (Surr)	101		53 - 142				11/02/23 09:36	11/02/23 14:44	1
Toluene-d8 (Surr)	102		70 - 130				11/02/23 09:36	11/02/23 14:44	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000430	U	0.00199	0.000430	mg/Kg			11/02/23 14:44	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<21.0	U	49.9	21.0	mg/Kg			11/03/23 16:32	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<21.0	U	49.9	21.0	mg/Kg		11/02/23 13:17	11/03/23 16:32	1
Diesel Range Organics (Over C10-C28)	<21.0	U	49.9	21.0	mg/Kg		11/02/23 13:17	11/03/23 16:32	1
Oil Range Organics (Over C28-C36)	<21.0	U	49.9	21.0	mg/Kg		11/02/23 13:17	11/03/23 16:32	1

Eurofins Midland

Client Sample Results

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 880-35079-1
SDG: Chaves Co

Client Sample ID: S3

Lab Sample ID: 880-35079-8

Date Collected: 10/27/23 11:20

Matrix: Solid

Date Received: 10/31/23 11:30

Sample Depth: 1'

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		65 - 130	11/02/23 13:17	11/03/23 16:32	1
o-Terphenyl	124		65 - 130	11/02/23 13:17	11/03/23 16:32	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	400		9.96	4.98	mg/Kg		11/02/23 11:31	11/02/23 15:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	93.2				%			11/03/23 14:22	1

Client Sample ID: S4

Lab Sample ID: 880-35079-9

Date Collected: 10/27/23 11:25

Matrix: Solid

Date Received: 10/31/23 11:30

Sample Depth: 0'

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00101	0.000385	mg/Kg		11/02/23 09:36	11/02/23 15:05	1
Toluene	<0.00122	U	0.00503	0.00122	mg/Kg		11/02/23 09:36	11/02/23 15:05	1
Ethylbenzene	<0.000306	U	0.00101	0.000306	mg/Kg		11/02/23 09:36	11/02/23 15:05	1
m,p-Xylenes	<0.000436	U	0.00201	0.000436	mg/Kg		11/02/23 09:36	11/02/23 15:05	1
o-Xylene	<0.000318	U	0.00101	0.000318	mg/Kg		11/02/23 09:36	11/02/23 15:05	1
Xylenes, Total	<0.000436	U	0.00201	0.000436	mg/Kg		11/02/23 09:36	11/02/23 15:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		56 - 150	11/02/23 09:36	11/02/23 15:05	1
4-Bromofluorobenzene (Surr)	109		68 - 152	11/02/23 09:36	11/02/23 15:05	1
Dibromofluoromethane (Surr)	101		53 - 142	11/02/23 09:36	11/02/23 15:05	1
Toluene-d8 (Surr)	106		70 - 130	11/02/23 09:36	11/02/23 15:05	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000436	U	0.00201	0.000436	mg/Kg			11/02/23 15:05	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<21.2	U	50.2	21.2	mg/Kg			11/03/23 16:32	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<21.2	U	50.2	21.2	mg/Kg		11/02/23 13:17	11/03/23 16:32	1
Diesel Range Organics (Over C10-C28)	<21.2	U	50.2	21.2	mg/Kg		11/02/23 13:17	11/03/23 16:32	1
Oil Range Organics (Over C28-C36)	<21.2	U	50.2	21.2	mg/Kg		11/02/23 13:17	11/03/23 16:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		65 - 130				11/02/23 13:17	11/03/23 16:32	1
o-Terphenyl	107		65 - 130				11/02/23 13:17	11/03/23 16:32	1

Eurofins Midland

Client Sample Results

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 880-35079-1
SDG: Chaves Co

Client Sample ID: S4

Lab Sample ID: 880-35079-9

Date Collected: 10/27/23 11:25

Matrix: Solid

Date Received: 10/31/23 11:30

Sample Depth: 0'

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4670		9.96	4.98	mg/Kg		11/02/23 11:31	11/02/23 15:52	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	82.2				%			11/03/23 14:22	1

Client Sample ID: S4

Lab Sample ID: 880-35079-10

Date Collected: 10/27/23 11:30

Matrix: Solid

Date Received: 10/31/23 11:30

Sample Depth: 1'

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000385	U	0.00101	0.000385	mg/Kg		11/02/23 09:36	11/02/23 15:26	1
Toluene	<0.00122	U	0.00503	0.00122	mg/Kg		11/02/23 09:36	11/02/23 15:26	1
Ethylbenzene	<0.000306	U	0.00101	0.000306	mg/Kg		11/02/23 09:36	11/02/23 15:26	1
m,p-Xylenes	<0.000436	U	0.00201	0.000436	mg/Kg		11/02/23 09:36	11/02/23 15:26	1
o-Xylene	<0.000318	U	0.00101	0.000318	mg/Kg		11/02/23 09:36	11/02/23 15:26	1
Xylenes, Total	<0.000436	U	0.00201	0.000436	mg/Kg		11/02/23 09:36	11/02/23 15:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		56 - 150	11/02/23 09:36	11/02/23 15:26	1
4-Bromofluorobenzene (Surr)	100		68 - 152	11/02/23 09:36	11/02/23 15:26	1
Dibromofluoromethane (Surr)	98		53 - 142	11/02/23 09:36	11/02/23 15:26	1
Toluene-d8 (Surr)	102		70 - 130	11/02/23 09:36	11/02/23 15:26	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000436	U	0.00201	0.000436	mg/Kg			11/02/23 15:26	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<21.1	U	49.9	21.1	mg/Kg			11/03/23 16:52	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<21.1	U	49.9	21.1	mg/Kg		11/02/23 13:17	11/03/23 16:52	1
Diesel Range Organics (Over C10-C28)	<21.1	U	49.9	21.1	mg/Kg		11/02/23 13:17	11/03/23 16:52	1
Oil Range Organics (Over C28-C36)	<21.1	U	49.9	21.1	mg/Kg		11/02/23 13:17	11/03/23 16:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		65 - 130	11/02/23 13:17	11/03/23 16:52	1
o-Terphenyl	109		65 - 130	11/02/23 13:17	11/03/23 16:52	1

Method: EPA 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6300		99.0	49.5	mg/Kg		11/02/23 11:31	11/02/23 16:11	10

Eurofins Midland

Client Sample Results

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 880-35079-1
SDG: Chaves Co

Client Sample ID: S4

Lab Sample ID: 880-35079-10

Date Collected: 10/27/23 11:30

Matrix: Solid

Date Received: 10/31/23 11:30

Sample Depth: 1'

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	86.4				%			11/03/23 14:22	1

Client Sample ID: S5/WEST 2

Lab Sample ID: 880-35079-11

Date Collected: 10/27/23 11:35

Matrix: Solid

Date Received: 10/31/23 11:30

Sample Depth: 1'

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00100	0.000383	mg/Kg		11/03/23 11:31	11/03/23 14:35	1
Toluene	<0.00121	U	0.00500	0.00121	mg/Kg		11/03/23 11:31	11/03/23 14:35	1
Ethylbenzene	<0.000304	U	0.00100	0.000304	mg/Kg		11/03/23 11:31	11/03/23 14:35	1
m,p-Xylenes	<0.000433	U	0.00200	0.000433	mg/Kg		11/03/23 11:31	11/03/23 14:35	1
o-Xylene	<0.000316	U	0.00100	0.000316	mg/Kg		11/03/23 11:31	11/03/23 14:35	1
Xylenes, Total	<0.000433	U	0.00200	0.000433	mg/Kg		11/03/23 11:31	11/03/23 14:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		56 - 150				11/03/23 11:31	11/03/23 14:35	1
4-Bromofluorobenzene (Surr)	106		68 - 152				11/03/23 11:31	11/03/23 14:35	1
Dibromofluoromethane (Surr)	99		53 - 142				11/03/23 11:31	11/03/23 14:35	1
Toluene-d8 (Surr)	109		70 - 130				11/03/23 11:31	11/03/23 14:35	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000433	U	0.00200	0.000433	mg/Kg			11/03/23 14:35	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<21.1	U	49.9	21.1	mg/Kg			11/03/23 17:13	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<21.1	U	49.9	21.1	mg/Kg		11/02/23 13:17	11/03/23 17:13	1
Diesel Range Organics (Over C10-C28)	<21.1	U	49.9	21.1	mg/Kg		11/02/23 13:17	11/03/23 17:13	1
Oil Range Organics (Over C28-C36)	<21.1	U	49.9	21.1	mg/Kg		11/02/23 13:17	11/03/23 17:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		65 - 130				11/02/23 13:17	11/03/23 17:13	1
o-Terphenyl	110		65 - 130				11/02/23 13:17	11/03/23 17:13	1

Method: EPA 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6420		99.2	49.6	mg/Kg		11/02/23 11:31	11/02/23 16:50	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	88.1				%			11/03/23 14:22	1

Eurofins Midland

Client Sample Results

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 880-35079-1
SDG: Chaves Co

Client Sample ID: S6

Lab Sample ID: 880-35079-12

Date Collected: 10/27/23 11:40

Matrix: Solid

Date Received: 10/31/23 11:30

Sample Depth: 0'

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U	0.00100	0.000384	mg/Kg	-	11/02/23 09:36	11/02/23 15:47	1
Toluene	<0.00122	U	0.00502	0.00122	mg/Kg	-	11/02/23 09:36	11/02/23 15:47	1
Ethylbenzene	<0.000306	U	0.00100	0.000306	mg/Kg	-	11/02/23 09:36	11/02/23 15:47	1
m,p-Xylenes	<0.000435	U	0.00201	0.000435	mg/Kg	-	11/02/23 09:36	11/02/23 15:47	1
o-Xylene	<0.000317	U	0.00100	0.000317	mg/Kg	-	11/02/23 09:36	11/02/23 15:47	1
Xylenes, Total	<0.000435	U	0.00201	0.000435	mg/Kg	-	11/02/23 09:36	11/02/23 15:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		56 - 150	11/02/23 09:36	11/02/23 15:47	1
4-Bromofluorobenzene (Surr)	103		68 - 152	11/02/23 09:36	11/02/23 15:47	1
Dibromofluoromethane (Surr)	105		53 - 142	11/02/23 09:36	11/02/23 15:47	1
Toluene-d8 (Surr)	102		70 - 130	11/02/23 09:36	11/02/23 15:47	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000435	U	0.00201	0.000435	mg/Kg	-		11/02/23 15:47	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<21.1	U	50.1	21.1	mg/Kg	-		11/03/23 17:33	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<21.1	U	50.1	21.1	mg/Kg		11/02/23 13:17	11/03/23 17:33	1
Diesel Range Organics (Over C10-C28)	<21.1	U	50.1	21.1	mg/Kg		11/02/23 13:17	11/03/23 17:33	1
Oil Range Organics (Over C28-C36)	<21.1	U	50.1	21.1	mg/Kg		11/02/23 13:17	11/03/23 17:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		65 - 130				11/02/23 13:17	11/03/23 17:33	1
o-Terphenyl	108		65 - 130				11/02/23 13:17	11/03/23 17:33	1

Method: EPA 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8180		99.4	49.7	mg/Kg	-	11/02/23 11:31	11/02/23 17:29	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	87.2				%	-		11/03/23 14:22	1

Client Sample ID: S6

Lab Sample ID: 880-35079-13

Date Collected: 10/27/23 11:45

Matrix: Solid

Date Received: 10/31/23 11:30

Sample Depth: 1'

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00100	0.000383	mg/Kg	-	11/02/23 09:36	11/02/23 16:07	1
Toluene	<0.00121	U	0.00501	0.00121	mg/Kg	-	11/02/23 09:36	11/02/23 16:07	1
Ethylbenzene	<0.000305	U	0.00100	0.000305	mg/Kg	-	11/02/23 09:36	11/02/23 16:07	1

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Client Sample Results

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 880-35079-1
SDG: Chaves Co

Client Sample ID: S6

Lab Sample ID: 880-35079-13

Date Collected: 10/27/23 11:45

Matrix: Solid

Date Received: 10/31/23 11:30

Sample Depth: 1'

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m,p-Xylenes	<0.000434	U	0.00200	0.000434	mg/Kg		11/02/23 09:36	11/02/23 16:07	1
o-Xylene	<0.000317	U	0.00100	0.000317	mg/Kg		11/02/23 09:36	11/02/23 16:07	1
Xylenes, Total	<0.000434	U	0.00200	0.000434	mg/Kg		11/02/23 09:36	11/02/23 16:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		56 - 150				11/02/23 09:36	11/02/23 16:07	1
4-Bromofluorobenzene (Surr)	108		68 - 152				11/02/23 09:36	11/02/23 16:07	1
Dibromofluoromethane (Surr)	106		53 - 142				11/02/23 09:36	11/02/23 16:07	1
Toluene-d8 (Surr)	102		70 - 130				11/02/23 09:36	11/02/23 16:07	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000434	U	0.00200	0.000434	mg/Kg			11/02/23 16:07	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<21.2	U	50.3	21.2	mg/Kg			11/03/23 17:54	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<21.2	U	50.3	21.2	mg/Kg		11/02/23 13:17	11/03/23 17:54	1
Diesel Range Organics (Over C10-C28)	<21.2	U	50.3	21.2	mg/Kg		11/02/23 13:17	11/03/23 17:54	1
Oil Range Organics (Over C28-C36)	<21.2	U	50.3	21.2	mg/Kg		11/02/23 13:17	11/03/23 17:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		65 - 130				11/02/23 13:17	11/03/23 17:54	1
o-Terphenyl	105		65 - 130				11/02/23 13:17	11/03/23 17:54	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4350		9.96	4.98	mg/Kg		11/02/23 11:31	11/02/23 17:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	86.1				%			11/03/23 14:22	1

Client Sample ID: S7

Lab Sample ID: 880-35079-14

Date Collected: 10/27/23 11:50

Matrix: Solid

Date Received: 10/31/23 11:30

Sample Depth: 0'

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00100	0.000383	mg/Kg		11/02/23 09:36	11/02/23 16:28	1
Toluene	<0.00121	U	0.00501	0.00121	mg/Kg		11/02/23 09:36	11/02/23 16:28	1
Ethylbenzene	<0.000305	U	0.00100	0.000305	mg/Kg		11/02/23 09:36	11/02/23 16:28	1
m,p-Xylenes	<0.000434	U	0.00200	0.000434	mg/Kg		11/02/23 09:36	11/02/23 16:28	1
o-Xylene	<0.000317	U	0.00100	0.000317	mg/Kg		11/02/23 09:36	11/02/23 16:28	1
Xylenes, Total	<0.000434	U	0.00200	0.000434	mg/Kg		11/02/23 09:36	11/02/23 16:28	1

Eurofins Midland

Client Sample Results

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 880-35079-1
SDG: Chaves Co

Client Sample ID: S7

Lab Sample ID: 880-35079-14

Date Collected: 10/27/23 11:50

Matrix: Solid

Date Received: 10/31/23 11:30

Sample Depth: 0'

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		56 - 150	11/02/23 09:36	11/02/23 16:28	1
4-Bromofluorobenzene (Surr)	101		68 - 152	11/02/23 09:36	11/02/23 16:28	1
Dibromofluoromethane (Surr)	112		53 - 142	11/02/23 09:36	11/02/23 16:28	1
Toluene-d8 (Surr)	103		70 - 130	11/02/23 09:36	11/02/23 16:28	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000434	U	0.00200	0.000434	mg/Kg			11/02/23 16:28	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<21.0	U	49.9	21.0	mg/Kg			11/03/23 16:52	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<21.0	U	49.9	21.0	mg/Kg		11/02/23 13:17	11/03/23 16:52	1
Diesel Range Organics (Over C10-C28)	<21.0	U	49.9	21.0	mg/Kg		11/02/23 13:17	11/03/23 16:52	1
Oil Range Organics (Over C28-C36)	<21.0	U	49.9	21.0	mg/Kg		11/02/23 13:17	11/03/23 16:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		65 - 130	11/02/23 13:17	11/03/23 16:52	1
o-Terphenyl	125		65 - 130	11/02/23 13:17	11/03/23 16:52	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3620		9.94	4.97	mg/Kg		11/02/23 11:31	11/02/23 18:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	88.5				%			11/03/23 14:22	1

Client Sample ID: S7

Lab Sample ID: 880-35079-15

Date Collected: 10/27/23 11:55

Matrix: Solid

Date Received: 10/31/23 11:30

Sample Depth: 1'

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000384	U	0.00100	0.000384	mg/Kg		11/02/23 09:36	11/02/23 16:49	1
Toluene	<0.00122	U	0.00502	0.00122	mg/Kg		11/02/23 09:36	11/02/23 16:49	1
Ethylbenzene	<0.000306	U	0.00100	0.000306	mg/Kg		11/02/23 09:36	11/02/23 16:49	1
m,p-Xylenes	<0.000435	U	0.00201	0.000435	mg/Kg		11/02/23 09:36	11/02/23 16:49	1
o-Xylene	<0.000317	U	0.00100	0.000317	mg/Kg		11/02/23 09:36	11/02/23 16:49	1
Xylenes, Total	<0.000435	U	0.00201	0.000435	mg/Kg		11/02/23 09:36	11/02/23 16:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		56 - 150	11/02/23 09:36	11/02/23 16:49	1
4-Bromofluorobenzene (Surr)	104		68 - 152	11/02/23 09:36	11/02/23 16:49	1
Dibromofluoromethane (Surr)	103		53 - 142	11/02/23 09:36	11/02/23 16:49	1
Toluene-d8 (Surr)	104		70 - 130	11/02/23 09:36	11/02/23 16:49	1

Eurofins Midland

Client Sample Results

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 880-35079-1
SDG: Chaves Co

Client Sample ID: S7

Lab Sample ID: 880-35079-15

Date Collected: 10/27/23 11:55

Matrix: Solid

Date Received: 10/31/23 11:30

Sample Depth: 1'

