



December 17, 2024

New Mexico Oil Conservation Division

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

**Re: Reclamation Report
Eider Federal 35
Incident Number NAPP2418343772
Lea County, New Mexico**

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of COG Operating, LLC (COG), has prepared the following *Reclamation Report* for the Eider Federal 35 (Site). The *Reclamation Report* documents the Site history and reclamation activities completed to date.

BACKGROUND

The Site is located in Unit O, Section 35, Township 24 South, Range 32 East, in Lea County, New Mexico (32.16790°, -103.64670°) and is associated with oil and gas exploration and production operations on federal land managed by the Bureau of Land Management (BLM).

On June 6, 2024, a hole on a poly line routing to a flare caused a release of approximately 0.2469 barrels (bbls) of condensate off pad onto a connecting lease road. The well head was immediately isolated and repaired to prevent further release. COG reported the release to the New Mexico Oil Conservation Division (NMOCD) and submitted a *Release Notification Form C-141* (Form C-141) on July 1, 2024. The release was assigned Incident Number NAPP2418343772.

Delineation and excavation of impacted soil was completed at the Site between June 2024 and July 2024. Based on the delineation and excavation soil sample analytical results, a *Closure Request* was submitted to the NMOCD on August 22, 2024. The NMOCD approved the *Closure Request* on September 16, 2024. Additional details regarding the release, Site Characterization, delineation and excavation activities, and soil sample analytical results can be referenced in the approved *Closure Request* attached as Appendix A. Remediation of the release was completed in accordance with Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC).

RECLAMATION ACTIVITIES

The excavation area measured approximately 35 square feet. A total of approximately 1.3 cubic yards of impacted soil were removed during the excavation activities. Upon completion of excavation activities and receipt of final laboratory analytical results, the excavation was backfilled and the area was restored to its original condition. The excavation area on the active lease road was backfilled with caliche. Since the excavation remained on an active lease road, revegetation was not required. The excavation extent

COG Operating, LLC
Reclamation Report
Eider Federal 35

and reclamation area are depicted on the attached Figure 1. Photographic documentation is included in Appendix B.

One representative 5-point composite sample (BF01) was collected from the backfill material. The backfill soil sample was transported under strict chain-of-custody procedures to Eurofins Laboratories (Eurofins) in Carlsbad, New Mexico, for analysis of the following constituents of concern (COCs): benzene, toluene, ethylbenzene, and total xylenes (BTEX) following United States Environmental Protection Agency (EPA) Method 8021B; total petroleum hydrocarbons (TPH)-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

Laboratory analytical results for the backfill soil sample confirmed compliance with NMOCD requirements for the reclaimed area to contain non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 milligrams per kilogram (mg/kg) and TPH concentrations less than 100 mg/kg. The laboratory analytical results are summarized in the attached Table 1 and the complete laboratory analytical report is included as Appendix C.

RECLAMATION APPROVAL REQUEST


Based on the reclamation activities completed to date, COG respectfully requests approval of this *Reclamation Report* and a status update to *Incident Closure Approved* for Incident Number NAPP2418343772.

If you have any questions or comments, please contact Ms. Hadlie Green at (432) 557-8895 or hgreen@ensolum.com.

Sincerely,
Ensolum, LLC



Hadlie Green
Project Geologist



Daniel R. Moir, PG (licensed in WY & TX)
Senior Managing Geologist

cc: Jacob Laird, ConocoPhillips Company
Bureau of Land Management


Appendices:

Figure 1	Excavation Extent / Reclamation Area
Table 1	Soil Sample Analytical Results
Appendix A	August 2024 <i>Closure Request</i>
Appendix B	Photographic Log
Appendix C	Laboratory Analytical Report & Chain of Custody Documentation



FIGURES

Legend

 Excavation/Reclamation extent



0 4 8 16 24 32
Feet

Sources: Environmental Systems Research Institute (ESRI)



Excavation Extent/Reclamation Area

COG Operating, LLC
Eider Federal 35
Incident Number: NAPP2418343772
Unit O, Section 35, Township 24 South, Range 32 East
Lea County, New Mexico

FIGURE

1



TABLES



TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Eider Federal 35
COG Operating, LLC
Lea County, New Mexico

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Requirements for Reclaimed Area			10	50	NE	NE	NE	100	600
Backfill Soil Sample									
BF01	11/27/2024	NA	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	159

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NE - Not Established

NA - Not Applicable

NMOCD: New Mexico Oil Conservation Division

NMAC: New Mexico Administrative Code

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon



APPENDIX A

August 2024 Closure Request



August 21, 2024

New Mexico Oil Conservation Division

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

**Re: Closure Request
Eider Federal 35
Incident Number: NAPP2418343772
Lea County, New Mexico**

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of COG Operating, LLC (COG), has prepared this *Closure Request* to document assessment and remediation activities performed at the Eider Federal 35 (Site). The purpose of the Site assessment and remediation activities was to address impacted soil following a condensate leak at the Site. Based on remediation activities described below, COG is submitting this *Closure Request*, requesting no further action and closure for Incident Number NAPP2418343772.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit O, Section 35, Township 24 South, Range 32 East, in Lea County, New Mexico (32.16790°, -103.64670°) and is associated with oil and gas exploration and production operations on federal land managed by the Bureau of Land Management (BLM).