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000435	U	0.00201	0.000435	mg/Kg			11/02/23 16:49	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<21.0	U	49.9	21.0	mg/Kg			11/03/23 17:13	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<21.0	U	49.9	21.0	mg/Kg		11/02/23 13:17	11/03/23 17:13	1
Diesel Range Organics (Over C10-C28)	<21.0	U	49.9	21.0	mg/Kg		11/02/23 13:17	11/03/23 17:13	1
Oil Range Organics (Over C28-C36)	<21.0	U	49.9	21.0	mg/Kg		11/02/23 13:17	11/03/23 17:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	106		65 - 130				11/02/23 13:17	11/03/23 17:13	1
o-Terphenyl	130		65 - 130				11/02/23 13:17	11/03/23 17:13	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1420		9.98	4.99	mg/Kg		11/02/23 11:31	11/02/23 18:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	91.1				%			11/03/23 14:22	1

Client Sample ID: S8/EAST1

Lab Sample ID: 880-35079-16

Date Collected: 10/27/23 12:00

Matrix: Solid

Date Received: 10/31/23 11:30

Sample Depth: 1'

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000386	U	0.00101	0.000386	mg/Kg		11/02/23 09:36	11/02/23 17:10	1
Toluene	<0.00122	U	0.00505	0.00122	mg/Kg		11/02/23 09:36	11/02/23 17:10	1
Ethylbenzene	<0.000307	U	0.00101	0.000307	mg/Kg		11/02/23 09:36	11/02/23 17:10	1
m,p-Xylenes	<0.000437	U	0.00202	0.000437	mg/Kg		11/02/23 09:36	11/02/23 17:10	1
o-Xylene	<0.000319	U	0.00101	0.000319	mg/Kg		11/02/23 09:36	11/02/23 17:10	1
Xylenes, Total	<0.000437	U	0.00202	0.000437	mg/Kg		11/02/23 09:36	11/02/23 17:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		56 - 150				11/02/23 09:36	11/02/23 17:10	1
4-Bromofluorobenzene (Surr)	102		68 - 152				11/02/23 09:36	11/02/23 17:10	1
Dibromofluoromethane (Surr)	104		53 - 142				11/02/23 09:36	11/02/23 17:10	1
Toluene-d8 (Surr)	105		70 - 130				11/02/23 09:36	11/02/23 17:10	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000437	U	0.00202	0.000437	mg/Kg			11/02/23 17:10	1

Eurofins Midland

Client Sample Results

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 880-35079-1
SDG: Chaves Co

Client Sample ID: S8/EAST1

Lab Sample ID: 880-35079-16

Date Collected: 10/27/23 12:00

Matrix: Solid

Date Received: 10/31/23 11:30

Sample Depth: 1'

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<21.0	U	49.8	21.0	mg/Kg			11/03/23 17:33	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<21.0	U	49.8	21.0	mg/Kg		11/02/23 13:17	11/03/23 17:33	1
Diesel Range Organics (Over C10-C28)	<21.0	U	49.8	21.0	mg/Kg		11/02/23 13:17	11/03/23 17:33	1
Oil Range Organics (Over C28-C36)	<21.0	U	49.8	21.0	mg/Kg		11/02/23 13:17	11/03/23 17:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		65 - 130				11/02/23 13:17	11/03/23 17:33	1
o-Terphenyl	121		65 - 130				11/02/23 13:17	11/03/23 17:33	1

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	463		10.0	5.01	mg/Kg		11/02/23 11:31	11/02/23 18:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids (SM 2540G)	90.0				%			11/03/23 14:22	1

Client Sample ID: S9/EAST2

Lab Sample ID: 880-35079-17

Date Collected: 10/27/23 12:05

Matrix: Solid

Date Received: 10/31/23 11:30

Sample Depth: 1'

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000381	U	0.000996	0.000381	mg/Kg		11/02/23 09:36	11/02/23 17:31	1
Toluene	<0.00121	U	0.00498	0.00121	mg/Kg		11/02/23 09:36	11/02/23 17:31	1
Ethylbenzene	<0.000303	U	0.000996	0.000303	mg/Kg		11/02/23 09:36	11/02/23 17:31	1
m,p-Xylenes	<0.000431	U	0.00199	0.000431	mg/Kg		11/02/23 09:36	11/02/23 17:31	1
o-Xylene	<0.000315	U	0.000996	0.000315	mg/Kg		11/02/23 09:36	11/02/23 17:31	1
Xylenes, Total	<0.000431	U	0.00199	0.000431	mg/Kg		11/02/23 09:36	11/02/23 17:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		56 - 150				11/02/23 09:36	11/02/23 17:31	1
4-Bromofluorobenzene (Surr)	102		68 - 152				11/02/23 09:36	11/02/23 17:31	1
Dibromofluoromethane (Surr)	102		53 - 142				11/02/23 09:36	11/02/23 17:31	1
Toluene-d8 (Surr)	101		70 - 130				11/02/23 09:36	11/02/23 17:31	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.000431	U	0.00199	0.000431	mg/Kg			11/02/23 17:31	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<21.1	U	49.9	21.1	mg/Kg			11/03/23 18:15	1

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Client Sample Results

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 880-35079-1
SDG: Chaves Co

Client Sample ID: S9/EAST2
Date Collected: 10/27/23 12:05
Date Received: 10/31/23 11:30
Sample Depth: 1'

Lab Sample ID: 880-35079-17
Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<21.1	U	49.9	21.1	mg/Kg	-	11/02/23 13:17	11/03/23 18:15	1	
Diesel Range Organics (Over C10-C28)	<21.1	U	49.9	21.1	mg/Kg	-	11/02/23 13:17	11/03/23 18:15	1	
Oil Range Organics (Over C28-C36)	<21.1	U	49.9	21.1	mg/Kg	-	11/02/23 13:17	11/03/23 18:15	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1-Chlorooctane	106		65 - 130				11/02/23 13:17	11/03/23 18:15	1	
o-Terphenyl	109		65 - 130				11/02/23 13:17	11/03/23 18:15	1	

Method: EPA 300.0 - Anions, Ion Chromatography										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	401		10.1	5.03	mg/Kg	-	11/02/23 11:31	11/02/23 19:11	1	

General Chemistry										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Total Solids (SM 2540G)	90.4				%	-		11/03/23 14:22	1	

Surrogate Summary

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 880-35079-1
SDG: Chaves Co

Method: 8260D - Volatile Organic Compounds by GC/MS
Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
Lab Sample ID	Client Sample ID	DCA	BFB	DBFM	TOL
		(56-150)	(68-152)	(53-142)	(70-130)
880-35079-1	HN	114	104	102	96
880-35079-2	HW	112	103	100	98
880-35079-3	HE	116	103	104	96
880-35079-4	S1/WEST 1	115	105	102	95
880-35079-5	S2	118	102	105	94
880-35079-6	S2	97	109	97	105
880-35079-7	S3	100	110	99	107
880-35079-8	S3	100	105	101	102
880-35079-9	S4	104	109	101	106
880-35079-10	S4	106	100	98	102
880-35079-11	S5/WEST 2	104	106	99	109
880-35079-12	S6	100	103	105	102
880-35079-13	S6	96	108	106	102
880-35079-14	S7	112	101	112	103
880-35079-15	S7	101	104	103	104
880-35079-16	S8/EAST1	103	102	104	105
880-35079-17	S9/EAST2	99	102	102	101
LCS 860-129108/3	Lab Control Sample	95	99	95	103
LCS 860-129306/3	Lab Control Sample	113	103	104	97
LCS 860-129308/3	Lab Control Sample	96	101	109	102
LCSD 860-129108/4	Lab Control Sample Dup	98	99	98	102
LCSD 860-129306/4	Lab Control Sample Dup	113	102	100	97
LCSD 860-129308/4	Lab Control Sample Dup	92	102	102	102
MB 860-129108/9	Method Blank	106	101	99	104
MB 860-129306/8	Method Blank	114	99	107	97
MB 860-129308/9	Method Blank	112	96	112	99
Surrogate Legend					
DCA = 1,2-Dichloroethane-d4 (Surr)					
BFB = 4-Bromofluorobenzene (Surr)					
DBFM = Dibromofluoromethane (Surr)					
TOL = Toluene-d8 (Surr)					

Method: 8015B NM - Diesel Range Organics (DRO) (GC)
Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1	OTPH1
		(65-130)	(65-130)
880-35079-1	HN	83	94
880-35079-2	HW	100	119
880-35079-3	HE	110	135 S1+
880-35079-4	S1/WEST 1	106	129
880-35079-5	S2	103	119
880-35079-6	S2	103	109
880-35079-7	S3	105	117
880-35079-8	S3	109	124
880-35079-9	S4	103	107
880-35079-10	S4	104	109
880-35079-11	S5/WEST 2	105	110

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Surrogate Summary

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 880-35079-1
SDG: Chaves Co

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (65-130)	OTPH1 (65-130)
880-35079-12	S6	104	108
880-35079-13	S6	101	105
880-35079-14	S7	106	125
880-35079-15	S7	106	130
880-35079-16	S8/EAST1	105	121
880-35079-17	S9/EAST2	106	109
LCS 860-129207/2-A	Lab Control Sample	100	119
LCSD 860-129207/3-A	Lab Control Sample Dup	101	122
MB 860-129207/1-A	Method Blank	95	101
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 880-35079-1
SDG: Chaves Co

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

Lab Sample ID: MB 860-129108/9

Matrix: Solid

Analysis Batch: 129108

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00100	0.000383	mg/Kg			11/02/23 12:59	1
Toluene	<0.00121	U	0.00500	0.00121	mg/Kg			11/02/23 12:59	1
Ethylbenzene	<0.000304	U	0.00100	0.000304	mg/Kg			11/02/23 12:59	1
m,p-Xylenes	<0.000433	U	0.00200	0.000433	mg/Kg			11/02/23 12:59	1
o-Xylene	<0.000316	U	0.00100	0.000316	mg/Kg			11/02/23 12:59	1
Xylenes, Total	<0.000433	U	0.00200	0.000433	mg/Kg			11/02/23 12:59	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		56 - 150		11/02/23 12:59	1
4-Bromofluorobenzene (Surr)	101		68 - 152		11/02/23 12:59	1
Dibromofluoromethane (Surr)	99		53 - 142		11/02/23 12:59	1
Toluene-d8 (Surr)	104		70 - 130		11/02/23 12:59	1

Lab Sample ID: LCS 860-129108/3

Matrix: Solid

Analysis Batch: 129108

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.0500	0.04820		mg/Kg		96	66 - 142
Toluene	0.0500	0.04666		mg/Kg		93	74 - 130
Ethylbenzene	0.0500	0.05002		mg/Kg		100	80 - 130
m,p-Xylenes	0.0500	0.04985		mg/Kg		100	78 - 130
o-Xylene	0.0500	0.04949		mg/Kg		99	79 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	95		56 - 150
4-Bromofluorobenzene (Surr)	99		68 - 152
Dibromofluoromethane (Surr)	95		53 - 142
Toluene-d8 (Surr)	103		70 - 130

Lab Sample ID: LCSD 860-129108/4

Matrix: Solid

Analysis Batch: 129108

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.0500	0.05030		mg/Kg		101	66 - 142	4	25
Toluene	0.0500	0.04806		mg/Kg		96	74 - 130	3	25
Ethylbenzene	0.0500	0.05044		mg/Kg		101	80 - 130	1	25
m,p-Xylenes	0.0500	0.04949		mg/Kg		99	78 - 130	1	25
o-Xylene	0.0500	0.05204		mg/Kg		104	79 - 130	5	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		56 - 150
4-Bromofluorobenzene (Surr)	99		68 - 152
Dibromofluoromethane (Surr)	98		53 - 142
Toluene-d8 (Surr)	102		70 - 130

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QC Sample Results

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 880-35079-1
SDG: Chaves Co

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 860-129306/8

Matrix: Solid

Analysis Batch: 129306

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00100	0.000383	mg/Kg			11/03/23 11:19	1
Toluene	<0.00121	U	0.00500	0.00121	mg/Kg			11/03/23 11:19	1
Ethylbenzene	<0.000304	U	0.00100	0.000304	mg/Kg			11/03/23 11:19	1
m,p-Xylenes	<0.000433	U	0.00200	0.000433	mg/Kg			11/03/23 11:19	1
o-Xylene	<0.000316	U	0.00100	0.000316	mg/Kg			11/03/23 11:19	1
Xylenes, Total	<0.000433	U	0.00200	0.000433	mg/Kg			11/03/23 11:19	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		56 - 150		11/03/23 11:19	1
4-Bromofluorobenzene (Surr)	99		68 - 152		11/03/23 11:19	1
Dibromofluoromethane (Surr)	107		53 - 142		11/03/23 11:19	1
Toluene-d8 (Surr)	97		70 - 130		11/03/23 11:19	1

Lab Sample ID: LCS 860-129306/3

Matrix: Solid

Analysis Batch: 129306

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.0500	0.05211		mg/Kg		104	66 - 142
Toluene	0.0500	0.05140		mg/Kg		103	74 - 130
Ethylbenzene	0.0500	0.05586		mg/Kg		112	80 - 130
m,p-Xylenes	0.0500	0.05450		mg/Kg		109	78 - 130
o-Xylene	0.0500	0.05679		mg/Kg		114	79 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	113		56 - 150
4-Bromofluorobenzene (Surr)	103		68 - 152
Dibromofluoromethane (Surr)	104		53 - 142
Toluene-d8 (Surr)	97		70 - 130

Lab Sample ID: LCSD 860-129306/4

Matrix: Solid

Analysis Batch: 129306

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.0500	0.04459		mg/Kg		89	66 - 142	16	25
Toluene	0.0500	0.04279		mg/Kg		86	74 - 130	18	25
Ethylbenzene	0.0500	0.04633		mg/Kg		93	80 - 130	19	25
m,p-Xylenes	0.0500	0.04624		mg/Kg		92	78 - 130	16	25
o-Xylene	0.0500	0.04803		mg/Kg		96	79 - 130	17	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	113		56 - 150
4-Bromofluorobenzene (Surr)	102		68 - 152
Dibromofluoromethane (Surr)	100		53 - 142
Toluene-d8 (Surr)	97		70 - 130

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QC Sample Results

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 880-35079-1
SDG: Chaves Co

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 860-129308/9

Matrix: Solid

Analysis Batch: 129308

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.000383	U	0.00100	0.000383	mg/Kg			11/03/23 10:45	1
Toluene	<0.00121	U	0.00500	0.00121	mg/Kg			11/03/23 10:45	1
Ethylbenzene	<0.000304	U	0.00100	0.000304	mg/Kg			11/03/23 10:45	1
m,p-Xylenes	<0.000433	U	0.00200	0.000433	mg/Kg			11/03/23 10:45	1
o-Xylene	<0.000316	U	0.00100	0.000316	mg/Kg			11/03/23 10:45	1
Xylenes, Total	<0.000433	U	0.00200	0.000433	mg/Kg			11/03/23 10:45	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		56 - 150		11/03/23 10:45	1
4-Bromofluorobenzene (Surr)	96		68 - 152		11/03/23 10:45	1
Dibromofluoromethane (Surr)	112		53 - 142		11/03/23 10:45	1
Toluene-d8 (Surr)	99		70 - 130		11/03/23 10:45	1

Lab Sample ID: LCS 860-129308/3

Matrix: Solid

Analysis Batch: 129308

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.0500	0.05369		mg/Kg		107	66 - 142
Toluene	0.0500	0.05078		mg/Kg		102	74 - 130
Ethylbenzene	0.0500	0.05354		mg/Kg		107	80 - 130
m,p-Xylenes	0.0500	0.05212		mg/Kg		104	78 - 130
o-Xylene	0.0500	0.05164		mg/Kg		103	79 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	96		56 - 150
4-Bromofluorobenzene (Surr)	101		68 - 152
Dibromofluoromethane (Surr)	109		53 - 142
Toluene-d8 (Surr)	102		70 - 130

Lab Sample ID: LCSD 860-129308/4

Matrix: Solid

Analysis Batch: 129308

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.0500	0.05047		mg/Kg		101	66 - 142	6	25
Toluene	0.0500	0.04870		mg/Kg		97	74 - 130	4	25
Ethylbenzene	0.0500	0.05091		mg/Kg		102	80 - 130	5	25
m,p-Xylenes	0.0500	0.05002		mg/Kg		100	78 - 130	4	25
o-Xylene	0.0500	0.05031		mg/Kg		101	79 - 130	3	25

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	92		56 - 150
4-Bromofluorobenzene (Surr)	102		68 - 152
Dibromofluoromethane (Surr)	102		53 - 142
Toluene-d8 (Surr)	102		70 - 130

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QC Sample Results

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 880-35079-1
SDG: Chaves Co

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 860-129207/1-A

Matrix: Solid

Analysis Batch: 129332

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 129207

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<21.1	U	50.0	21.1	mg/Kg		11/02/23 13:17	11/03/23 12:04	1
Diesel Range Organics (Over C10-C28)	<21.1	U	50.0	21.1	mg/Kg		11/02/23 13:17	11/03/23 12:04	1
Oil Range Organics (Over C28-C36)	<21.1	U	50.0	21.1	mg/Kg		11/02/23 13:17	11/03/23 12:04	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		65 - 130				11/02/23 13:17	11/03/23 12:04	1
o-Terphenyl	101		65 - 130				11/02/23 13:17	11/03/23 12:04	1

Lab Sample ID: LCS 860-129207/2-A

Matrix: Solid

Analysis Batch: 129332

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 129207

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	999	888.5		mg/Kg		89	70 - 135
Diesel Range Organics (Over C10-C28)	999	1101		mg/Kg		110	70 - 135
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	100		65 - 130				
o-Terphenyl	119		65 - 130				

Lab Sample ID: LCSD 860-129207/3-A

Matrix: Solid

Analysis Batch: 129332

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 129207

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	999	911.1		mg/Kg		91	70 - 135	3	35
Diesel Range Organics (Over C10-C28)	999	1140		mg/Kg		114	70 - 135	3	35
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	101		65 - 130						
o-Terphenyl	122		65 - 130						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-129184/1-A

Matrix: Solid

Analysis Batch: 129182

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 129184

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	10.0	5.00	mg/Kg		11/02/23 11:31	11/02/23 12:47	1

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QC Sample Results

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 880-35079-1
SDG: Chaves Co

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 860-129184/2-A					Client Sample ID: Lab Control Sample				
Matrix: Solid					Prep Type: Total/NA				
Analysis Batch: 129182					Prep Batch: 129184				
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	100	97.23		mg/Kg		97	80 - 120		

Lab Sample ID: LCSD 860-129184/3-A					Client Sample ID: Lab Control Sample Dup				
Matrix: Solid					Prep Type: Total/NA				
Analysis Batch: 129182					Prep Batch: 129184				
Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	100	96.55		mg/Kg		97	80 - 120	1	20

Method: SM 2540G - Total, Fixed, and Volatile Solids

Lab Sample ID: MB 860-129437/1					Client Sample ID: Method Blank				
Matrix: Solid					Prep Type: Total/NA				
Analysis Batch: 129437									
Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Solids	99.96				%			11/03/23 14:22	1

Lab Sample ID: 880-35079-1 DU					Client Sample ID: HN				
Matrix: Solid					Prep Type: Total/NA				
Analysis Batch: 129437									
Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Solids	93.6			93.45		%		0.2	10

QC Association Summary

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 880-35079-1
SDG: Chaves Co

GC/MS VOA

Prep Batch: 129020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35079-1	HN	Total/NA	Solid	5035	
880-35079-2	HW	Total/NA	Solid	5035	
880-35079-3	HE	Total/NA	Solid	5035	
880-35079-4	S1/WEST 1	Total/NA	Solid	5035	
880-35079-5	S2	Total/NA	Solid	5035	

Analysis Batch: 129108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35079-6	S2	Total/NA	Solid	8260D	129158
880-35079-7	S3	Total/NA	Solid	8260D	129158
880-35079-8	S3	Total/NA	Solid	8260D	129158
880-35079-9	S4	Total/NA	Solid	8260D	129158
880-35079-10	S4	Total/NA	Solid	8260D	129158
880-35079-12	S6	Total/NA	Solid	8260D	129158
880-35079-13	S6	Total/NA	Solid	8260D	129158
880-35079-14	S7	Total/NA	Solid	8260D	129158
880-35079-15	S7	Total/NA	Solid	8260D	129158
880-35079-16	S8/EAST1	Total/NA	Solid	8260D	129158
880-35079-17	S9/EAST2	Total/NA	Solid	8260D	129158
MB 860-129108/9	Method Blank	Total/NA	Solid	8260D	
LCS 860-129108/3	Lab Control Sample	Total/NA	Solid	8260D	
LCSD 860-129108/4	Lab Control Sample Dup	Total/NA	Solid	8260D	

Prep Batch: 129158

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35079-6	S2	Total/NA	Solid	5035	
880-35079-7	S3	Total/NA	Solid	5035	
880-35079-8	S3	Total/NA	Solid	5035	
880-35079-9	S4	Total/NA	Solid	5035	
880-35079-10	S4	Total/NA	Solid	5035	
880-35079-12	S6	Total/NA	Solid	5035	
880-35079-13	S6	Total/NA	Solid	5035	
880-35079-14	S7	Total/NA	Solid	5035	
880-35079-15	S7	Total/NA	Solid	5035	
880-35079-16	S8/EAST1	Total/NA	Solid	5035	
880-35079-17	S9/EAST2	Total/NA	Solid	5035	

Analysis Batch: 129306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35079-1	HN	Total/NA	Solid	8260D	129020
880-35079-2	HW	Total/NA	Solid	8260D	129020
880-35079-3	HE	Total/NA	Solid	8260D	129020
880-35079-4	S1/WEST 1	Total/NA	Solid	8260D	129020
880-35079-5	S2	Total/NA	Solid	8260D	129020
MB 860-129306/8	Method Blank	Total/NA	Solid	8260D	
LCS 860-129306/3	Lab Control Sample	Total/NA	Solid	8260D	
LCSD 860-129306/4	Lab Control Sample Dup	Total/NA	Solid	8260D	

Analysis Batch: 129308

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35079-11	S5/WEST 2	Total/NA	Solid	8260D	129365

Eurofins Midland

QC Association Summary

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 880-35079-1
SDG: Chaves Co

GC/MS VOA (Continued)

Analysis Batch: 129308 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 860-129308/9	Method Blank	Total/NA	Solid	8260D	
LCS 860-129308/3	Lab Control Sample	Total/NA	Solid	8260D	
LCSD 860-129308/4	Lab Control Sample Dup	Total/NA	Solid	8260D	

Prep Batch: 129365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35079-11	S5/WEST 2	Total/NA	Solid	5035	

Analysis Batch: 129704

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35079-1	HN	Total/NA	Solid	Total BTEX	
880-35079-2	HW	Total/NA	Solid	Total BTEX	
880-35079-3	HE	Total/NA	Solid	Total BTEX	
880-35079-4	S1/WEST 1	Total/NA	Solid	Total BTEX	
880-35079-5	S2	Total/NA	Solid	Total BTEX	
880-35079-6	S2	Total/NA	Solid	Total BTEX	
880-35079-7	S3	Total/NA	Solid	Total BTEX	
880-35079-8	S3	Total/NA	Solid	Total BTEX	
880-35079-9	S4	Total/NA	Solid	Total BTEX	
880-35079-10	S4	Total/NA	Solid	Total BTEX	
880-35079-11	S5/WEST 2	Total/NA	Solid	Total BTEX	
880-35079-12	S6	Total/NA	Solid	Total BTEX	
880-35079-13	S6	Total/NA	Solid	Total BTEX	
880-35079-14	S7	Total/NA	Solid	Total BTEX	
880-35079-15	S7	Total/NA	Solid	Total BTEX	
880-35079-16	S8/EAST1	Total/NA	Solid	Total BTEX	
880-35079-17	S9/EAST2	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 101425

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35079-1	HN	Total/NA	Solid	8015 NM	
880-35079-2	HW	Total/NA	Solid	8015 NM	
880-35079-3	HE	Total/NA	Solid	8015 NM	
880-35079-4	S1/WEST 1	Total/NA	Solid	8015 NM	
880-35079-5	S2	Total/NA	Solid	8015 NM	
880-35079-6	S2	Total/NA	Solid	8015 NM	
880-35079-7	S3	Total/NA	Solid	8015 NM	
880-35079-8	S3	Total/NA	Solid	8015 NM	
880-35079-9	S4	Total/NA	Solid	8015 NM	
880-35079-10	S4	Total/NA	Solid	8015 NM	
880-35079-11	S5/WEST 2	Total/NA	Solid	8015 NM	
880-35079-12	S6	Total/NA	Solid	8015 NM	
880-35079-13	S6	Total/NA	Solid	8015 NM	
880-35079-14	S7	Total/NA	Solid	8015 NM	
880-35079-15	S7	Total/NA	Solid	8015 NM	
880-35079-16	S8/EAST1	Total/NA	Solid	8015 NM	
880-35079-17	S9/EAST2	Total/NA	Solid	8015 NM	

Eurofins Midland

QC Association Summary

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 880-35079-1
SDG: Chaves Co

GC Semi VOA

Prep Batch: 129207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35079-1	HN	Total/NA	Solid	8015NM Prep	
880-35079-2	HW	Total/NA	Solid	8015NM Prep	
880-35079-3	HE	Total/NA	Solid	8015NM Prep	
880-35079-4	S1/WEST 1	Total/NA	Solid	8015NM Prep	
880-35079-5	S2	Total/NA	Solid	8015NM Prep	
880-35079-6	S2	Total/NA	Solid	8015NM Prep	
880-35079-7	S3	Total/NA	Solid	8015NM Prep	
880-35079-8	S3	Total/NA	Solid	8015NM Prep	
880-35079-9	S4	Total/NA	Solid	8015NM Prep	
880-35079-10	S4	Total/NA	Solid	8015NM Prep	
880-35079-11	S5/WEST 2	Total/NA	Solid	8015NM Prep	
880-35079-12	S6	Total/NA	Solid	8015NM Prep	
880-35079-13	S6	Total/NA	Solid	8015NM Prep	
880-35079-14	S7	Total/NA	Solid	8015NM Prep	
880-35079-15	S7	Total/NA	Solid	8015NM Prep	
880-35079-16	S8/EAST1	Total/NA	Solid	8015NM Prep	
880-35079-17	S9/EAST2	Total/NA	Solid	8015NM Prep	
MB 860-129207/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 860-129207/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 860-129207/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 129329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35079-6	S2	Total/NA	Solid	8015B NM	129207
880-35079-9	S4	Total/NA	Solid	8015B NM	129207
880-35079-10	S4	Total/NA	Solid	8015B NM	129207
880-35079-11	S5/WEST 2	Total/NA	Solid	8015B NM	129207
880-35079-12	S6	Total/NA	Solid	8015B NM	129207
880-35079-13	S6	Total/NA	Solid	8015B NM	129207
880-35079-17	S9/EAST2	Total/NA	Solid	8015B NM	129207

Analysis Batch: 129332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35079-1	HN	Total/NA	Solid	8015B NM	129207
880-35079-2	HW	Total/NA	Solid	8015B NM	129207
880-35079-3	HE	Total/NA	Solid	8015B NM	129207
880-35079-4	S1/WEST 1	Total/NA	Solid	8015B NM	129207
880-35079-5	S2	Total/NA	Solid	8015B NM	129207
880-35079-7	S3	Total/NA	Solid	8015B NM	129207
880-35079-8	S3	Total/NA	Solid	8015B NM	129207
880-35079-14	S7	Total/NA	Solid	8015B NM	129207
880-35079-15	S7	Total/NA	Solid	8015B NM	129207
880-35079-16	S8/EAST1	Total/NA	Solid	8015B NM	129207
MB 860-129207/1-A	Method Blank	Total/NA	Solid	8015B NM	129207
LCS 860-129207/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	129207
LCSD 860-129207/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	129207

Eurofins Midland

QC Association Summary

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 880-35079-1
SDG: Chaves Co

HPLC/IC

Analysis Batch: 129182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35079-1	HN	Total/NA	Solid	300.0	129184
880-35079-2	HW	Total/NA	Solid	300.0	129184
880-35079-3	HE	Total/NA	Solid	300.0	129184
880-35079-4 - DL	S1/WEST 1	Total/NA	Solid	300.0	129184
880-35079-5 - DL	S2	Total/NA	Solid	300.0	129184
880-35079-6	S2	Total/NA	Solid	300.0	129184
880-35079-7	S3	Total/NA	Solid	300.0	129184
880-35079-8	S3	Total/NA	Solid	300.0	129184
880-35079-9	S4	Total/NA	Solid	300.0	129184
880-35079-10 - DL	S4	Total/NA	Solid	300.0	129184
880-35079-11 - DL	S5/WEST 2	Total/NA	Solid	300.0	129184
880-35079-12 - DL	S6	Total/NA	Solid	300.0	129184
880-35079-13	S6	Total/NA	Solid	300.0	129184
880-35079-14	S7	Total/NA	Solid	300.0	129184
880-35079-15	S7	Total/NA	Solid	300.0	129184
880-35079-16	S8/EAST1	Total/NA	Solid	300.0	129184
880-35079-17	S9/EAST2	Total/NA	Solid	300.0	129184
MB 860-129184/1-A	Method Blank	Total/NA	Solid	300.0	129184
LCS 860-129184/2-A	Lab Control Sample	Total/NA	Solid	300.0	129184
LCSD 860-129184/3-A	Lab Control Sample Dup	Total/NA	Solid	300.0	129184

Prep Batch: 129184

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35079-1	HN	Total/NA	Solid	300_Prep	
880-35079-2	HW	Total/NA	Solid	300_Prep	
880-35079-3	HE	Total/NA	Solid	300_Prep	
880-35079-4 - DL	S1/WEST 1	Total/NA	Solid	300_Prep	
880-35079-5 - DL	S2	Total/NA	Solid	300_Prep	
880-35079-6	S2	Total/NA	Solid	300_Prep	
880-35079-7	S3	Total/NA	Solid	300_Prep	
880-35079-8	S3	Total/NA	Solid	300_Prep	
880-35079-9	S4	Total/NA	Solid	300_Prep	
880-35079-10 - DL	S4	Total/NA	Solid	300_Prep	
880-35079-11 - DL	S5/WEST 2	Total/NA	Solid	300_Prep	
880-35079-12 - DL	S6	Total/NA	Solid	300_Prep	
880-35079-13	S6	Total/NA	Solid	300_Prep	
880-35079-14	S7	Total/NA	Solid	300_Prep	
880-35079-15	S7	Total/NA	Solid	300_Prep	
880-35079-16	S8/EAST1	Total/NA	Solid	300_Prep	
880-35079-17	S9/EAST2	Total/NA	Solid	300_Prep	
MB 860-129184/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 860-129184/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	
LCSD 860-129184/3-A	Lab Control Sample Dup	Total/NA	Solid	300_Prep	

General Chemistry

Analysis Batch: 129437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35079-1	HN	Total/NA	Solid	SM 2540G	
880-35079-2	HW	Total/NA	Solid	SM 2540G	
880-35079-3	HE	Total/NA	Solid	SM 2540G	

Eurofins Midland

QC Association Summary

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 880-35079-1
SDG: Chaves Co

General Chemistry (Continued)

Analysis Batch: 129437 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-35079-4	S1/WEST 1	Total/NA	Solid	SM 2540G	
880-35079-5	S2	Total/NA	Solid	SM 2540G	
880-35079-6	S2	Total/NA	Solid	SM 2540G	
880-35079-7	S3	Total/NA	Solid	SM 2540G	
880-35079-8	S3	Total/NA	Solid	SM 2540G	
880-35079-9	S4	Total/NA	Solid	SM 2540G	
880-35079-10	S4	Total/NA	Solid	SM 2540G	
880-35079-11	S5/WEST 2	Total/NA	Solid	SM 2540G	
880-35079-12	S6	Total/NA	Solid	SM 2540G	
880-35079-13	S6	Total/NA	Solid	SM 2540G	
880-35079-14	S7	Total/NA	Solid	SM 2540G	
880-35079-15	S7	Total/NA	Solid	SM 2540G	
880-35079-16	S8/EAST1	Total/NA	Solid	SM 2540G	
880-35079-17	S9/EAST2	Total/NA	Solid	SM 2540G	
MB 860-129437/1	Method Blank	Total/NA	Solid	SM 2540G	
880-35079-1 DU	HN	Total/NA	Solid	SM 2540G	

Lab Chronicle

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 880-35079-1
SDG: Chaves Co

Client Sample ID: HN
Date Collected: 10/27/23 13:25
Date Received: 10/31/23 11:30

Lab Sample ID: 880-35079-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	129020	11/01/23 14:56	MTMG	EET HOU
Total/NA	Analysis	8260D		1	5 mL	5 mL	129306	11/03/23 15:38	MTMG	EET HOU
Total/NA	Analysis	Total BTEX		1			129704	11/03/23 15:38	KLV	EET HOU
Total/NA	Analysis	8015 NM		1			101425	11/03/23 14:07	CZT	EET HOU
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	129207	11/02/23 13:17	BH	EET HOU
Total/NA	Analysis	8015B NM		1			129332	11/03/23 14:07	CZT	EET HOU
Total/NA	Prep	300_Prep			5.02 g	50 mL	129184	11/02/23 11:31	HN	EET HOU
Total/NA	Analysis	300.0		1			129182	11/02/23 13:36	A1S	EET HOU
Total/NA	Analysis	SM 2540G		1			129437	11/03/23 14:22	JM	EET HOU

Client Sample ID: HW
Date Collected: 10/27/23 13:30
Date Received: 10/31/23 11:30

Lab Sample ID: 880-35079-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	129020	11/01/23 14:56	MTMG	EET HOU
Total/NA	Analysis	8260D		1	5 mL	5 mL	129306	11/03/23 16:00	MTMG	EET HOU
Total/NA	Analysis	Total BTEX		1			129704	11/03/23 16:00	KLV	EET HOU
Total/NA	Analysis	8015 NM		1			101425	11/03/23 14:28	CZT	EET HOU
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	129207	11/02/23 13:17	BH	EET HOU
Total/NA	Analysis	8015B NM		1			129332	11/03/23 14:28	CZT	EET HOU
Total/NA	Prep	300_Prep			5.01 g	50 mL	129184	11/02/23 11:31	HN	EET HOU
Total/NA	Analysis	300.0		1			129182	11/02/23 13:45	A1S	EET HOU
Total/NA	Analysis	SM 2540G		1			129437	11/03/23 14:22	JM	EET HOU

Client Sample ID: HE
Date Collected: 10/27/23 13:35
Date Received: 10/31/23 11:30

Lab Sample ID: 880-35079-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	129020	11/01/23 14:56	MTMG	EET HOU
Total/NA	Analysis	8260D		1	5 mL	5 mL	129306	11/03/23 16:22	MTMG	EET HOU
Total/NA	Analysis	Total BTEX		1			129704	11/03/23 16:22	KLV	EET HOU
Total/NA	Analysis	8015 NM		1			101425	11/03/23 15:09	CZT	EET HOU
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	129207	11/02/23 13:17	BH	EET HOU
Total/NA	Analysis	8015B NM		1			129332	11/03/23 15:09	CZT	EET HOU
Total/NA	Prep	300_Prep			4.97 g	50 mL	129184	11/02/23 11:31	HN	EET HOU
Total/NA	Analysis	300.0		1			129182	11/02/23 13:55	A1S	EET HOU
Total/NA	Analysis	SM 2540G		1			129437	11/03/23 14:22	JM	EET HOU

Lab Chronicle

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 880-35079-1
SDG: Chaves Co

Client Sample ID: S1/WEST 1
Date Collected: 10/27/23 11:00
Date Received: 10/31/23 11:30