On June 6, 2024, a hole on a poly line routing to a flare caused a release of approximately 0.2469 barrels (bbls) of condensate off pad. The well head was immediately isolated and repaired to prevent further release. COG reported the release to the New Mexico Oil Conservation Division (NMOCD) and submitted a *Release Notification Form C-141* (Form C-141) on July 1, 2024. The release was assigned Incident Number NAPP2418343772.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized to assess the applicability of Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29 (19.15.29) of the NMAC. Results from the characterization are summarized below and detailed in the NMOCD permitting portal Form C-141 Site Characterization section. Potential Site receptors are identified on Figure 1.

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater is the USGS well 321005103402301, located approximately 7,958 feet west of the Site. The groundwater well has a reported depth to groundwater of 290 feet bgs and a total depth of 367 feet bgs. All wells used for depth to groundwater determination are presented on Figure 1. The referenced well records and Closure Criteria Variance Correspondence are included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is a stream bed, located approximately 24,559 feet east of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). Site receptors are identified on Figure 1.

Based on the results of the Site Characterization, the following NMOCD Table I Closure Criteria (Closure Criteria) apply:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH)-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg
- TPH: 2,500 mg/kg
- Chloride: 20,000 mg/kg

A reclamation requirement of 600 mg/kg chloride and 100 mg/kg TPH applies to the top 4 feet of the pasture area that was impacted by the release, per 19.15.29.13.D (1) NMAC for the top 4 feet of areas that will be reclaimed following remediation.

ASSESSMENT ACTIVITIES AND LABORATORY ANALYTICAL RESULTS

Between June 26, 2024, and July 30, 2024, Ensolum personnel visited the Site to evaluate the release extent based on information provided on the Form C-141 and visual observations. Six assessment soil samples (SS01 through SS06) were collected within and around the extent at a depth of approximately 0.5 feet bgs to assess for the presence or absence of impacts soil resulting from the condensate release. The assessment soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. Photographic documentation was completed during the Site visit and a photographic log is included in Appendix B.

The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported under strict chain-of-custody procedures to Eurofins Laboratories (Eurofins) in Midland, Texas, for analysis of the following chemicals of concern (COCs): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

Laboratory analytical results for soil sample SS02 indicated the concentration of TPH-GRO/TPH-DRO and TPH exceeded the closure criteria and reclamation requirement. In addition, the concentration of TPH exceeded the reclamation requirement. All lateral soil samples were in compliance with the Closure Criteria and reclamation requirement, properly defining the lateral extent of the release. As a result of delineation activities, excavation appeared warranted to address impacted and waste-containing soil associated with the release.

EXCAVATION ACTIVITIES AND ANALYTICAL RESULTS

On July 30, 2024, Ensolum personnel were at the Site to oversee excavation activities based on laboratory analytical results for assessment soil samples. Excavation activities were performed utilizing a hydrovac. To direct excavation activities, soil was field screened for VOCs and chloride. The excavations were completed to depths of 1.5 feet bgs. Photographic documentation of the excavation activities is included in Appendix B.

Following removal of impacted soil, two 5-point composite soil samples were collected from the excavation: one floor confirmation soil sample (FS01) and one sidewall confirmation soil (SW01). The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. FS01 was collected at a depth of 1.5 feet bgs and SW01 was collected at a depth range of ground surface (0 feet) to 1.5 feet bgs. The excavation soil samples were collected, handled, and analyzed following the same procedures as described above.

Laboratory analytical results for excavation soil samples FS01 and SW01 indicated all COC concentrations were compliant with the most stringent Table I Closure Criteria. The excavation extent and excavation soil sample locations are presented on Figure 3. Laboratory analytical results are summarized in Table 1 and laboratory analytical reports are included as Appendix C.

The final excavation measured approximately 35 square feet in areal extent and approximately 1.3 cubic yards of impacted and waste-containing soil was transported to Lea Land Landfill in Hobbs, New Mexico. The excavation will be backfilled with material purchased locally and recontoured to match pre-existing site conditions. The disturbed pasture area will be re-seeded with an approved BLM seed mixture.