Lab Sample ID: 880-35079-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	129020	11/01/23 14:56	MTMG	EET HOU
Total/NA	Analysis	8260D		1	5 mL	5 mL	129306	11/03/23 16:43	MTMG	EET HOU
Total/NA	Analysis	Total BTEX		1			129704	11/03/23 16:43	KLV	EET HOU
Total/NA	Analysis	8015 NM		1			101425	11/03/23 15:30	CZT	EET HOU
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	129207	11/02/23 13:17	BH	EET HOU
Total/NA	Analysis	8015B NM		1			129332	11/03/23 15:30	CZT	EET HOU
Total/NA	Prep	300_Prep	DL		4.99 g	50 mL	129184	11/02/23 11:31	HN	EET HOU
Total/NA	Analysis	300.0	DL	10			129182	11/02/23 14:15	A1S	EET HOU
Total/NA	Analysis	SM 2540G		1			129437	11/03/23 14:22	JM	EET HOU

Client Sample ID: S2
Date Collected: 10/27/23 11:05
Date Received: 10/31/23 11:30

Lab Sample ID: 880-35079-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	129020	11/01/23 14:56	MTMG	EET HOU
Total/NA	Analysis	8260D		1	5 mL	5 mL	129306	11/03/23 17:05	MTMG	EET HOU
Total/NA	Analysis	Total BTEX		1			129704	11/03/23 17:05	KLV	EET HOU
Total/NA	Analysis	8015 NM		1			101425	11/03/23 15:50	CZT	EET HOU
Total/NA	Prep	8015NM Prep			9.96 g	10 mL	129207	11/02/23 13:17	BH	EET HOU
Total/NA	Analysis	8015B NM		1			129332	11/03/23 15:50	CZT	EET HOU
Total/NA	Prep	300_Prep	DL		5.01 g	50 mL	129184	11/02/23 11:31	HN	EET HOU
Total/NA	Analysis	300.0	DL	10			129182	11/02/23 15:13	A1S	EET HOU
Total/NA	Analysis	SM 2540G		1			129437	11/03/23 14:22	JM	EET HOU

Client Sample ID: S2
Date Collected: 10/27/23 11:10
Date Received: 10/31/23 11:30

Lab Sample ID: 880-35079-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	129158	11/02/23 09:36	MTMG	EET HOU
Total/NA	Analysis	8260D		1	5 mL	5 mL	129108	11/02/23 14:02	MTMG	EET HOU
Total/NA	Analysis	Total BTEX		1			129704	11/02/23 14:02	KLV	EET HOU
Total/NA	Analysis	8015 NM		1			101425	11/03/23 18:35	CZT	EET HOU
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	129207	11/02/23 13:17	BH	EET HOU
Total/NA	Analysis	8015B NM		1			129329	11/03/23 18:35	T1S	EET HOU
Total/NA	Prep	300_Prep			4.98 g	50 mL	129184	11/02/23 11:31	HN	EET HOU
Total/NA	Analysis	300.0		1			129182	11/02/23 15:23	A1S	EET HOU
Total/NA	Analysis	SM 2540G		1			129437	11/03/23 14:22	JM	EET HOU

Lab Chronicle

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 880-35079-1
SDG: Chaves Co

Client Sample ID: S3
Date Collected: 10/27/23 11:15
Date Received: 10/31/23 11:30

Lab Sample ID: 880-35079-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	129158	11/02/23 09:36	MTMG	EET HOU
Total/NA	Analysis	8260D		1	5 mL	5 mL	129108	11/02/23 14:23	MTMG	EET HOU
Total/NA	Analysis	Total BTEX		1			129704	11/02/23 14:23	KLV	EET HOU
Total/NA	Analysis	8015 NM		1			101425	11/03/23 16:11	CZT	EET HOU
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	129207	11/02/23 13:17	BH	EET HOU
Total/NA	Analysis	8015B NM		1			129332	11/03/23 16:11	CZT	EET HOU
Total/NA	Prep	300_Prep			4.98 g	50 mL	129184	11/02/23 11:31	HN	EET HOU
Total/NA	Analysis	300.0		1			129182	11/02/23 15:33	A1S	EET HOU
Total/NA	Analysis	SM 2540G		1			129437	11/03/23 14:22	JM	EET HOU

Client Sample ID: S3
Date Collected: 10/27/23 11:20
Date Received: 10/31/23 11:30

Lab Sample ID: 880-35079-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	129158	11/02/23 09:36	MTMG	EET HOU
Total/NA	Analysis	8260D		1	5 mL	5 mL	129108	11/02/23 14:44	MTMG	EET HOU
Total/NA	Analysis	Total BTEX		1			129704	11/02/23 14:44	KLV	EET HOU
Total/NA	Analysis	8015 NM		1			101425	11/03/23 16:32	CZT	EET HOU
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	129207	11/02/23 13:17	BH	EET HOU
Total/NA	Analysis	8015B NM		1			129332	11/03/23 16:32	CZT	EET HOU
Total/NA	Prep	300_Prep			5.02 g	50 mL	129184	11/02/23 11:31	HN	EET HOU
Total/NA	Analysis	300.0		1			129182	11/02/23 15:42	A1S	EET HOU
Total/NA	Analysis	SM 2540G		1			129437	11/03/23 14:22	JM	EET HOU

Client Sample ID: S4
Date Collected: 10/27/23 11:25
Date Received: 10/31/23 11:30

Lab Sample ID: 880-35079-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	129158	11/02/23 09:36	MTMG	EET HOU
Total/NA	Analysis	8260D		1	5 mL	5 mL	129108	11/02/23 15:05	MTMG	EET HOU
Total/NA	Analysis	Total BTEX		1			129704	11/02/23 15:05	KLV	EET HOU
Total/NA	Analysis	8015 NM		1			101425	11/03/23 16:32	CZT	EET HOU
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	129207	11/02/23 13:17	BH	EET HOU
Total/NA	Analysis	8015B NM		1			129329	11/03/23 16:32	T1S	EET HOU
Total/NA	Prep	300_Prep			5.02 g	50 mL	129184	11/02/23 11:31	HN	EET HOU
Total/NA	Analysis	300.0		1			129182	11/02/23 15:52	A1S	EET HOU
Total/NA	Analysis	SM 2540G		1			129437	11/03/23 14:22	JM	EET HOU

Lab Chronicle

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 880-35079-1
SDG: Chaves Co

Client Sample ID: S4
Date Collected: 10/27/23 11:30
Date Received: 10/31/23 11:30

Lab Sample ID: 880-35079-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	129158	11/02/23 09:36	MTMG	EET HOU
Total/NA	Analysis	8260D		1	5 mL	5 mL	129108	11/02/23 15:26	MTMG	EET HOU
Total/NA	Analysis	Total BTEX		1			129704	11/02/23 15:26	KLV	EET HOU
Total/NA	Analysis	8015 NM		1			101425	11/03/23 16:52	CZT	EET HOU
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	129207	11/02/23 13:17	BH	EET HOU
Total/NA	Analysis	8015B NM		1			129329	11/03/23 16:52	T1S	EET HOU
Total/NA	Prep	300_Prep	DL		5.05 g	50 mL	129184	11/02/23 11:31	HN	EET HOU
Total/NA	Analysis	300.0	DL	10			129182	11/02/23 16:11	A1S	EET HOU
Total/NA	Analysis	SM 2540G		1			129437	11/03/23 14:22	JM	EET HOU

Client Sample ID: S5/WEST 2
Date Collected: 10/27/23 11:35
Date Received: 10/31/23 11:30

Lab Sample ID: 880-35079-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	129365	11/03/23 11:31	MTMG	EET HOU
Total/NA	Analysis	8260D		1	5 mL	5 mL	129308	11/03/23 14:35	MTMG	EET HOU
Total/NA	Analysis	Total BTEX		1			129704	11/03/23 14:35	KLV	EET HOU
Total/NA	Analysis	8015 NM		1			101425	11/03/23 17:13	CZT	EET HOU
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	129207	11/02/23 13:17	BH	EET HOU
Total/NA	Analysis	8015B NM		1			129329	11/03/23 17:13	T1S	EET HOU
Total/NA	Prep	300_Prep	DL		5.04 g	50 mL	129184	11/02/23 11:31	HN	EET HOU
Total/NA	Analysis	300.0	DL	10			129182	11/02/23 16:50	A1S	EET HOU
Total/NA	Analysis	SM 2540G		1			129437	11/03/23 14:22	JM	EET HOU

Client Sample ID: S6
Date Collected: 10/27/23 11:40
Date Received: 10/31/23 11:30

Lab Sample ID: 880-35079-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	129158	11/02/23 09:36	MTMG	EET HOU
Total/NA	Analysis	8260D		1	5 mL	5 mL	129108	11/02/23 15:47	MTMG	EET HOU
Total/NA	Analysis	Total BTEX		1			129704	11/02/23 15:47	KLV	EET HOU
Total/NA	Analysis	8015 NM		1			101425	11/03/23 17:33	CZT	EET HOU
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	129207	11/02/23 13:17	BH	EET HOU
Total/NA	Analysis	8015B NM		1			129329	11/03/23 17:33	T1S	EET HOU
Total/NA	Prep	300_Prep	DL		5.03 g	50 mL	129184	11/02/23 11:31	HN	EET HOU
Total/NA	Analysis	300.0	DL	10			129182	11/02/23 17:29	A1S	EET HOU
Total/NA	Analysis	SM 2540G		1			129437	11/03/23 14:22	JM	EET HOU

Lab Chronicle

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 880-35079-1
SDG: Chaves Co

Client Sample ID: S6
Date Collected: 10/27/23 11:45
Date Received: 10/31/23 11:30

Lab Sample ID: 880-35079-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	129158	11/02/23 09:36	MTMG	EET HOU
Total/NA	Analysis	8260D		1	5 mL	5 mL	129108	11/02/23 16:07	MTMG	EET HOU
Total/NA	Analysis	Total BTEX		1			129704	11/02/23 16:07	KLV	EET HOU
Total/NA	Analysis	8015 NM		1			101425	11/03/23 17:54	CZT	EET HOU
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	129207	11/02/23 13:17	BH	EET HOU
Total/NA	Analysis	8015B NM		1			129329	11/03/23 17:54	T1S	EET HOU
Total/NA	Prep	300_Prep			5.02 g	50 mL	129184	11/02/23 11:31	HN	EET HOU
Total/NA	Analysis	300.0		1			129182	11/02/23 17:42	A1S	EET HOU
Total/NA	Analysis	SM 2540G		1			129437	11/03/23 14:22	JM	EET HOU

Client Sample ID: S7
Date Collected: 10/27/23 11:50
Date Received: 10/31/23 11:30

Lab Sample ID: 880-35079-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	129158	11/02/23 09:36	MTMG	EET HOU
Total/NA	Analysis	8260D		1	5 mL	5 mL	129108	11/02/23 16:28	MTMG	EET HOU
Total/NA	Analysis	Total BTEX		1			129704	11/02/23 16:28	KLV	EET HOU
Total/NA	Analysis	8015 NM		1			101425	11/03/23 16:52	CZT	EET HOU
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	129207	11/02/23 13:17	BH	EET HOU
Total/NA	Analysis	8015B NM		1			129332	11/03/23 16:52	CZT	EET HOU
Total/NA	Prep	300_Prep			5.03 g	50 mL	129184	11/02/23 11:31	HN	EET HOU
Total/NA	Analysis	300.0		1			129182	11/02/23 18:07	A1S	EET HOU
Total/NA	Analysis	SM 2540G		1			129437	11/03/23 14:22	JM	EET HOU

Client Sample ID: S7
Date Collected: 10/27/23 11:55
Date Received: 10/31/23 11:30

Lab Sample ID: 880-35079-15
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	129158	11/02/23 09:36	MTMG	EET HOU
Total/NA	Analysis	8260D		1	5 mL	5 mL	129108	11/02/23 16:49	MTMG	EET HOU
Total/NA	Analysis	Total BTEX		1			129704	11/02/23 16:49	KLV	EET HOU
Total/NA	Analysis	8015 NM		1			101425	11/03/23 17:13	CZT	EET HOU
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	129207	11/02/23 13:17	BH	EET HOU
Total/NA	Analysis	8015B NM		1			129332	11/03/23 17:13	CZT	EET HOU
Total/NA	Prep	300_Prep			5.01 g	50 mL	129184	11/02/23 11:31	HN	EET HOU
Total/NA	Analysis	300.0		1			129182	11/02/23 18:20	A1S	EET HOU
Total/NA	Analysis	SM 2540G		1			129437	11/03/23 14:22	JM	EET HOU

Lab Chronicle

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 880-35079-1
SDG: Chaves Co

Client Sample ID: S8/EAST1
Date Collected: 10/27/23 12:00
Date Received: 10/31/23 11:30

Lab Sample ID: 880-35079-16
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	129158	11/02/23 09:36	MTMG	EET HOU
Total/NA	Analysis	8260D		1	5 mL	5 mL	129108	11/02/23 17:10	MTMG	EET HOU
Total/NA	Analysis	Total BTEX		1			129704	11/02/23 17:10	KLV	EET HOU
Total/NA	Analysis	8015 NM		1			101425	11/03/23 17:33	CZT	EET HOU
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	129207	11/02/23 13:17	BH	EET HOU
Total/NA	Analysis	8015B NM		1			129332	11/03/23 17:33	CZT	EET HOU
Total/NA	Prep	300_Prep			4.99 g	50 mL	129184	11/02/23 11:31	HN	EET HOU
Total/NA	Analysis	300.0		1			129182	11/02/23 18:58	A1S	EET HOU
Total/NA	Analysis	SM 2540G		1			129437	11/03/23 14:22	JM	EET HOU

Client Sample ID: S9/EAST2
Date Collected: 10/27/23 12:05
Date Received: 10/31/23 11:30

Lab Sample ID: 880-35079-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	129158	11/02/23 09:36	MTMG	EET HOU
Total/NA	Analysis	8260D		1	5 mL	5 mL	129108	11/02/23 17:31	MTMG	EET HOU
Total/NA	Analysis	Total BTEX		1			129704	11/02/23 17:31	KLV	EET HOU
Total/NA	Analysis	8015 NM		1			101425	11/03/23 18:15	CZT	EET HOU
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	129207	11/02/23 13:17	BH	EET HOU
Total/NA	Analysis	8015B NM		1			129329	11/03/23 18:15	T1S	EET HOU
Total/NA	Prep	300_Prep			4.97 g	50 mL	129184	11/02/23 11:31	HN	EET HOU
Total/NA	Analysis	300.0		1			129182	11/02/23 19:11	A1S	EET HOU
Total/NA	Analysis	SM 2540G		1			129437	11/03/23 14:22	JM	EET HOU

Laboratory References:
EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Accreditation/Certification Summary

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 880-35079-1
SDG: Chaves Co

Laboratory: Eurofins Houston

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704215-23-53	06-30-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
8015B NM	8015NM Prep	Solid	Diesel Range Organics (Over C10-C28)
8015B NM	8015NM Prep	Solid	Gasoline Range Organics (GRO)-C6-C10
8015B NM	8015NM Prep	Solid	Oil Range Organics (Over C28-C36)
Total BTEX		Solid	Total BTEX

Method Summary

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 880-35079-1
SDG: Chaves Co

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET HOU
Total BTEX	Total BTEX Calculation	TAL SOP	EET HOU
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET HOU
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET HOU
300.0	Anions, Ion Chromatography	EPA	EET HOU
SM 2540G	Total, Fixed, and Volatile Solids	SM	EET HOU
300_Prep	Anions, Ion Chromatography, 10% Wt/Vol	EPA	EET HOU
5035	Closed System Purge and Trap	SW846	EET HOU
8015NM Prep	Microextraction	SW846	EET HOU

Protocol References:

- EPA = US Environmental Protection Agency
- SM = "Standard Methods For The Examination Of Water And Wastewater"
- SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
- TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

- EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

Sample Summary

Client: Select Energy Services
Project/Site: Red Deer

Job ID: 880-35079-1
SDG: Chaves Co

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-35079-1	HN	Solid	10/27/23 13:25	10/31/23 11:30	0'
880-35079-2	HW	Solid	10/27/23 13:30	10/31/23 11:30	0'
880-35079-3	HE	Solid	10/27/23 13:35	10/31/23 11:30	0'
880-35079-4	S1/WEST 1	Solid	10/27/23 11:00	10/31/23 11:30	1'
880-35079-5	S2	Solid	10/27/23 11:05	10/31/23 11:30	0'
880-35079-6	S2	Solid	10/27/23 11:10	10/31/23 11:30	1'
880-35079-7	S3	Solid	10/27/23 11:15	10/31/23 11:30	0'
880-35079-8	S3	Solid	10/27/23 11:20	10/31/23 11:30	1'
880-35079-9	S4	Solid	10/27/23 11:25	10/31/23 11:30	0'
880-35079-10	S4	Solid	10/27/23 11:30	10/31/23 11:30	1'
880-35079-11	S5/WEST 2	Solid	10/27/23 11:35	10/31/23 11:30	1'
880-35079-12	S6	Solid	10/27/23 11:40	10/31/23 11:30	0'
880-35079-13	S6	Solid	10/27/23 11:45	10/31/23 11:30	1'
880-35079-14	S7	Solid	10/27/23 11:50	10/31/23 11:30	0'
880-35079-15	S7	Solid	10/27/23 11:55	10/31/23 11:30	1'
880-35079-16	S8/EAST1	Solid	10/27/23 12:00	10/31/23 11:30	1'
880-35079-17	S9/EAST2	Solid	10/27/23 12:05	10/31/23 11:30	1'



Environment Testing
Xenco

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199



880-35079 Chain of Custody

Project Manager TIM SAW BRICKER		Bill to (if different)		Work Order Comments	
Company Name SELECT WATER		Company Name		Program: <input type="checkbox"/> UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>	
Address 1502 E GREEN ST		Address		State of Project: <input type="checkbox"/> Level III <input type="checkbox"/> Level IV <input type="checkbox"/>	
City, State ZIP CARLSBAD NM 88220		City, State ZIP		Reporting: <input type="checkbox"/> Level II <input type="checkbox"/> Level III <input type="checkbox"/> Level IV <input type="checkbox"/>	
Phone 575-200-7551		Email Hatched@selectwater.com		Deliverables: <input type="checkbox"/> EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other	