CLOSURE REQUEST

Site assessment and remediation activities were conducted at the Site to address the June 2024 condensate release. Laboratory analytical results for the excavation activities indicated all COC concentrations were compliant with the Site Closure Criteria and reclamation requirement, where applicable. Based on the soil sample analytical results, no further remediation is required.

Initial response efforts, excavation of impacted soil, and remediation activities have mitigated impacts at this Site. Depth to groundwater has been estimated to be greater than 100 feet bgs and no other sensitive receptors were identified near the release extent. COG believes these remedial actions are protective of human health, the environment, and groundwater. As such, COG respectfully requests closure for Incident Number NAPP2418343772 Notifications submitted to the NMOCD are included in Appendix D.

COG Operating, LLC
Closure Request
Eider Federal 35

Page 4

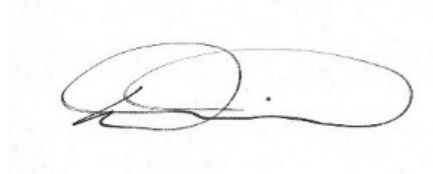
If you have any questions or comments, please contact Mr. Daniel R. Moir at (303) 887-2946 or dmoir@ensolum.com.

Sincerely,

Ensolum, LLC



David A. McInnis
Project Geologist



Daniel R. Moir, PG (licensed in WY & TX)
Senior Managing Geologist

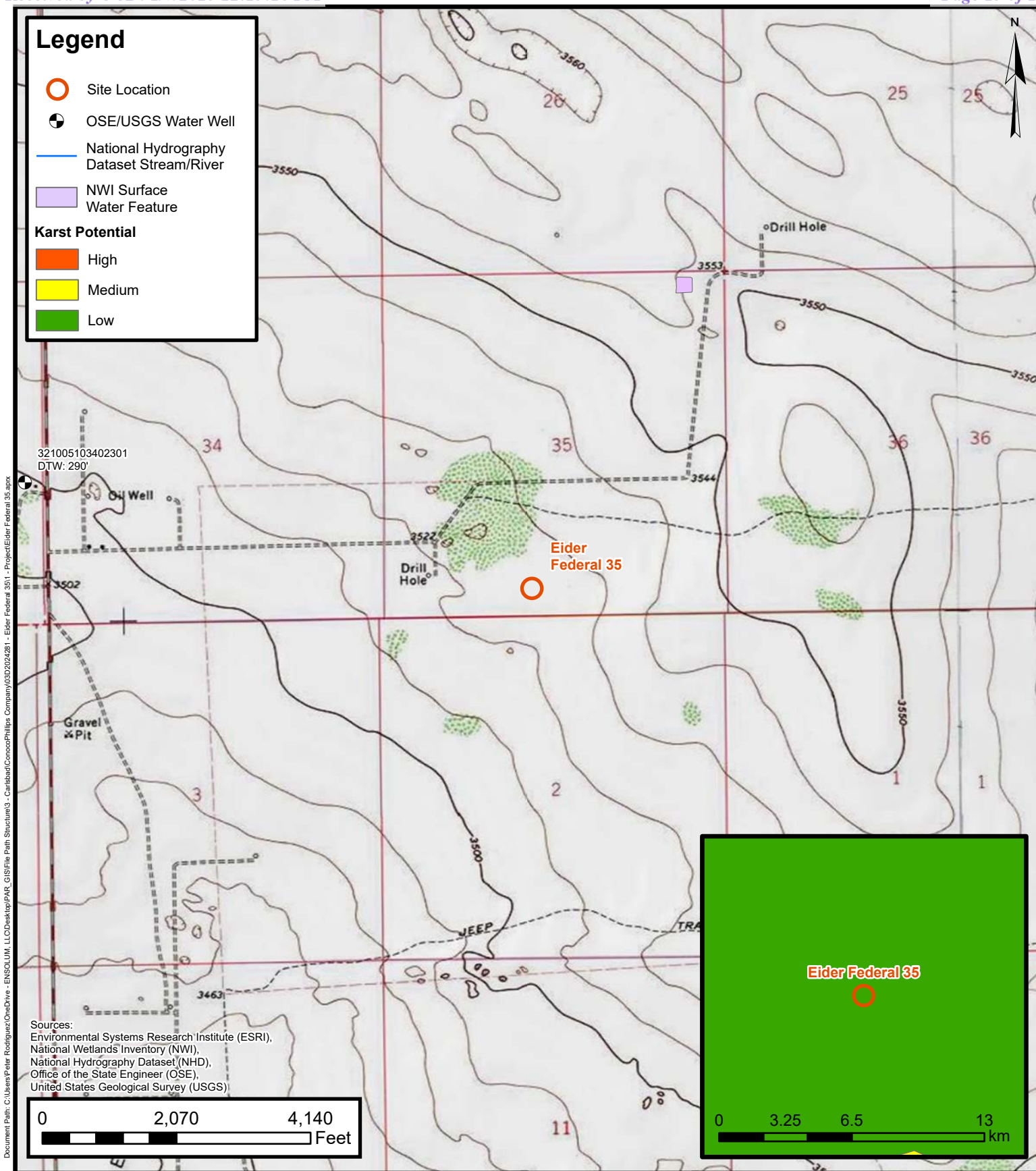
cc: Jacob Laird, COG Operating, LLC

Appendices:

Figure 1	Site Receptor Map
Figure 2	Assessment Soil Sample Locations
Figure 3	Excavation Soil Sample Locations
Table 1	Soil Sample Analytical Results
Appendix A	Referenced Well Records
Appendix B	Photographic Log
Appendix C	Laboratory Analytical Reports & Chain-of-Custody Documentation



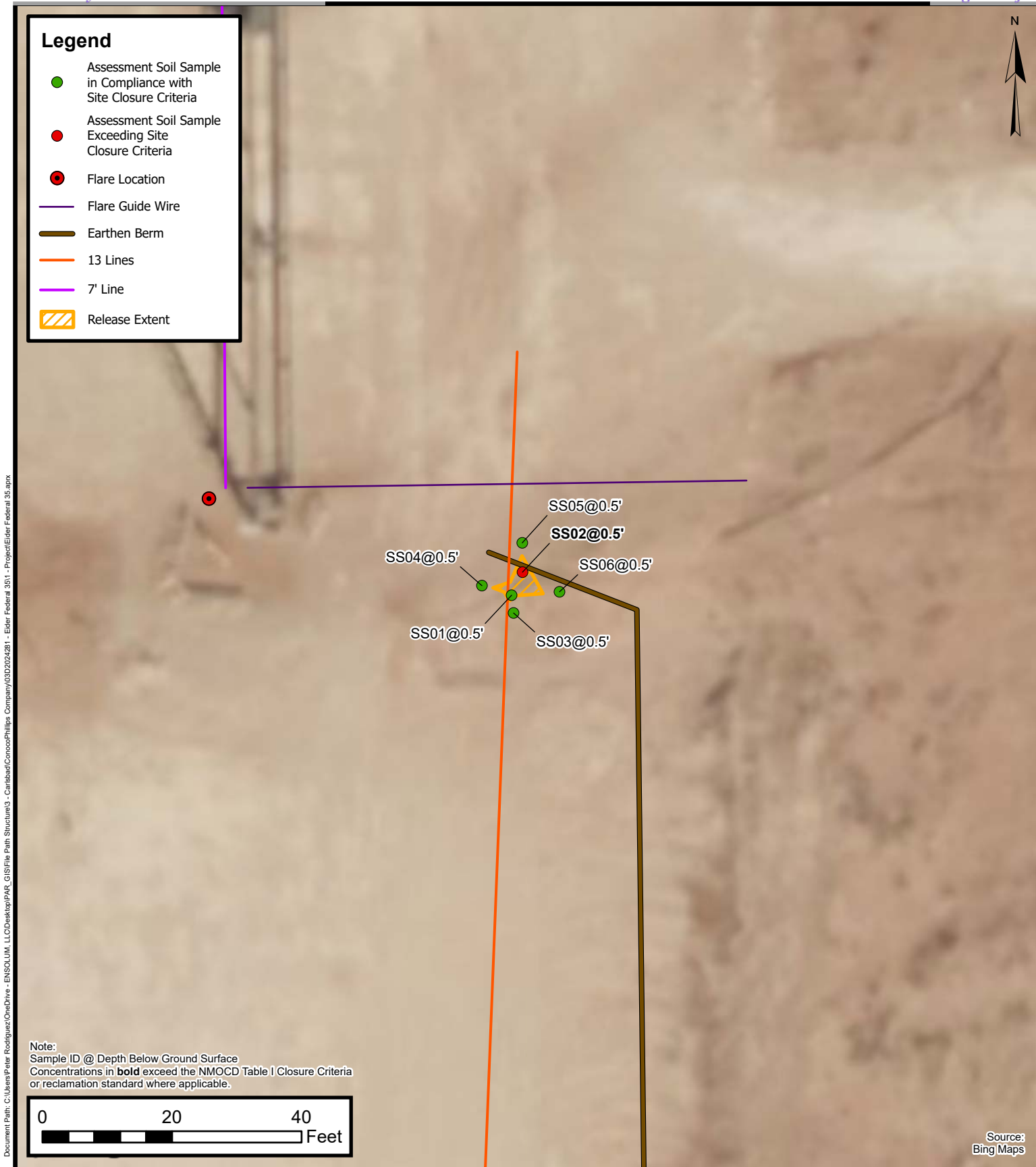
Figures



Site Receptor Map

ConocoPhillips Company
Eider Federal 35
Incident Number: NAPP2418343772
Unit N , Sec 35, T24S, R32E
Lea County, New Mexico

FIGURE
1



Assessment Soil Sample Locations

ConocoPhillips Company
Eider Federal 35
Incident Number: NAPP2418343772
Unit N, Sec 35, T24S, R32E
Lea County, New Mexico

FIGURE
2

Legend

- Compliant
- ▨ Excavation Extent



FS01@1.5"

SW01@0 - 1.5"

Notes:
Sample ID @ Depth Below Ground Surface.

0 5 10 20 30 40
Feet

Sources: Environmental Systems Research Institute (ESRI)



Excavation Soil Sample Locations

COG Operating, LLC
Eider Federal 35
Incident Number: NAPP2418343772
Unit O, Section 35, Township 24 South, Range 32 East
Lea County, New Mexico

FIGURE

3



Tables



TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
 Eider Federal 35
 ConocoPhillips Company
 Lea County, New Mexico

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Preliminary Assessment Soil Samples										
SS01	6/24/2024	0.5	<0.00202	0.164	<49.8	124	229	124	353	251
SS02	6/24/2024	0.5	<0.0504	28.6	461	1,120	2,030	1,581	3,610	68.2
SS03	6/24/2024	0.5	<0.00202	0.00706	<49.8	<49.8	<49.8	<49.8	<49.8	489
SS04	6/24/2024	0.5	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	117
SS05	6/24/2024	0.5	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	74.0
SS06	6/24/2024	0.5	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	103
Excavation Soil Samples										
FS01	7/30/2024	1.5	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	<49.8	55.5
SW01	7/30/2024	0 - 1.5	<0.00200	<0.00399	<49.7	<49.7	<49.7	<49.7	<49.7	23.0

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

NMAC: New Mexico Administrative Code

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

Concentrations in **bold** exceed the NMOCD Table I Closure Criteria or reclamation standard where applicable.**Grey** text represents samples that have been excavated* indicates sample was collected in area to be reclaimed after remediation is complete;
reclamation standard in the top 4 feet is 600 mg/kg for chloride and 100 mg/kg for TPH.



APPENDIX A

Referenced Well Records

National Water Information System: Web Interface

USGS Water Resources

Data Category:

Groundwater

Geographic Area:

New Mexico

GO

Click to hideNews Bulletins

- Explore the *NEW* [USGS National Water Dashboard](#) interactive map to access real-time water data from over 13,500 stations nationwide.

Groundwater levels for New Mexico

Click to hide state-specific text

 Important: [Next Generation Monitoring Location Page](#)

Search Results -- 1 sites found

Agency code = usgs
site_no list =

- 321005103402301

Minimum number of levels = 1
[Save file of selected sites](#) to local disk for future upload

USGS 321005103402301 24S.32E.33.42241

Lea County, New Mexico
Latitude 32°10'21.6", Longitude 103°40'18.9" NAD83
Land-surface elevation 3,499.00 feet above NGVD29
The depth of the well is 367 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Chinle Formation (231CHNL) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measur
1959-02-18			D 62610		3185.60	NGVD29	1		Z	
1959-02-18			D 62611		3187.32	NAVD88	1		Z	
1959-02-18			D 72019	313.40			1		Z	
1981-06-12			D 62610		3194.60	NGVD29	1		Z	
1981-06-12			D 62611		3196.32	NAVD88	1		Z	
1981-06-12			D 72019	304.40			1		Z	
1986-03-11			D 62610		3193.79	NGVD29	1		Z	
1986-03-11			D 62611		3195.51	NAVD88	1		Z	
1986-03-11			D 72019	305.21			1		Z	
1991-05-29			D 62610		3211.55	NGVD29	1		Z	
1991-05-29			D 62611		3213.27	NAVD88	1		Z	
1991-05-29			D 72019	287.45			1		Z	
1996-03-14			D 62610		3213.60	NGVD29	1		S	
1996-03-14			D 62611		3215.32	NAVD88	1		S	
1996-03-14			D 72019	285.40			1		S	