Project Name RED DEER		Turn Around		Pres. Code		ANALYSIS REQUEST		Preservative Codes	
Project Number 2023-014	Due Date TAT starts the day received by the lab, if received by 4:30pm	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Rush	Thermometer ID	Wet Ice	Yes	No	None	NO
Project Location CHAVEZ CO								Cool	COOL
Sampler's Name TIM SAW BRICKER								HCL	HC
PO #								H ₂ SO ₄	H ₂
SAMPLE RECEIPT		Temp Blank		Yes		No		H ₃ PO ₄	
Samples Received Intact		Yes		No		Thermometer ID		NaHSO ₄	
Cooler Custody Seals		Yes		No		Correction Factor		Na ₂ S ₂ O ₃	
Sample Custody Seals		Yes		No		Temperature Reading		Zn Acetate+NaOH	
Total Containers		Yes		No		Corrected Temperature		NaOH+Ascorbic Acid	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Sample Comments
1W	S	10/27	1:25p	0'			
1W	S	10/27	1:30p	0'			
1E	S	10/27	1:35p	0'			
SL WEST 1	S	10/27	11:00a	1'			
S2	S	10/27	11:05a	0'			
S2	S	10/27	11:10a	1'			
S3	S	10/27	11:15a	0'			
S3	S	10/27	11:20a	1'			
S4	S	10/27	11:25a	0'			
S4	S	10/27	11:30a	1'			

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg 1631 / 245 1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco. Its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by (Signature) 	Received by (Signature) 	Date/Time 10/27	Relinquished by (Signature) 2 15:28	Received by (Signature) 	Date/Time 10/31/23
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2



Environment Testing
Xenco

Chain of Custody

Houston, TX (281) 240-4200, Dallas TX (214) 902-0300
Midland, TX (432) 704-5440 San Antonio, TX (210) 509-3334
EL Paso TX (915) 585-3443 Lubbock, TX (806) 794-1296
Hobbs NM (575) 392 7550 Carlsbad, NM (575) 988-3199

Loc: 880
35079

Work Order No: _____

www.xenco.com Page _____ of _____

Project Manager		Bill to (if different)	
Company Name		Company Name	
Address		Address	
City State ZIP		City State ZIP	
Phone		Email	

Project Name		Turn Around	
Project Number		Routine <input checked="" type="checkbox"/> Rush <input type="checkbox"/>	
Project Location		Due Date:	
Sampler's Name		TAT starts the day received by the lab, if received by 4:30pm	
P.O. #			

SAMPLE RECEIPT		Temp Blank		Yes No		Wet Ice		Yes No	
Samples Received Intact:		Yes No		Thermometer ID		Correction Factor		Temperature Reading	
Cooler Custody Seals:		Yes No		N/A		N/A		Corrected Temperature:	
Sample Custody Seals:		Yes No		N/A		N/A		Corrected Temperature:	
Total Containers:									

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Pres. Code	ANALYSIS REQUEST	Preservative Codes	Sample Comments
SS/WES12	S	10/27	11:35a	1'					None NO	DI Water H ₂ O
S10	S	10/27	11:40a	6'					Cool Cool	MeOH Me
S10	S	10/27	11:45a	1'					HCL HC	HNO ₃ HN
S7	S	10/27	11:50a	0'					H ₂ SO ₄ H ₂	NaOH Na
S7	S	10/27	11:55a	1'					H ₃ PO ₄ HP	
S8/EAS1	S	10/27	12:00p	1'					NaHSO ₄ NABIS	
S9/EAS12	S	10/27	12:05p	1'					Na ₂ S ₂ O ₃ NaSO ₃	
									Zn Acetate+NaOH Zn	
									NaOH+Ascorbic Acid SAPC	

Total	200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed	TCLP / SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg 1631 / 245 1 / 7470 / 7471		

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by (Signature)	Received by (Signature)	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	10/27
3	4	10/31/23
5	6	11/30

Revised Date: 08/25/2020 Rev 2020.2

Login Sample Receipt Checklist

Client: Select Energy Services

Job Number: 880-35079-1

SDG Number: Chaves Co

Login Number: 35079

List Number: 1

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

Question	Answer	Comment
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.	N/A	
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").	N/A	

Login Sample Receipt Checklist

Client: Select Energy Services

Job Number: 880-35079-1

SDG Number: Chaves Co

Login Number: 35079

List Source: Eurofins Houston

List Number: 2

List Creation: 11/01/23 01:27 PM

Creator: Baker, Jeremiah

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the 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	



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Bradley Wells
Hungry Horse LLC
PO BOX 1058
Hobbs, New Mexico 88241

Generated 2/19/2024 5:47:26 PM

JOB DESCRIPTION

Red Deer-Mack Energy

JOB NUMBER

880-39112-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701



Eurofins Midland

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.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Authorization



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2/19/2024 5:47:26 PM

Authorized for release by
Holly Taylor, Project Manager
Holly.Taylor@et.eurofinsus.com
(806)794-1296

Client: Hungry Horse LLC
Project/Site: Red Deer-Mack Energy

Laboratory Job ID: 880-39112-1

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Definitions/Glossary

Client: Hungry Horse LLC
Project/Site: Red Deer-Mack Energy

Job ID: 880-39112-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
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

Case Narrative

Client: Hungry Horse LLC
Project: Red Deer-Mack Energy

Job ID: 880-39112-1

Job ID: 880-39112-1

Eurofins Midland

Job Narrative 880-39112-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 2/8/2024 10:01 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 1.7°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: HZ South (880-39112-1), HZ South (880-39112-2), SP1 West (880-39112-3), SP4 West (880-39112-4), SP5 West (880-39112-5), SP6 East (880-39112-6) and SP7 East (880-39112-7).

GC VOA

Method 8021B: An incorrect volume of spiking solution was inadvertently added to the laboratory control sample duplicate (LCSD), matrix spike (MS), and matrix spike duplicate (MSD) associated with preparation batch 880-73232 and analytical batch 880-73419. Since only an acceptable LCS is required per the method, the data has been qualified and reported.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-73189 and analytical batch 880-73320 was outside the control limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: SP6 East (880-39112-6). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-73320 recovered below the lower control limit for Ethylbenzene, m,p-Xylenes and o-Xylene. An acceptable CCV was ran within the 12 hour window, therefore the data has been qualified and reported. The associated sample is impacted: (CCV 880-73320/64).

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

GC Semi VOA

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-72722 and analytical batch 880-73204 was outside the upper control limits.

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

HPLC/IC

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

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Client Sample Results

Client: Hungry Horse LLC
Project/Site: Red Deer-Mack Energy

Job ID: 880-39112-1

Client Sample ID: HZ South

Lab Sample ID: 880-39112-1

Date Collected: 02/06/24 09:00

Matrix: Solid

Date Received: 02/08/24 10:01

Sample Depth: Surf

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<0.00201	U	0.00201	mg/Kg	-	02/15/24 11:17	02/19/24 00:02	1	
Toluene	<0.00201	U *- *1	0.00201	mg/Kg	-	02/15/24 11:17	02/19/24 00:02	1	
Ethylbenzene	<0.00201	U	0.00201	mg/Kg	-	02/15/24 11:17	02/19/24 00:02	1	
m,p-Xylenes	<0.00402	U	0.00402	mg/Kg	-	02/15/24 11:17	02/19/24 00:02	1	
o-Xylene	<0.00201	U *- *1	0.00201	mg/Kg	-	02/15/24 11:17	02/19/24 00:02	1	
Xylenes, Total	<0.00402	U	0.00402	mg/Kg	-	02/15/24 11:17	02/19/24 00:02	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	100		70 - 130			02/15/24 11:17	02/19/24 00:02	1	
1,4-Difluorobenzene (Surr)	106		70 - 130			02/15/24 11:17	02/19/24 00:02	1	

Method: TAL SOP Total BTEX - Total BTEX Calculation									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Total BTEX	<0.00402	U	0.00402	mg/Kg	-		02/19/24 00:02	1	

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Total TPH	<50.5	U	50.5	mg/Kg	-		02/15/24 13:39	1	

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5	mg/Kg	-	02/09/24 10:47	02/15/24 13:39	1	
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5	mg/Kg	-	02/09/24 10:47	02/15/24 13:39	1	
Oil Range Organics (Over C28-C36)	<50.5	U	50.5	mg/Kg	-	02/09/24 10:47	02/15/24 13:39	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1-Chlorooctane (Surr)	118		70 - 130			02/09/24 10:47	02/15/24 13:39	1	
o-Terphenyl (Surr)	96		70 - 130			02/09/24 10:47	02/15/24 13:39	1	

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	148		4.96	mg/Kg	-		02/08/24 23:45	1	

Client Sample ID: HZ South

Lab Sample ID: 880-39112-2

Date Collected: 02/06/24 09:10

Matrix: Solid

Date Received: 02/08/24 10:01

Sample Depth: 1'

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<0.00202	U	0.00202	mg/Kg	-	02/15/24 11:17	02/19/24 00:22	1	
Toluene	<0.00202	U *- *1	0.00202	mg/Kg	-	02/15/24 11:17	02/19/24 00:22	1	
Ethylbenzene	<0.00202	U	0.00202	mg/Kg	-	02/15/24 11:17	02/19/24 00:22	1	
m,p-Xylenes	<0.00403	U	0.00403	mg/Kg	-	02/15/24 11:17	02/19/24 00:22	1	
o-Xylene	<0.00202	U *- *1	0.00202	mg/Kg	-	02/15/24 11:17	02/19/24 00:22	1	
Xylenes, Total	<0.00403	U	0.00403	mg/Kg	-	02/15/24 11:17	02/19/24 00:22	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	98		70 - 130			02/15/24 11:17	02/19/24 00:22	1	

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Client Sample Results

Client: Hungry Horse LLC
Project/Site: Red Deer-Mack Energy

Job ID: 880-39112-1

Client Sample ID: HZ South

Lab Sample ID: 880-39112-2

Date Collected: 02/06/24 09:10

Matrix: Solid

Date Received: 02/08/24 10:01

Sample Depth: 1'

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	105		70 - 130	02/15/24 11:17	02/19/24 00:22	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			02/19/24 00:22	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			02/15/24 14:01	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		02/09/24 10:47	02/15/24 14:01	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		02/09/24 10:47	02/15/24 14:01	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		02/09/24 10:47	02/15/24 14:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	107		70 - 130			02/09/24 10:47	02/15/24 14:01	1
o-Terphenyl (Surr)	88		70 - 130			02/09/24 10:47	02/15/24 14:01	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	389		4.95	mg/Kg			02/08/24 23:49	1

Client Sample ID: SP1 West

Lab Sample ID: 880-39112-3

Date Collected: 02/06/24 10:00

Matrix: Solid

Date Received: 02/08/24 10:01

Sample Depth: 4'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		02/15/24 11:17	02/19/24 00:43	1
Toluene	<0.00199	U *- *1	0.00199	mg/Kg		02/15/24 11:17	02/19/24 00:43	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		02/15/24 11:17	02/19/24 00:43	1
m,p-Xylenes	<0.00398	U	0.00398	mg/Kg		02/15/24 11:17	02/19/24 00:43	1
o-Xylene	<0.00199	U *+ *1	0.00199	mg/Kg		02/15/24 11:17	02/19/24 00:43	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		02/15/24 11:17	02/19/24 00:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130			02/15/24 11:17	02/19/24 00:43	1
1,4-Difluorobenzene (Surr)	103		70 - 130			02/15/24 11:17	02/19/24 00:43	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			02/19/24 00:43	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			02/15/24 14:46	1

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Client Sample Results

Client: Hungry Horse LLC
Project/Site: Red Deer-Mack Energy

Job ID: 880-39112-1

Client Sample ID: SP1 West

Lab Sample ID: 880-39112-3

Date Collected: 02/06/24 10:00

Matrix: Solid

Date Received: 02/08/24 10:01

Sample Depth: 4'

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		02/09/24 10:47	02/15/24 14:46	1	
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		02/09/24 10:47	02/15/24 14:46	1	
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		02/09/24 10:47	02/15/24 14:46	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1-Chlorooctane (Surr)	121		70 - 130			02/09/24 10:47	02/15/24 14:46	1	
o-Terphenyl (Surr)	102		70 - 130			02/09/24 10:47	02/15/24 14:46	1	

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	919		49.5	mg/Kg			02/09/24 00:03	10	

Client Sample ID: SP4 West

Lab Sample ID: 880-39112-4

Date Collected: 02/06/24 10:30

Matrix: Solid

Date Received: 02/08/24 10:01

Sample Depth: 4'

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<0.00198	U	0.00198	mg/Kg		02/15/24 11:17	02/19/24 01:04	1	
Toluene	<0.00198	U *- *1	0.00198	mg/Kg		02/15/24 11:17	02/19/24 01:04	1	
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		02/15/24 11:17	02/19/24 01:04	1	
m,p-Xylenes	<0.00396	U	0.00396	mg/Kg		02/15/24 11:17	02/19/24 01:04	1	
o-Xylene	<0.00198	U *+ *1	0.00198	mg/Kg		02/15/24 11:17	02/19/24 01:04	1	
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		02/15/24 11:17	02/19/24 01:04	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	101		70 - 130			02/15/24 11:17	02/19/24 01:04	1	
1,4-Difluorobenzene (Surr)	107		70 - 130			02/15/24 11:17	02/19/24 01:04	1	

Method: TAL SOP Total BTEX - Total BTEX Calculation									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Total BTEX	<0.00396	U	0.00396	mg/Kg			02/19/24 01:04	1	

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Total TPH	<49.6	U	49.6	mg/Kg			02/15/24 15:08	1	

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6	mg/Kg		02/09/24 10:47	02/15/24 15:08	1	
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6	mg/Kg		02/09/24 10:47	02/15/24 15:08	1	
Oil Range Organics (Over C28-C36)	<49.6	U	49.6	mg/Kg		02/09/24 10:47	02/15/24 15:08	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1-Chlorooctane (Surr)	129		70 - 130			02/09/24 10:47	02/15/24 15:08	1	
o-Terphenyl (Surr)	113		70 - 130			02/09/24 10:47	02/15/24 15:08	1	

Eurofins Midland

Client Sample Results

Client: Hungry Horse LLC
Project/Site: Red Deer-Mack Energy

Job ID: 880-39112-1

Client Sample ID: SP4 West

Lab Sample ID: 880-39112-4

Date Collected: 02/06/24 10:30

Matrix: Solid

Date Received: 02/08/24 10:01

Sample Depth: 4'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7200		99.6	mg/Kg			02/09/24 00:08	20

Client Sample ID: SP5 West

Lab Sample ID: 880-39112-5

Date Collected: 02/06/24 11:00

Matrix: Solid

Date Received: 02/08/24 10:01

Sample Depth: 4'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		02/15/24 12:26	02/17/24 08:46	1
Toluene	<0.00199	U	0.00199	mg/Kg		02/15/24 12:26	02/17/24 08:46	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		02/15/24 12:26	02/17/24 08:46	1
m,p-Xylenes	<0.00398	U	0.00398	mg/Kg		02/15/24 12:26	02/17/24 08:46	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		02/15/24 12:26	02/17/24 08:46	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		02/15/24 12:26	02/17/24 08:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		70 - 130			02/15/24 12:26	02/17/24 08:46	1
1,4-Difluorobenzene (Surr)	85		70 - 130			02/15/24 12:26	02/17/24 08:46	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			02/17/24 08:46	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7	mg/Kg			02/15/24 15:29	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7	mg/Kg		02/09/24 10:47	02/15/24 15:29	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7	mg/Kg		02/09/24 10:47	02/15/24 15:29	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7	mg/Kg		02/09/24 10:47	02/15/24 15:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	121		70 - 130			02/09/24 10:47	02/15/24 15:29	1
o-Terphenyl (Surr)	105		70 - 130			02/09/24 10:47	02/15/24 15:29	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1050		50.1	mg/Kg			02/09/24 00:13	10

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Client Sample Results

Client: Hungry Horse LLC
Project/Site: Red Deer-Mack Energy

Job ID: 880-39112-1

Client Sample ID: SP6 East

Lab Sample ID: 880-39112-6

Date Collected: 02/06/24 11:30

Matrix: Solid

Date Received: 02/08/24 10:01

Sample Depth: 4'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg	-	02/15/24 12:26	02/17/24 09:06	1
Toluene	<0.00198	U	0.00198	mg/Kg	-	02/15/24 12:26	02/17/24 09:06	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg	-	02/15/24 12:26	02/17/24 09:06	1
m,p-Xylenes	<0.00396	U	0.00396	mg/Kg	-	02/15/24 12:26	02/17/24 09:06	1
o-Xylene	<0.00198	U	0.00198	mg/Kg	-	02/15/24 12:26	02/17/24 09:06	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg	-	02/15/24 12:26	02/17/24 09:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	69	S1-	70 - 130			02/15/24 12:26	02/17/24 09:06	1
1,4-Difluorobenzene (Surr)	95		70 - 130			02/15/24 12:26	02/17/24 09:06	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg	-		02/17/24 09:06	1

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg	-		02/15/24 15:52	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg	-	02/09/24 10:47	02/15/24 15:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg	-	02/09/24 10:47	02/15/24 15:52	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg	-	02/09/24 10:47	02/15/24 15:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	101		70 - 130			02/09/24 10:47	02/15/24 15:52	1
o-Terphenyl (Surr)	86		70 - 130			02/09/24 10:47	02/15/24 15:52	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2570		50.2	mg/Kg	-		02/09/24 00:17	10