Date	Time	Water-level date-time accuracy	Parameter code	Water level, feet below land surface	level, feet above specific vertical datum	Referenced vertical datum	Status	Method of measurement	Measuring agency	Source
2001-02-27			D	62610	3210.32	NGVD29	1		S	
2001-02-27			D	62611	3212.04	NAVD88	1		S	
2001-02-27			D	72019	288.68		1		S	
2013-01-17	16:30 UTC		m	62610	3209.31	NGVD29	1		S	USGS
2013-01-17	16:30 UTC		m	62611	3211.03	NAVD88	1		S	USGS
2013-01-17	16:30 UTC		m	72019	289.69		1		S	USGS

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level date-time accuracy	m	Date is accurate to the Minute
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Method of measurement	S	Steel-tape measurement.
Method of measurement	Z	Other.
Measuring agency		Not determined
Measuring agency	USGS	U.S. Geological Survey
Source of measurement		Not determined
Source of measurement	S	Measured by personnel of reporting agency.
Water-level approval status	A	Approved for publication -- Processing and review completed.

Questions or Comments

Help

Data Tips

Explanation of terms

Subscribe for system changes

Accessibility FOIA Privacy Policies and Notices
U.S. Department of the Interior | U.S. Geological Survey
Title: Groundwater for New Mexico: Water Levels
URL: <https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?>



Page Contact Information: [New Mexico Water Data Maintainer](#)
Page Last Modified: 2024-06-20 13:50:27 EDT
0.29 0.26 nadww02



APPENDIX B

Photographic Log



Photographic Log
 COG Operating, LLC
 Eider Federal 35
 nAPP2418343772



Photograph: 1 Date: 6/18/2024
 Description: Soil staining in release footprint
 View: East



Photograph: 2 Date: 7/30/2024
 Description: Hydro excavation activities
 View: West



Photograph: 3 Date: 7/30/2024
 Description: Final excavation extent
 View: West



Photograph: 4 Date: 7/30/2024
 Description: Final excavation extent
 View: East



APPENDIX C

Laboratory Analytical Reports & Chain of Custody Documentation



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Hadlie Green
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 7/9/2024 11:00:36 AM Revision 1

JOB DESCRIPTION

ELDER FEDERAL 35
03C2024281

JOB NUMBER

890-6848-1

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



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

Generated
7/9/2024 11:00:36 AM
Revision 1

Client: Ensolum
Project/Site: ELDER FEDERAL 35

Laboratory Job ID: 890-6848-1
SDG: 03C2024281

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Definitions/Glossary

Client: Ensolum
Project/Site: ELDER FEDERAL 35

Job ID: 890-6848-1
SDG: 03C2024281

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
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.
F1	MS and/or MSD recovery exceeds control limits.
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: Ensolum
Project: ELDER FEDERAL 35

Job ID: 890-6848-1

Job ID: 890-6848-1

Eurofins Carlsbad

Job Narrative 890-6848-1

REVISION

The report being provided is a revision of the original report sent on 7/1/2024. The report (revision 1) is being revised due to Per client email, requesting chloride re run.

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 6/26/2024 8:46 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 8.8°C.

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: SS 03 (890-6848-1), SS 04 (890-6848-2), SS 05 (890-6848-3) and SS 06 (890-6848-4).

GC VOA

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

Diesel Range Organics

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-84376 and analytical batch 880-84437 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: SS 04 (890-6848-2), SS 05 (890-6848-3), SS 06 (890-6848-4), (880-45332-A-67-D MS) and (880-45332-A-67-E MSD). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-84376 and analytical batch 880-84437 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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 - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-84369 and analytical batch 880-84458 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 300_ORGFM_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-84369 and analytical batch 880-84458 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 300_ORGFM_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-85090 and analytical batch 880-85128 were outside control limits. Sample matrix interference and/or non-homogeneity

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Case Narrative

Client: Ensolum
Project: ELDER FEDERAL 35

Job ID: 890-6848-1

Job ID: 890-6848-1 (Continued) **Eurofins Carlsbad**

are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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: Ensolum
Project/Site: ELDER FEDERAL 35

Job ID: 890-6848-1
SDG: 03C2024281

Client Sample ID: SS 03

Lab Sample ID: 890-6848-1

Date Collected: 06/24/24 14:00

Matrix: Solid

Date Received: 06/26/24 08:46

Sample Depth: 0.5'

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		06/27/24 08:22	06/27/24 18:40	1
Toluene	0.00205		0.00202	mg/Kg		06/27/24 08:22	06/27/24 18:40	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		06/27/24 08:22	06/27/24 18:40	1
m-Xylene & p-Xylene	0.00501		0.00404	mg/Kg		06/27/24 08:22	06/27/24 18:40	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		06/27/24 08:22	06/27/24 18:40	1
Xylenes, Total	0.00501		0.00404	mg/Kg		06/27/24 08:22	06/27/24 18:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	06/27/24 08:22	06/27/24 18:40	1
1,4-Difluorobenzene (Surr)	94		70 - 130	06/27/24 08:22	06/27/24 18:40	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00706		0.00404	mg/Kg			06/27/24 18:40	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			06/28/24 16:04	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	<49.8	U	49.8	mg/Kg		06/27/24 14:29	06/28/24 16:04	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		06/27/24 14:29	06/28/24 16:04	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		06/27/24 14:29	06/28/24 16:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	85		70 - 130	06/27/24 14:29	06/28/24 16:04	1
o-Terphenyl	88		70 - 130	06/27/24 14:29	06/28/24 16:04	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	489		5.02	mg/Kg			07/08/24 15:08	1

Client Sample ID: SS 04

Lab Sample ID: 890-6848-2

Date Collected: 06/24/24 14:35

Matrix: Solid

Date Received: 06/26/24 08:46

Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		06/27/24 08:22	06/27/24 19:00	1
Toluene	<0.00200	U	0.00200	mg/Kg		06/27/24 08:22	06/27/24 19:00	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		06/27/24 08:22	06/27/24 19:00	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		06/27/24 08:22	06/27/24 19:00	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		06/27/24 08:22	06/27/24 19:00	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		06/27/24 08:22	06/27/24 19:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	06/27/24 08:22	06/27/24 19:00	1

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Client Sample Results

Client: Ensolum
Project/Site: ELDER FEDERAL 35

Job ID: 890-6848-1
SDG: 03C2024281

Client Sample ID: SS 04

Lab Sample ID: 890-6848-2

Date Collected: 06/24/24 14:35

Matrix: Solid

Date Received: 06/26/24 08:46

Sample Depth: 0.5'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	87		70 - 130	06/27/24 08:22	06/27/24 19:00	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			06/27/24 19:00	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			06/28/24 16:25	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		06/27/24 14:29	06/28/24 16:25	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		06/27/24 14:29	06/28/24 16:25	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		06/27/24 14:29	06/28/24 16:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	30	S1-	70 - 130			06/27/24 14:29	06/28/24 16:25	1
o-Terphenyl	23	S1-	70 - 130			06/27/24 14:29	06/28/24 16:25	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	117		5.03	mg/Kg			06/29/24 09:05	1

Client Sample ID: SS 05

Lab Sample ID: 890-6848-3

Date Collected: 06/24/24 14:40

Matrix: Solid

Date Received: 06/26/24 08:46

Sample Depth: 0.5'

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		06/27/24 08:22	06/27/24 19:21	1
Toluene	<0.00198	U	0.00198	mg/Kg		06/27/24 08:22	06/27/24 19:21	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		06/27/24 08:22	06/27/24 19:21	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		06/27/24 08:22	06/27/24 19:21	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		06/27/24 08:22	06/27/24 19:21	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		06/27/24 08:22	06/27/24 19:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	06/27/24 08:22	06/27/24 19:21	1
1,4-Difluorobenzene (Surr)	95		70 - 130	06/27/24 08:22	06/27/24 19:21	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397	mg/Kg			06/27/24 19:21	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			06/28/24 16:46	1

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Client Sample Results

Client: Ensolum
Project/Site: ELDER FEDERAL 35

Job ID: 890-6848-1
SDG: 03C2024281

Client Sample ID: SS 05

Lab Sample ID: 890-6848-3

Date Collected: 06/24/24 14:40

Matrix: Solid

Date Received: 06/26/24 08:46

Sample Depth: 0.5'

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		06/27/24 14:29	06/28/24 16:46	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		06/27/24 14:29	06/28/24 16:46	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		06/27/24 14:29	06/28/24 16:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	29	S1-	70 - 130			06/27/24 14:29	06/28/24 16:46	1
o-Terphenyl	24	S1-	70 - 130			06/27/24 14:29	06/28/24 16:46	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	74.0		5.01	mg/Kg			06/29/24 09:10	1

Client Sample ID: SS 06

Lab Sample ID: 890-6848-4

Date Collected: 06/24/24 14:45

Matrix: Solid

Date Received: 06/26/24 08:46

Sample Depth: 0.5'