Client Sample ID: SP7 East

Lab Sample ID: 880-39112-7

Date Collected: 02/06/24 12:00

Matrix: Solid

Date Received: 02/08/24 10:01

Sample Depth: 4'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg	-	02/15/24 12:26	02/17/24 09:26	1
Toluene	<0.00202	U	0.00202	mg/Kg	-	02/15/24 12:26	02/17/24 09:26	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg	-	02/15/24 12:26	02/17/24 09:26	1
m,p-Xylenes	<0.00404	U	0.00404	mg/Kg	-	02/15/24 12:26	02/17/24 09:26	1
o-Xylene	<0.00202	U	0.00202	mg/Kg	-	02/15/24 12:26	02/17/24 09:26	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg	-	02/15/24 12:26	02/17/24 09:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	70		70 - 130			02/15/24 12:26	02/17/24 09:26	1

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Client Sample Results

Client: Hungry Horse LLC
Project/Site: Red Deer-Mack Energy

Job ID: 880-39112-1

Client Sample ID: SP7 East

Lab Sample ID: 880-39112-7

Date Collected: 02/06/24 12:00

Matrix: Solid

Date Received: 02/08/24 10:01

Sample Depth: 4'

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)									
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1,4-Difluorobenzene (Surr)	97		70 - 130			02/15/24 12:26	02/17/24 09:26	1	
Method: TAL SOP Total BTEX - Total BTEX Calculation									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Total BTEX	<0.00404	U	0.00404	mg/Kg			02/17/24 09:26	1	
Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Total TPH	<50.0	U	50.0	mg/Kg			02/15/24 16:14	1	
Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/09/24 10:47	02/15/24 16:14	1	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/09/24 10:47	02/15/24 16:14	1	
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/09/24 10:47	02/15/24 16:14	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1-Chlorooctane (Surr)	114		70 - 130			02/09/24 10:47	02/15/24 16:14	1	
o-Terphenyl (Surr)	97		70 - 130			02/09/24 10:47	02/15/24 16:14	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	1080		49.9	mg/Kg			02/09/24 00:22	10	

Surrogate Summary

Client: Hungry Horse LLC
Project/Site: Red Deer-Mack Energy

Job ID: 880-39112-1

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-39112-1	HZ South	100	106
880-39112-2	HZ South	98	105
880-39112-3	SP1 West	102	103
880-39112-4	SP4 West	101	107
880-39112-5	SP5 West	81	85
880-39112-5 MS	SP5 West	108	101
880-39112-5 MSD	SP5 West	103	115
880-39112-6	SP6 East	69 S1-	95
880-39112-7	SP7 East	70	97
LCS 880-73232/1-A	Lab Control Sample	94	100
LCS 880-73253/1-A	Lab Control Sample	107	122
LCSD 880-73232/2-A	Lab Control Sample Dup	0 S1-	0 S1-
LCSD 880-73253/2-A	Lab Control Sample Dup	108	117
MB 880-73189/5-A	Method Blank	69 S1-	79
MB 880-73232/5-A	Method Blank	78	100
MB 880-73253/5-A	Method Blank	73	92
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-39112-1	HZ South	118	96
880-39112-2	HZ South	107	88
880-39112-3	SP1 West	121	102
880-39112-4	SP4 West	129	113
880-39112-5	SP5 West	121	105
880-39112-6	SP6 East	101	86
880-39112-7	SP7 East	114	97
LCS 880-72722/2-A	Lab Control Sample	113	120
LCSD 880-72722/3-A	Lab Control Sample Dup	110	111
MB 880-72722/1-A	Method Blank	249 S1+	223 S1+
Surrogate Legend			
1CO = 1-Chlorooctane (Surr)			
OTPH = o-Terphenyl (Surr)			

QC Sample Results

Client: Hungry Horse LLC
Project/Site: Red Deer-Mack Energy

Job ID: 880-39112-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-73189/5-A						Client Sample ID: Method Blank		
Matrix: Solid						Prep Type: Total/NA		
Analysis Batch: 73320						Prep Batch: 73189		
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/14/24 16:41	02/16/24 21:44	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/14/24 16:41	02/16/24 21:44	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/14/24 16:41	02/16/24 21:44	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		02/14/24 16:41	02/16/24 21:44	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/14/24 16:41	02/16/24 21:44	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/14/24 16:41	02/16/24 21:44	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	69	S1-	70 - 130			02/14/24 16:41	02/16/24 21:44	1
1,4-Difluorobenzene (Surr)	79		70 - 130			02/14/24 16:41	02/16/24 21:44	1

Lab Sample ID: MB 880-73232/5-A						Client Sample ID: Method Blank		
Matrix: Solid						Prep Type: Total/NA		
Analysis Batch: 73419						Prep Batch: 73232		
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/15/24 11:17	02/18/24 17:04	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/15/24 11:17	02/18/24 17:04	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/15/24 11:17	02/18/24 17:04	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		02/15/24 11:17	02/18/24 17:04	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/15/24 11:17	02/18/24 17:04	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/15/24 11:17	02/18/24 17:04	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	78		70 - 130			02/15/24 11:17	02/18/24 17:04	1
1,4-Difluorobenzene (Surr)	100		70 - 130			02/15/24 11:17	02/18/24 17:04	1

Lab Sample ID: LCS 880-73232/1-A						Client Sample ID: Lab Control Sample		
Matrix: Solid						Prep Type: Total/NA		
Analysis Batch: 73419						Prep Batch: 73232		
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Benzene	0.100	0.1095		mg/Kg		110	70 - 130	
Toluene	0.100	0.08555		mg/Kg		86	70 - 130	
Ethylbenzene	0.100	0.08743		mg/Kg		87	70 - 130	
m,p-Xylenes	0.200	0.1764		mg/Kg		88	70 - 130	
o-Xylene	0.100	0.08884		mg/Kg		89	70 - 130	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
4-Bromofluorobenzene (Surr)	94		70 - 130					
1,4-Difluorobenzene (Surr)	100		70 - 130					

Lab Sample ID: LCSD 880-73232/2-A						Client Sample ID: Lab Control Sample Dup				
Matrix: Solid						Prep Type: Total/NA				
Analysis Batch: 73419						Prep Batch: 73232				
Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit	
Benzene	0.100	0.1215		mg/Kg		121	70 - 130	10	35	

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QC Sample Results

Client: Hungry Horse LLC
Project/Site: Red Deer-Mack Energy

Job ID: 880-39112-1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-73232/2-A

Matrix: Solid

Analysis Batch: 73419

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 73232

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene	0.100	<0.000456	U *- *1	mg/Kg		0.000	70 - 130	200	35
Ethylbenzene	0.100	0.09445		mg/Kg		94	70 - 130	8	35
m,p-Xylenes	0.200	0.1892		mg/Kg		95	70 - 130	7	35
o-Xylene	0.100	0.1340	*+ *1	mg/Kg		134	70 - 130	41	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	0	S1-	70 - 130
1,4-Difluorobenzene (Surr)	0	S1-	70 - 130

Lab Sample ID: MB 880-73253/5-A

Matrix: Solid

Analysis Batch: 73320

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 73253

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		02/15/24 12:26	02/17/24 08:24	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/15/24 12:26	02/17/24 08:24	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/15/24 12:26	02/17/24 08:24	1
m,p-Xylenes	<0.00400	U	0.00400	mg/Kg		02/15/24 12:26	02/17/24 08:24	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/15/24 12:26	02/17/24 08:24	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		02/15/24 12:26	02/17/24 08:24	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	73		70 - 130	02/15/24 12:26	02/17/24 08:24	1
1,4-Difluorobenzene (Surr)	92		70 - 130	02/15/24 12:26	02/17/24 08:24	1

Lab Sample ID: LCS 880-73253/1-A

Matrix: Solid

Analysis Batch: 73320

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 73253

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09136		mg/Kg		91	70 - 130
Toluene	0.100	0.08290		mg/Kg		83	70 - 130
Ethylbenzene	0.100	0.09001		mg/Kg		90	70 - 130
m,p-Xylenes	0.200	0.1872		mg/Kg		94	70 - 130
o-Xylene	0.100	0.09263		mg/Kg		93	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	122		70 - 130

Lab Sample ID: LCSD 880-73253/2-A

Matrix: Solid

Analysis Batch: 73320

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 73253

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1037		mg/Kg		104	70 - 130	13	35
Toluene	0.100	0.08674		mg/Kg		87	70 - 130	5	35

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QC Sample Results

Client: Hungry Horse LLC
Project/Site: Red Deer-Mack Energy

Job ID: 880-39112-1

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: LCSD 880-73253/2-A

Matrix: Solid

Analysis Batch: 73320

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 73253

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Ethylbenzene	0.100	0.1011		mg/Kg		101	70 - 130	12	35
m,p-Xylenes	0.200	0.2073		mg/Kg		104	70 - 130	10	35
o-Xylene	0.100	0.1022		mg/Kg		102	70 - 130	10	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	117		70 - 130

Lab Sample ID: 880-39112-5 MS

Matrix: Solid

Analysis Batch: 73320

Client Sample ID: SP5 West

Prep Type: Total/NA

Prep Batch: 73253

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.100	0.07308		mg/Kg		73	70 - 130		
Toluene	<0.00199	U	0.100	0.07527		mg/Kg		75	70 - 130		
Ethylbenzene	<0.00199	U	0.100	0.08392		mg/Kg		84	70 - 130		
m,p-Xylenes	<0.00398	U	0.200	0.1684		mg/Kg		84	70 - 130		
o-Xylene	<0.00199	U	0.100	0.08254		mg/Kg		82	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 880-39112-5 MSD

Matrix: Solid

Analysis Batch: 73320

Client Sample ID: SP5 West

Prep Type: Total/NA

Prep Batch: 73253

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.101	0.07562		mg/Kg		75	70 - 130	3	35
Toluene	<0.00199	U	0.101	0.07375		mg/Kg		73	70 - 130	2	35
Ethylbenzene	<0.00199	U	0.101	0.08016		mg/Kg		80	70 - 130	5	35
m,p-Xylenes	<0.00398	U	0.201	0.1611		mg/Kg		80	70 - 130	4	35
o-Xylene	<0.00199	U	0.101	0.07908		mg/Kg		79	70 - 130	4	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	115		70 - 130

Method: 8015B NM - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 880-72722/1-A

Matrix: Solid

Analysis Batch: 73204

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 72722

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/09/24 10:46	02/15/24 07:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/09/24 10:46	02/15/24 07:31	1

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QC Sample Results

Client: Hungry Horse LLC
Project/Site: Red Deer-Mack Energy

Job ID: 880-39112-1

Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: MB 880-72722/1-A						Client Sample ID: Method Blank		
Matrix: Solid						Prep Type: Total/NA		
Analysis Batch: 73204						Prep Batch: 72722		
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/09/24 10:46	02/15/24 07:31	1
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	249	S1+	70 - 130			02/09/24 10:46	02/15/24 07:31	1
o-Terphenyl (Surr)	223	S1+	70 - 130			02/09/24 10:46	02/15/24 07:31	1

Lab Sample ID: LCS 880-72722/2-A					Client Sample ID: Lab Control Sample				
Matrix: Solid					Prep Type: Total/NA				
Analysis Batch: 73204					Prep Batch: 72722				
Analyte			Spike	LCS	LCS			%Rec	
			Added	Result	Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics (GRO)-C6-C10			1000	941.1		mg/Kg		94	70 - 130
Diesel Range Organics (Over C10-C28)			1000	966.1		mg/Kg		97	70 - 130
		LCS	LCS						
Surrogate	%Recovery	Qualifier	Limits						
1-Chlorooctane (Surr)	113		70 - 130						
o-Terphenyl (Surr)	120		70 - 130						

Lab Sample ID: LCSD 880-72722/3-A						Client Sample ID: Lab Control Sample Dup			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 73204						Prep Batch: 72722			
Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	924.3		mg/Kg		92	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	989.1		mg/Kg		99	70 - 130	2	20
Surrogate	%Recovery	LCSD Qualifier	Limits						
1-Chlorooctane (Surr)	110		70 - 130						
o-Terphenyl (Surr)	111		70 - 130						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-72630/1-A						Client Sample ID: Method Blank			
Matrix: Solid						Prep Type: Soluble			
Analysis Batch: 72670									
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	<5.00	U	5.00	mg/Kg			02/08/24 22:12	1	
Lab Sample ID: LCS 880-72630/2-A						Client Sample ID: Lab Control Sample			
Matrix: Solid						Prep Type: Soluble			
Analysis Batch: 72670									
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	250	247.6		mg/Kg		99	90 - 110		

Eurofins Midland

QC Sample Results

Client: Hungry Horse LLC
Project/Site: Red Deer-Mack Energy

Job ID: 880-39112-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-72630/3-A					Client Sample ID: Lab Control Sample Dup				
Matrix: Solid					Prep Type: Soluble				
Analysis Batch: 72670									
Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limits
Chloride	250	251.6		mg/Kg		101	90 - 110	2	20

QC Association Summary

Client: Hungry Horse LLC
Project/Site: Red Deer-Mack Energy

Job ID: 880-39112-1

GC VOA

Prep Batch: 73189

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-73189/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 73232

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39112-1	HZ South	Total/NA	Solid	5035	
880-39112-2	HZ South	Total/NA	Solid	5035	
880-39112-3	SP1 West	Total/NA	Solid	5035	
880-39112-4	SP4 West	Total/NA	Solid	5035	
MB 880-73232/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-73232/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-73232/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Prep Batch: 73253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39112-5	SP5 West	Total/NA	Solid	5035	
880-39112-6	SP6 East	Total/NA	Solid	5035	
880-39112-7	SP7 East	Total/NA	Solid	5035	
MB 880-73253/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-73253/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-73253/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-39112-5 MS	SP5 West	Total/NA	Solid	5035	
880-39112-5 MSD	SP5 West	Total/NA	Solid	5035	

Analysis Batch: 73320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39112-5	SP5 West	Total/NA	Solid	8021B	73253
880-39112-6	SP6 East	Total/NA	Solid	8021B	73253
880-39112-7	SP7 East	Total/NA	Solid	8021B	73253
MB 880-73189/5-A	Method Blank	Total/NA	Solid	8021B	73189
MB 880-73253/5-A	Method Blank	Total/NA	Solid	8021B	73253
LCS 880-73253/1-A	Lab Control Sample	Total/NA	Solid	8021B	73253
LCSD 880-73253/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	73253
880-39112-5 MS	SP5 West	Total/NA	Solid	8021B	73253
880-39112-5 MSD	SP5 West	Total/NA	Solid	8021B	73253

Analysis Batch: 73419

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39112-1	HZ South	Total/NA	Solid	8021B	73232
880-39112-2	HZ South	Total/NA	Solid	8021B	73232
880-39112-3	SP1 West	Total/NA	Solid	8021B	73232
880-39112-4	SP4 West	Total/NA	Solid	8021B	73232
MB 880-73232/5-A	Method Blank	Total/NA	Solid	8021B	73232
LCS 880-73232/1-A	Lab Control Sample	Total/NA	Solid	8021B	73232
LCSD 880-73232/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	73232

Analysis Batch: 73578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39112-1	HZ South	Total/NA	Solid	Total BTEX	
880-39112-2	HZ South	Total/NA	Solid	Total BTEX	
880-39112-3	SP1 West	Total/NA	Solid	Total BTEX	
880-39112-4	SP4 West	Total/NA	Solid	Total BTEX	

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QC Association Summary

Client: Hungry Horse LLC
Project/Site: Red Deer-Mack Energy

Job ID: 880-39112-1

GC VOA (Continued)

Analysis Batch: 73578 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39112-5	SP5 West	Total/NA	Solid	Total BTEX	
880-39112-6	SP6 East	Total/NA	Solid	Total BTEX	
880-39112-7	SP7 East	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 72722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39112-1	HZ South	Total/NA	Solid	8015NM Prep	
880-39112-2	HZ South	Total/NA	Solid	8015NM Prep	
880-39112-3	SP1 West	Total/NA	Solid	8015NM Prep	
880-39112-4	SP4 West	Total/NA	Solid	8015NM Prep	
880-39112-5	SP5 West	Total/NA	Solid	8015NM Prep	
880-39112-6	SP6 East	Total/NA	Solid	8015NM Prep	
880-39112-7	SP7 East	Total/NA	Solid	8015NM Prep	
MB 880-72722/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-72722/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-72722/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 73204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39112-1	HZ South	Total/NA	Solid	8015B NM	72722
880-39112-2	HZ South	Total/NA	Solid	8015B NM	72722
880-39112-3	SP1 West	Total/NA	Solid	8015B NM	72722
880-39112-4	SP4 West	Total/NA	Solid	8015B NM	72722
880-39112-5	SP5 West	Total/NA	Solid	8015B NM	72722
880-39112-6	SP6 East	Total/NA	Solid	8015B NM	72722
880-39112-7	SP7 East	Total/NA	Solid	8015B NM	72722
MB 880-72722/1-A	Method Blank	Total/NA	Solid	8015B NM	72722
LCS 880-72722/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	72722
LCSD 880-72722/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	72722

Analysis Batch: 73287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39112-1	HZ South	Total/NA	Solid	8015 NM	
880-39112-2	HZ South	Total/NA	Solid	8015 NM	
880-39112-3	SP1 West	Total/NA	Solid	8015 NM	
880-39112-4	SP4 West	Total/NA	Solid	8015 NM	
880-39112-5	SP5 West	Total/NA	Solid	8015 NM	
880-39112-6	SP6 East	Total/NA	Solid	8015 NM	
880-39112-7	SP7 East	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 72630

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39112-1	HZ South	Soluble	Solid	DI Leach	
880-39112-2	HZ South	Soluble	Solid	DI Leach	
880-39112-3	SP1 West	Soluble	Solid	DI Leach	
880-39112-4	SP4 West	Soluble	Solid	DI Leach	
880-39112-5	SP5 West	Soluble	Solid	DI Leach	
880-39112-6	SP6 East	Soluble	Solid	DI Leach	

Eurofins Midland

QC Association Summary

Client: Hungry Horse LLC
Project/Site: Red Deer-Mack Energy

Job ID: 880-39112-1

HPLC/IC (Continued)

Leach Batch: 72630 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39112-7	SP7 East	Soluble	Solid	DI Leach	
MB 880-72630/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-72630/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-72630/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 72670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-39112-1	HZ South	Soluble	Solid	300.0	72630
880-39112-2	HZ South	Soluble	Solid	300.0	72630
880-39112-3	SP1 West	Soluble	Solid	300.0	72630
880-39112-4	SP4 West	Soluble	Solid	300.0	72630
880-39112-5	SP5 West	Soluble	Solid	300.0	72630
880-39112-6	SP6 East	Soluble	Solid	300.0	72630
880-39112-7	SP7 East	Soluble	Solid	300.0	72630
MB 880-72630/1-A	Method Blank	Soluble	Solid	300.0	72630
LCS 880-72630/2-A	Lab Control Sample	Soluble	Solid	300.0	72630
LCSD 880-72630/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	72630

Lab Chronicle

Client: Hungry Horse LLC
Project/Site: Red Deer-Mack Energy

Job ID: 880-39112-1

Client Sample ID: HZ South
Date Collected: 02/06/24 09:00
Date Received: 02/08/24 10:01

Lab Sample ID: 880-39112-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	73232	02/15/24 11:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73419	02/19/24 00:02	SM	EET MID
Total/NA	Analysis	Total BTEX		1			73578	02/19/24 00:02	SM	EET MID
Total/NA	Analysis	8015 NM		1			73287	02/15/24 13:39	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	72722	02/09/24 10:47	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73204	02/15/24 13:39	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	72630	02/08/24 11:03	SA	EET MID
Soluble	Analysis	300.0		1			72670	02/08/24 23:45	CH	EET MID

Client Sample ID: HZ South
Date Collected: 02/06/24 09:10
Date Received: 02/08/24 10:01

Lab Sample ID: 880-39112-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	73232	02/15/24 11:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73419	02/19/24 00:22	SM	EET MID
Total/NA	Analysis	Total BTEX		1			73578	02/19/24 00:22	SM	EET MID
Total/NA	Analysis	8015 NM		1			73287	02/15/24 14:01	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	72722	02/09/24 10:47	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73204	02/15/24 14:01	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	72630	02/08/24 11:03	SA	EET MID
Soluble	Analysis	300.0		1			72670	02/08/24 23:49	CH	EET MID

Client Sample ID: SP1 West
Date Collected: 02/06/24 10:00
Date Received: 02/08/24 10:01

Lab Sample ID: 880-39112-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	73232	02/15/24 11:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73419	02/19/24 00:43	SM	EET MID
Total/NA	Analysis	Total BTEX		1			73578	02/19/24 00:43	SM	EET MID
Total/NA	Analysis	8015 NM		1			73287	02/15/24 14:46	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	72722	02/09/24 10:47	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73204	02/15/24 14:46	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	72630	02/08/24 11:03	SA	EET MID
Soluble	Analysis	300.0		10			72670	02/09/24 00:03	CH	EET MID

Client Sample ID: SP4 West
Date Collected: 02/06/24 10:30
Date Received: 02/08/24 10:01

Lab Sample ID: 880-39112-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	73232	02/15/24 11:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73419	02/19/24 01:04	SM	EET MID
Total/NA	Analysis	Total BTEX		1			73578	02/19/24 01:04	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Hungry Horse LLC
Project/Site: Red Deer-Mack Energy

Job ID: 880-39112-1

Client Sample ID: SP4 West
Date Collected: 02/06/24 10:30
Date Received: 02/08/24 10:01

Lab Sample ID: 880-39112-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			73287	02/15/24 15:08	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	72722	02/09/24 10:47	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73204	02/15/24 15:08	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	72630	02/08/24 11:03	SA	EET MID
Soluble	Analysis	300.0		20			72670	02/09/24 00:08	CH	EET MID

Client Sample ID: SP5 West
Date Collected: 02/06/24 11:00
Date Received: 02/08/24 10:01

Lab Sample ID: 880-39112-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	73253	02/15/24 12:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73320	02/17/24 08:46	SM	EET MID
Total/NA	Analysis	Total BTEX		1			73578	02/17/24 08:46	SM	EET MID
Total/NA	Analysis	8015 NM		1			73287	02/15/24 15:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	72722	02/09/24 10:47	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73204	02/15/24 15:29	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	72630	02/08/24 11:03	SA	EET MID
Soluble	Analysis	300.0		10			72670	02/09/24 00:13	CH	EET MID

Client Sample ID: SP6 East
Date Collected: 02/06/24 11:30
Date Received: 02/08/24 10:01

Lab Sample ID: 880-39112-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	73253	02/15/24 12:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73320	02/17/24 09:06	SM	EET MID
Total/NA	Analysis	Total BTEX		1			73578	02/17/24 09:06	SM	EET MID
Total/NA	Analysis	8015 NM		1			73287	02/15/24 15:52	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	72722	02/09/24 10:47	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73204	02/15/24 15:52	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	72630	02/08/24 11:03	SA	EET MID
Soluble	Analysis	300.0		10			72670	02/09/24 00:17	CH	EET MID

Client Sample ID: SP7 East
Date Collected: 02/06/24 12:00
Date Received: 02/08/24 10:01

Lab Sample ID: 880-39112-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	73253	02/15/24 12:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	73320	02/17/24 09:26	SM	EET MID
Total/NA	Analysis	Total BTEX		1			73578	02/17/24 09:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			73287	02/15/24 16:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	72722	02/09/24 10:47	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	73204	02/15/24 16:14	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Hungry Horse LLC
Project/Site: Red Deer-Mack Energy

Job ID: 880-39112-1

Client Sample ID: SP7 East

Date Collected: 02/06/24 12:00

Date Received: 02/08/24 10:01

Lab Sample ID: 880-39112-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	72630	02/08/24 11:03	SA	EET MID
Soluble	Analysis	300.0		10			72670	02/09/24 00:22	CH	EET MID

Laboratory References:
EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

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Accreditation/Certification Summary

Client: Hungry Horse LLC
Project/Site: Red Deer-Mack Energy

Job ID: 880-39112-1

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	06-30-24
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Hungry Horse LLC
Project/Site: Red Deer-Mack Energy

Job ID: 880-39112-1

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

- ASTM = ASTM International
- EPA = US Environmental Protection Agency
- SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
- TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

- EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Hungry Horse LLC
Project/Site: Red Deer-Mack Energy

Job ID: 880-39112-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-39112-1	HZ South	Solid	02/06/24 09:00	02/08/24 10:01	Surf
880-39112-2	HZ South	Solid	02/06/24 09:10	02/08/24 10:01	1'
880-39112-3	SP1 West	Solid	02/06/24 10:00	02/08/24 10:01	4'
880-39112-4	SP4 West	Solid	02/06/24 10:30	02/08/24 10:01	4'
880-39112-5	SP5 West	Solid	02/06/24 11:00	02/08/24 10:01	4'
880-39112-6	SP6 East	Solid	02/06/24 11:30	02/08/24 10:01	4'
880-39112-7	SP7 East	Solid	02/06/24 12:00	02/08/24 10:01	4'

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Chain of Custody

Houston TX (281) 240-4200 Dallas TX (214) 902 0300
 Midland TX (432) 704-5440 San Antonio TX (210) 509 3334
 EL Paso TX (915) 585 3443 Lubbock TX (806) 794-1296
 Hobbs NM (575) 392 7550 Carlsbad NM (575) 988-3199



880-39112 Chain of Custody

Project Manager	Bradley Wells	Bill to (if different)	Timsan Bricker
Company Name	Hungry Horse LLC	Company Name	Select Energy
Address	4024 Plains Hwy	Address	1502 E Greene St
City State ZIP	Lovington, NM 88260	City State ZIP	Carlsbad
Phone	575 393-3386	Email	tbricker@selectwater.com and pm@hungry-horse.com

Work Order Comments	
Program	UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project	New Mexico
Reporting Level	Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> RRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables	EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other <input type="checkbox"/>

Project Name		Turn Around		Parameters		ANALYSIS REQUEST												Preservative Codes	
Project Number	Project Location	Due Date	Temp Blank	Temp Blank	Temp Blank	Temp Blank	Temp Blank	Temp Blank	Temp Blank	Temp Blank	Temp Blank	Temp Blank	Temp Blank	Temp Blank	Temp Blank	Temp Blank	Temp Blank		
1	HZ South	2/6/24	9:00	Surf	Grab	1	X	X	X	X	X	X	X	X	X	X	X		
2	HZ South	2/6/24	9:10	1'	Grab	1	X	X	X	X	X	X	X	X	X	X	X		
3	SP1 West	2/6/24	10:00	4'	Grab	1	X	X	X	X	X	X	X	X	X	X	X		
4	SP4 West	2/6/24	10:30	4'	Grab	1	X	X	X	X	X	X	X	X	X	X	X		
5	SP5 West	2/6/24	11:00	4'	Grab	1	X	X	X	X	X	X	X	X	X	X	X		
6	SP6 East	2/6/24	11:30	4'	Grab	1	X	X	X	X	X	X	X	X	X	X	X		
7	SP7 East	2/6/24	12:00	4'	Grab	1	X	X	X	X	X	X	X	X	X	X	X		

Total	200 7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed	TCLP / SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg 1631 / 245.1 / 7470 / 7471			

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$65.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
1 <i>[Signature]</i>	2 <i>[Signature]</i>	02-08-24	3 <i>[Signature]</i>	4 <i>[Signature]</i>	02-08-24
5 <i>[Signature]</i>	6 <i>[Signature]</i>	10:01			

Login Sample Receipt Checklist

Client: Hungry Horse LLC

Job Number: 880-39112-1

Login Number: 39112

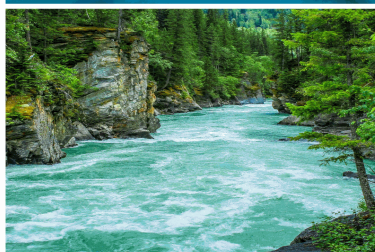
List Number: 1

Creator: Wheeler, Jazmine

List Source: Eurofins Midland

Question	Answer	Comment
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.	N/A	
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").	N/A	

Report to:
Bradley Wells



envirotech

Practical Solutions for a Better Tomorrow

Analytical Report

Select Water Solutions, LLC

Project Name: Red Deer - Mack Energy

Work Order: E406166

Job Number: 24019-0001

Received: 6/19/2024

Revision: 1

Report Reviewed By:

Walter Hinchman
Laboratory Director
6/21/24

5796 U.S. Hwy 64
Farmington, NM 87401

Phone: (505) 632-1881
Envirotech-inc.com



Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.
Statement of Data Authenticity: Envirotech Inc. attests the data reported has not been altered in any way.
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.
Envirotech Inc. holds the Utah TNI certification NM00979 for data reported.
Envirotech Inc. holds the Texas TNI certification T104704557 for data reported.

Date Reported: 6/21/24

Bradley Wells
PO Box 1715
Gainesville, TX 76241



Project Name: Red Deer - Mack Energy
Workorder: E406166
Date Received: 6/19/2024 7:00:32AM

Bradley Wells,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 6/19/2024 7:00:32AM, under the Project Name: Red Deer - Mack Energy.

The analytical test results summarized in this report with the Project Name: Red Deer - Mack Energy apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues regarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

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Sample Summary

Select Water Solutions, LLC	Project Name:	Red Deer - Mack Energy	Reported:
PO Box 1715	Project Number:	24019-0001	
Gainesville TX, 76241	Project Manager:	Bradley Wells	06/21/24 14:24

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
SP1 West 6'	E406166-01A	Soil	06/17/24	06/19/24	Glass Jar, 2 oz.
SP4 West 6'	E406166-02A	Soil	06/17/24	06/19/24	Glass Jar, 2 oz.
SP5 West 6'	E406166-03A	Soil	06/17/24	06/19/24	Glass Jar, 2 oz.
SP6 East 6'	E406166-04A	Soil	06/17/24	06/19/24	Glass Jar, 2 oz.
SP7 East 6'	E406166-05A	Soil	06/17/24	06/19/24	Glass Jar, 2 oz.



Sample Data

Select Water Solutions, LLC PO Box 1715 Gainesville TX, 76241	Project Name: Red Deer - Mack Energy Project Number: 24019-0001 Project Manager: Bradley Wells	Reported: 6/21/2024 2:24:38PM
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SP1 West 6'
E406166-01

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B	mg/kg	mg/kg	Analyst: IY		Batch: 2425047	
Benzene	ND	0.0250	1	06/18/24	06/20/24	
Ethylbenzene	ND	0.0250	1	06/18/24	06/20/24	
Toluene	ND	0.0250	1	06/18/24	06/20/24	
o-Xylene	ND	0.0250	1	06/18/24	06/20/24	
p,m-Xylene	ND	0.0500	1	06/18/24	06/20/24	
Total Xylenes	ND	0.0250	1	06/18/24	06/20/24	
Surrogate: Bromofluorobenzene		98.7 %	70-130	06/18/24	06/20/24	
Surrogate: 1,2-Dichloroethane-d4		98.3 %	70-130	06/18/24	06/20/24	
Surrogate: Toluene-d8		109 %	70-130	06/18/24	06/20/24	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: IY		Batch: 2425047	
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/18/24	06/20/24	
Surrogate: Bromofluorobenzene		98.7 %	70-130	06/18/24	06/20/24	
Surrogate: 1,2-Dichloroethane-d4		98.3 %	70-130	06/18/24	06/20/24	
Surrogate: Toluene-d8		109 %	70-130	06/18/24	06/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: NV		Batch: 2425051	
Diesel Range Organics (C10-C28)	ND	25.0	1	06/19/24	06/19/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/19/24	06/19/24	
Surrogate: n-Nonane		81.0 %	50-200	06/19/24	06/19/24	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: WF		Batch: 2425053	
Chloride	275	200	10	06/19/24	06/19/24	



Sample Data

Select Water Solutions, LLC	Project Name:	Red Deer - Mack Energy	
PO Box 1715	Project Number:	24019-0001	Reported:
Gainesville TX, 76241	Project Manager:	Bradley Wells	6/21/2024 2:24:38PM

SP4 West 6'
E406166-02

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2425047	
Benzene	ND	0.0250	1	06/18/24	06/20/24	
Ethylbenzene	ND	0.0250	1	06/18/24	06/20/24	
Toluene	ND	0.0250	1	06/18/24	06/20/24	
o-Xylene	ND	0.0250	1	06/18/24	06/20/24	
p,m-Xylene	ND	0.0500	1	06/18/24	06/20/24	
Total Xylenes	ND	0.0250	1	06/18/24	06/20/24	
Surrogate: Bromofluorobenzene	86.1 %	70-130		06/18/24	06/20/24	
Surrogate: 1,2-Dichloroethane-d4	97.4 %	70-130		06/18/24	06/20/24	
Surrogate: Toluene-d8	107 %	70-130		06/18/24	06/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2425047	
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/18/24	06/20/24	
Surrogate: Bromofluorobenzene	86.1 %	70-130		06/18/24	06/20/24	
Surrogate: 1,2-Dichloroethane-d4	97.4 %	70-130		06/18/24	06/20/24	
Surrogate: Toluene-d8	107 %	70-130		06/18/24	06/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2425051	
Diesel Range Organics (C10-C28)	ND	25.0	1	06/19/24	06/19/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/19/24	06/19/24	
Surrogate: n-Nonane	83.1 %	50-200		06/19/24	06/19/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: WF		Batch: 2425053	
Chloride	202	200	10	06/19/24	06/19/24	



Sample Data

Select Water Solutions, LLC
PO Box 1715
Gainesville TX, 76241

Project Name: Red Deer - Mack Energy
Project Number: 24019-0001
Project Manager: Bradley Wells

Reported:
6/21/2024 2:24:38PM

SP5 West 6'

E406166-03

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2425047	
Benzene	ND	0.0250	1	06/18/24	06/20/24	
Ethylbenzene	ND	0.0250	1	06/18/24	06/20/24	
Toluene	ND	0.0250	1	06/18/24	06/20/24	
o-Xylene	ND	0.0250	1	06/18/24	06/20/24	
p,m-Xylene	ND	0.0500	1	06/18/24	06/20/24	
Total Xylenes	ND	0.0250	1	06/18/24	06/20/24	
Surrogate: Bromofluorobenzene		104 %	70-130	06/18/24	06/20/24	
Surrogate: 1,2-Dichloroethane-d4		100 %	70-130	06/18/24	06/20/24	
Surrogate: Toluene-d8		107 %	70-130	06/18/24	06/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2425047	
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/18/24	06/20/24	
Surrogate: Bromofluorobenzene		104 %	70-130	06/18/24	06/20/24	
Surrogate: 1,2-Dichloroethane-d4		100 %	70-130	06/18/24	06/20/24	
Surrogate: Toluene-d8		107 %	70-130	06/18/24	06/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2425051	
Diesel Range Organics (C10-C28)	ND	25.0	1	06/19/24	06/19/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/19/24	06/19/24	
Surrogate: n-Nonane		85.8 %	50-200	06/19/24	06/19/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: WF		Batch: 2425053	
Chloride	ND	200	10	06/19/24	06/19/24	



Sample Data

Select Water Solutions, LLC	Project Name:	Red Deer - Mack Energy	
PO Box 1715	Project Number:	24019-0001	Reported:
Gainesville TX, 76241	Project Manager:	Bradley Wells	6/21/2024 2:24:38PM

SP6 East 6'
E406166-04

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg		Analyst: IY		Batch: 2425047
Benzene	ND	0.0250	1	06/18/24	06/20/24	
Ethylbenzene	ND	0.0250	1	06/18/24	06/20/24	
Toluene	ND	0.0250	1	06/18/24	06/20/24	
o-Xylene	ND	0.0250	1	06/18/24	06/20/24	
p,m-Xylene	ND	0.0500	1	06/18/24	06/20/24	
Total Xylenes	ND	0.0250	1	06/18/24	06/20/24	
Surrogate: Bromofluorobenzene		103 %	70-130	06/18/24	06/20/24	
Surrogate: 1,2-Dichloroethane-d4		98.3 %	70-130	06/18/24	06/20/24	
Surrogate: Toluene-d8		105 %	70-130	06/18/24	06/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg		Analyst: IY		Batch: 2425047
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/18/24	06/20/24	
Surrogate: Bromofluorobenzene		103 %	70-130	06/18/24	06/20/24	
Surrogate: 1,2-Dichloroethane-d4		98.3 %	70-130	06/18/24	06/20/24	
Surrogate: Toluene-d8		105 %	70-130	06/18/24	06/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg		Analyst: NV		Batch: 2425051
Diesel Range Organics (C10-C28)	ND	25.0	1	06/19/24	06/19/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/19/24	06/19/24	
Surrogate: n-Nonane		81.1 %	50-200	06/19/24	06/19/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg		Analyst: WF		Batch: 2425053
Chloride	453	200	10	06/19/24	06/19/24	



Sample Data

Select Water Solutions, LLC	Project Name:	Red Deer - Mack Energy	Reported: 6/21/2024 2:24:38PM
PO Box 1715	Project Number:	24019-0001	
Gainesville TX, 76241	Project Manager:	Bradley Wells	

SP7 East 6'
E406166-05

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organic Compounds by EPA 8260B						
	mg/kg	mg/kg	Analyst: IY		Batch: 2425047	
Benzene	ND	0.0250	1	06/18/24	06/20/24	
Ethylbenzene	ND	0.0250	1	06/18/24	06/20/24	
Toluene	ND	0.0250	1	06/18/24	06/20/24	
o-Xylene	ND	0.0250	1	06/18/24	06/20/24	
p,m-Xylene	ND	0.0500	1	06/18/24	06/20/24	
Total Xylenes	ND	0.0250	1	06/18/24	06/20/24	
Surrogate: Bromofluorobenzene	96.6 %	70-130		06/18/24	06/20/24	
Surrogate: 1,2-Dichloroethane-d4	94.5 %	70-130		06/18/24	06/20/24	
Surrogate: Toluene-d8	105 %	70-130		06/18/24	06/20/24	
Nonhalogenated Organics by EPA 8015D - GRO						
	mg/kg	mg/kg	Analyst: IY		Batch: 2425047	
Gasoline Range Organics (C6-C10)	ND	20.0	1	06/18/24	06/20/24	
Surrogate: Bromofluorobenzene	96.6 %	70-130		06/18/24	06/20/24	
Surrogate: 1,2-Dichloroethane-d4	94.5 %	70-130		06/18/24	06/20/24	
Surrogate: Toluene-d8	105 %	70-130		06/18/24	06/20/24	
Nonhalogenated Organics by EPA 8015D - DRO/ORO						
	mg/kg	mg/kg	Analyst: NV		Batch: 2425051	
Diesel Range Organics (C10-C28)	ND	25.0	1	06/19/24	06/19/24	
Oil Range Organics (C28-C36)	ND	50.0	1	06/19/24	06/19/24	
Surrogate: n-Nonane	78.8 %	50-200		06/19/24	06/19/24	
Anions by EPA 300.0/9056A						
	mg/kg	mg/kg	Analyst: WF		Batch: 2425053	
Chloride	277	200	10	06/19/24	06/19/24	



Select Water Solutions, LLC	Project Name:	Red Deer - Mack Energy	Reported:
PO Box 1715	Project Number:	24019-0001	
Gainesville TX, 76241	Project Manager:	Bradley Wells	6/21/2024 2:24:38PM

Volatile Organic Compounds by EPA 8260B

Analyst: IY

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2425047-BLK1) Prepared: 06/19/24 Analyzed: 06/20/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: Bromofluorobenzene	0.562		0.500		112	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.444		0.500		88.7	70-130			
Surrogate: Toluene-d8	0.528		0.500		106	70-130			

LCS (2425047-BS1) Prepared: 06/19/24 Analyzed: 06/20/24

Benzene	2.04	0.0250	2.50		81.7	70-130			
Ethylbenzene	2.20	0.0250	2.50		88.0	70-130			
Toluene	2.18	0.0250	2.50		87.0	70-130			
o-Xylene	2.29	0.0250	2.50		91.7	70-130			
p,m-Xylene	4.56	0.0500	5.00		91.2	70-130			
Total Xylenes	6.85	0.0250	7.50		91.4	70-130			
Surrogate: Bromofluorobenzene	0.567		0.500		113	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.495		0.500		98.9	70-130			
Surrogate: Toluene-d8	0.520		0.500		104	70-130			

Matrix Spike (2425047-MS1) Source: E406163-07 Prepared: 06/19/24 Analyzed: 06/20/24

Benzene	2.24	0.0250	2.50	ND	89.7	48-131			
Ethylbenzene	2.40	0.0250	2.50	ND	95.9	45-135			
Toluene	2.37	0.0250	2.50	ND	94.8	48-130			
o-Xylene	2.55	0.0250	2.50	ND	102	43-135			
p,m-Xylene	5.08	0.0500	5.00	ND	102	43-135			
Total Xylenes	7.63	0.0250	7.50	ND	102	43-135			
Surrogate: Bromofluorobenzene	0.573		0.500		115	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.494		0.500		98.8	70-130			
Surrogate: Toluene-d8	0.518		0.500		104	70-130			

Matrix Spike Dup (2425047-MSD1) Source: E406163-07 Prepared: 06/19/24 Analyzed: 06/20/24

Benzene	2.30	0.0250	2.50	ND	91.9	48-131	2.42	23	
Ethylbenzene	2.45	0.0250	2.50	ND	98.0	45-135	2.25	27	
Toluene	2.41	0.0250	2.50	ND	96.5	48-130	1.80	24	
o-Xylene	2.58	0.0250	2.50	ND	103	43-135	1.40	27	
p,m-Xylene	5.17	0.0500	5.00	ND	103	43-135	1.62	27	
Total Xylenes	7.75	0.0250	7.50	ND	103	43-135	1.55	27	
Surrogate: Bromofluorobenzene	0.575		0.500		115	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.499		0.500		99.7	70-130			
Surrogate: Toluene-d8	0.521		0.500		104	70-130			



QC Summary Data

Select Water Solutions, LLC	Project Name:	Red Deer - Mack Energy	Reported:
PO Box 1715	Project Number:	24019-0001	
Gainesville TX, 76241	Project Manager:	Bradley Wells	6/21/2024 2:24:38PM

Nonhalogenated Organics by EPA 8015D - GRO

Analyst: IY

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2425047-BLK1) Prepared: 06/19/24 Analyzed: 06/20/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: Bromofluorobenzene	0.562		0.500		112	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.444		0.500		88.7	70-130			
Surrogate: Toluene-d8	0.528		0.500		106	70-130			

LCS (2425047-BS2) Prepared: 06/19/24 Analyzed: 06/20/24

Gasoline Range Organics (C6-C10)	56.4	20.0	50.0		113	70-130			
Surrogate: Bromofluorobenzene	0.571		0.500		114	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.461		0.500		92.1	70-130			
Surrogate: Toluene-d8	0.522		0.500		104	70-130			

Matrix Spike (2425047-MS2) Source: E406163-07 Prepared: 06/19/24 Analyzed: 06/20/24

Gasoline Range Organics (C6-C10)	57.6	20.0	50.0	ND	115	70-130			
Surrogate: Bromofluorobenzene	0.579		0.500		116	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.476		0.500		95.2	70-130			
Surrogate: Toluene-d8	0.528		0.500		106	70-130			

Matrix Spike Dup (2425047-MSD2) Source: E406163-07 Prepared: 06/19/24 Analyzed: 06/20/24

Gasoline Range Organics (C6-C10)	56.1	20.0	50.0	ND	112	70-130	2.65	20	
Surrogate: Bromofluorobenzene	0.570		0.500		114	70-130			
Surrogate: 1,2-Dichloroethane-d4	0.460		0.500		91.9	70-130			
Surrogate: Toluene-d8	0.529		0.500		106	70-130			



QC Summary Data

Select Water Solutions, LLC	Project Name:	Red Deer - Mack Energy	Reported:
PO Box 1715	Project Number:	24019-0001	
Gainesville TX, 76241	Project Manager:	Bradley Wells	6/21/2024 2:24:38PM

Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: KM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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Blank (2425051-BLK1) Prepared: 06/19/24 Analyzed: 06/19/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	45.1		50.0		90.1	50-200			

LCS (2425051-BS1) Prepared: 06/19/24 Analyzed: 06/19/24

Diesel Range Organics (C10-C28)	282	25.0	250		113	38-132			
Surrogate: n-Nonane	50.9		50.0		102	50-200			

Matrix Spike (2425051-MS1) Source: E406162-06 Prepared: 06/19/24 Analyzed: 06/19/24

Diesel Range Organics (C10-C28)	276	25.0	250	ND	111	38-132			
Surrogate: n-Nonane	45.8		50.0		91.6	50-200			

Matrix Spike Dup (2425051-MSD1) Source: E406162-06 Prepared: 06/19/24 Analyzed: 06/19/24

Diesel Range Organics (C10-C28)	282	25.0	250	ND	113	38-132	1.89	20	
Surrogate: n-Nonane	50.2		50.0		100	50-200			



QC Summary Data

Select Water Solutions, LLC	Project Name:	Red Deer - Mack Energy	Reported:
PO Box 1715	Project Number:	24019-0001	
Gainesville TX, 76241	Project Manager:	Bradley Wells	6/21/2024 2:24:38PM

Anions by EPA 300.0/9056A

Analyst: WF

Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	Notes
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	

Blank (2425053-BLK1)					Prepared: 06/19/24 Analyzed: 06/19/24				
Chloride	ND	20.0							
LCS (2425053-BS1)					Prepared: 06/19/24 Analyzed: 06/19/24				
Chloride	248	20.0	250		99.1	90-110			
Matrix Spike (2425053-MS1)					Source: E406163-06		Prepared: 06/19/24 Analyzed: 06/19/24		
Chloride	825	20.0	250	593	92.9	80-120			
Matrix Spike Dup (2425053-MSD1)					Source: E406163-06		Prepared: 06/19/24 Analyzed: 06/19/24		
Chloride	800	20.0	250	593	82.7	80-120	3.15	20	

QC Summary Report Comment:
Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures.
Therefore, hand calculated values may differ slightly.



Definitions and Notes

Select Water Solutions, LLC	Project Name:	Red Deer - Mack Energy	
PO Box 1715	Project Number:	24019-0001	Reported:
Gainesville TX, 76241	Project Manager:	Bradley Wells	06/21/24 14:24

- ND Analyte NOT DETECTED at or above the reporting limit
 - NR Not Reported
 - RPD Relative Percent Difference
 - DNI Did Not Ignite
 - DNR Did not react with the addition of acid or base.
- Note (1): Methods marked with ** are non-accredited methods.
- Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.





Envirotech Analytical Laboratory

Printed: 6/19/2024 12:24:35PM

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	Select Water Solutions, LLC	Date Received:	06/19/24 07:00	Work Order ID:	E406166
Phone:	(575) 393-3386	Date Logged In:	06/18/24 16:00	Logged In By:	Jessica Liesse
Email:	pm@hungry-horse.com	Due Date:	06/25/24 17:00 (4 day TAT)		

Chain of Custody (COC)

1. Does the sample ID match the COC? Yes
2. Does the number of samples per sampling site location match the COC? Yes
3. Were samples dropped off by client or carrier? Yes
4. Was the COC complete, i.e., signatures, dates/times, requested analyses? No
5. Were all samples received within holding time? Yes

Note: Analysis, such as pH which should be conducted in the field, i.e., 15 minute hold time, are not included in this discussion.

Carrier: courierComments/Resolution

Sampled time is not listed on the coc by client.

Sample Turn Around Time (TAT)

6. Did the COC indicate standard TAT, or Expedited TAT? Yes

Sample Cooler

7. Was a sample cooler received? Yes
8. If yes, was cooler received in good condition? Yes
9. Was the sample(s) received intact, i.e., not broken? Yes
10. Were custody/security seals present? No
11. If yes, were custody/security seals intact? NA
12. Was the sample received on ice? If yes, the recorded temp is 4°C, i.e., 6°±2°C? Yes

Note: Thermal preservation is not required, if samples are received w/i 15 minutes of sampling

13. If no visible ice, record the temperature. Actual sample temperature: 4°C

Sample Container

14. Are aqueous VOC samples present? No
15. Are VOC samples collected in VOA Vials? NA
16. Is the head space less than 6-8 mm (pea sized or less)? NA
17. Was a trip blank (TB) included for VOC analyses? NA
18. Are non-VOC samples collected in the correct containers? Yes
19. Is the appropriate volume/weight or number of sample containers collected? Yes

Field Label

20. Were field sample labels filled out with the minimum information:
 - Sample ID? Yes
 - Date/Time Collected? Yes
 - Collectors name? No

Sample Preservation

21. Does the COC or field labels indicate the samples were preserved? No
22. Are sample(s) correctly preserved? NA
24. Is lab filtration required and/or requested for dissolved metals? No

Multiphase Sample Matrix

26. Does the sample have more than one phase, i.e., multiphase? No
27. If yes, does the COC specify which phase(s) is to be analyzed? NA

Subcontract Laboratory

28. Are samples required to get sent to a subcontract laboratory? No
29. Was a subcontract laboratory specified by the client and if so who? NA Subcontract Lab: NA

Client Instruction

Signature of client authorizing changes to the COC or sample disposition.

Date



envirotech Inc.

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Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

QUESTIONS

Action 382746

QUESTIONS

Operator: SELECT WATER SOLUTIONS, LLC 1820 N I-35 Gainesville, TX 76240	OGRID:
	289068
	Action Number:
	382746
Action Type:	
[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)	

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2327650736
Incident Name	NAPP2327650736 RED DEER @ 0
Incident Type	Produced Water Release
Incident Status	Remediation Plan Received

Location of Release Source

Please answer all the questions in this group.

Site Name	RED DEER
Date Release Discovered	10/02/2023
Surface Owner	State

Incident Details

Please answer all the questions in this group.

Incident Type	Produced Water Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release

Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.

Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Equipment Failure Pipeline (Any) Produced Water Released: 93 BBL Recovered: 0 BBL Lost: 93 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

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QUESTIONS, Page 2

Action 382746

QUESTIONS (continued)

Operator: SELECT WATER SOLUTIONS, LLC 1820 N I-35 Gainesville, TX 76240	OGRID:	289068
	Action Number:	382746
	Action Type:	[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	Yes
Reasons why this would be considered a submission for a notification of a major release	From paragraph A. "Major release" determine using: (1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.

The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	Not answered.

Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

I hereby agree and sign off to the above statement	Name: Timsan Bricker Title: ENV Coordinator Email: tbricker@selectwater.com Date: 09/11/2024
--	---

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QUESTIONS, Page 3

Action 382746

QUESTIONS (continued)

Operator: SELECT WATER SOLUTIONS, LLC 1820 N I-35 Gainesville, TX 76240	OGRID:
	289068
	Action Number:
	382746
Action Type:	
[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)	

QUESTIONS**Site Characterization**

Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 26 and 50 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Greater than 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 200 and 300 (ft.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 200 and 300 (ft.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Greater than 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No

Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)

Chloride	(EPA 300.0 or SM4500 Cl B)	8830
TPH (GRO+DRO+MRO)	(EPA SW-846 Method 8015M)	0
GRO+DRO	(EPA SW-846 Method 8015M)	0
BTEX	(EPA SW-846 Method 8021B or 8260B)	0
Benzene	(EPA SW-846 Method 8021B or 8260B)	0

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

On what estimated date will the remediation commence	10/01/2024
On what date will (or did) the final sampling or liner inspection occur	10/30/2024
On what date will (or was) the remediation complete(d)	11/30/2024
What is the estimated surface area (in square feet) that will be reclaimed	5100
What is the estimated volume (in cubic yards) that will be reclaimed	1442
What is the estimated surface area (in square feet) that will be remediated	5100
What is the estimated volume (in cubic yards) that will be remediated	1442

These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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QUESTIONS, Page 4

Action 382746

QUESTIONS (continued)

Operator: SELECT WATER SOLUTIONS, LLC 1820 N I-35 Gainesville, TX 76240	OGRID:	289068
	Action Number:	382746
	Action Type:	[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Remediation Plan (continued)	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for off-site disposal	GANDY MARLEY LANDFARM/LANDFILL [FEEM0112338393]
OR which OCD approved well (API) will be used for off-site disposal	Not answered.
OR is the off-site disposal site, to be used, out-of-state	Not answered.
OR is the off-site disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Timsan Bricker Title: ENV Coordinator Email: tbricker@selectwater.com Date: 09/11/2024
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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QUESTIONS, Page 5

Action 382746

QUESTIONS (continued)

Operator: SELECT WATER SOLUTIONS, LLC 1820 N I-35 Gainesville, TX 76240	OGRID:
	289068
	Action Number:
	382746
Action Type:	
[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)	

QUESTIONS

Deferral Requests Only	
<i>Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.</i>	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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QUESTIONS, Page 6

Action 382746

QUESTIONS (continued)

Operator: SELECT WATER SOLUTIONS, LLC 1820 N I-35 Gainesville, TX 76240	OGRID:	289068
	Action Number:	382746
	Action Type:	
	[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)	

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	{Unavailable.}

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.	
Requesting a remediation closure approval with this submission	No

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CONDITIONS

Action 382746

CONDITIONS

Operator: SELECT WATER SOLUTIONS, LLC 1820 N I-35 Gainesville, TX 76240	OGRID:
	289068
	Action Number:
	382746
Action Type:	
[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)	

CONDITIONS

Created By	Condition	Condition Date
rhamlet	The Remediation Plan is Conditionally Approved. Due to the lack of groundwater data within ½ mile of the release location, the site will need to be remediated to the strictest closure criteria standards. Please make sure all floor sample locations are fully delineated/excavated to meet OCD Table 1 standards for <50' depth to groundwater. Samples must be analyzed for all constituents listed in Table I of 19.15.29.12 NMAC. Sidewall/edge samples should be delineated/excavated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release. All sidewall samples should be taken from the sidewall of the excavation. Please make sure that the edge of the release extent is accurately defined. Please collect confirmation samples, representing no more than 200 ft2. The work will need to occur in 90 days after the report has been reviewed.	10/1/2024