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		06/27/24 08:22	06/27/24 19:41	1
Toluene	<0.00202	U	0.00202	mg/Kg		06/27/24 08:22	06/27/24 19:41	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		06/27/24 08:22	06/27/24 19:41	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		06/27/24 08:22	06/27/24 19:41	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		06/27/24 08:22	06/27/24 19:41	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		06/27/24 08:22	06/27/24 19:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130			06/27/24 08:22	06/27/24 19:41	1
1,4-Difluorobenzene (Surr)	93		70 - 130			06/27/24 08:22	06/27/24 19:41	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			06/27/24 19:41	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			06/28/24 17:07	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		06/27/24 14:29	06/28/24 17:07	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		06/27/24 14:29	06/28/24 17:07	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		06/27/24 14:29	06/28/24 17:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	40	S1-	70 - 130			06/27/24 14:29	06/28/24 17:07	1
o-Terphenyl	38	S1-	70 - 130			06/27/24 14:29	06/28/24 17:07	1

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Client Sample Results

Client: Ensolum
Project/Site: ELDER FEDERAL 35

Job ID: 890-6848-1
SDG: 03C2024281

Client Sample ID: SS 06
Date Collected: 06/24/24 14:45
Date Received: 06/26/24 08:46
Sample Depth: 0.5'

Lab Sample ID: 890-6848-4
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	103		4.97	mg/Kg			06/29/24 09:15	1	

Surrogate Summary

Client: Ensolum
Project/Site: ELDER FEDERAL 35

Job ID: 890-6848-1
SDG: 03C2024281

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)
880-45309-A-12-D MS	Matrix Spike	100	92
880-45309-A-12-E MSD	Matrix Spike Duplicate	98	94
890-6848-1	SS 03	109	94
890-6848-2	SS 04	101	87
890-6848-3	SS 05	110	95
890-6848-4	SS 06	109	93
LCS 880-84303/1-A	Lab Control Sample	99	91
LCSD 880-84303/2-A	Lab Control Sample Dup	99	92
MB 880-84303/5-A	Method Blank	100	84
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)
880-45332-A-67-D MS	Matrix Spike	65 S1-	61 S1-
880-45332-A-67-E MSD	Matrix Spike Duplicate	62 S1-	56 S1-
890-6848-1	SS 03	85	88
890-6848-2	SS 04	30 S1-	23 S1-
890-6848-3	SS 05	29 S1-	24 S1-
890-6848-4	SS 06	40 S1-	38 S1-
LCS 880-84376/2-A	Lab Control Sample	97	97
LCSD 880-84376/3-A	Lab Control Sample Dup	113	115
MB 880-84376/1-A	Method Blank	136 S1+	149 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Ensolum
Project/Site: ELDER FEDERAL 35

Job ID: 890-6848-1
SDG: 03C2024281

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-84303/5-A

Matrix: Solid

Analysis Batch: 84306

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 84303

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		06/27/24 08:22	06/27/24 11:33	1
Toluene	<0.00200	U	0.00200	mg/Kg		06/27/24 08:22	06/27/24 11:33	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		06/27/24 08:22	06/27/24 11:33	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		06/27/24 08:22	06/27/24 11:33	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		06/27/24 08:22	06/27/24 11:33	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		06/27/24 08:22	06/27/24 11:33	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	06/27/24 08:22	06/27/24 11:33	1
1,4-Difluorobenzene (Surr)	84		70 - 130	06/27/24 08:22	06/27/24 11:33	1

Lab Sample ID: LCS 880-84303/1-A

Matrix: Solid

Analysis Batch: 84306

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 84303

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08529		mg/Kg		85	70 - 130
Toluene	0.100	0.08347		mg/Kg		83	70 - 130
Ethylbenzene	0.100	0.08427		mg/Kg		84	70 - 130
m-Xylene & p-Xylene	0.200	0.1800		mg/Kg		90	70 - 130
o-Xylene	0.100	0.09044		mg/Kg		90	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1,4-Difluorobenzene (Surr)	91		70 - 130

Lab Sample ID: LCSD 880-84303/2-A

Matrix: Solid

Analysis Batch: 84306

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 84303

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08970		mg/Kg		90	70 - 130	5	35
Toluene	0.100	0.08729		mg/Kg		87	70 - 130	4	35
Ethylbenzene	0.100	0.08859		mg/Kg		89	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.1885		mg/Kg		94	70 - 130	5	35
o-Xylene	0.100	0.09465		mg/Kg		95	70 - 130	5	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1,4-Difluorobenzene (Surr)	92		70 - 130

Lab Sample ID: 880-45309-A-12-D MS

Matrix: Solid

Analysis Batch: 84306

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 84303

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.100	0.07915		mg/Kg		79	70 - 130
Toluene	<0.00199	U	0.100	0.07754		mg/Kg		77	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: ELDER FEDERAL 35

Job ID: 890-6848-1
SDG: 03C2024281

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

Lab Sample ID: 880-45309-A-12-D MS

Matrix: Solid

Analysis Batch: 84306

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 84303

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U	0.100	0.07915		mg/Kg		79	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1688		mg/Kg		84	70 - 130
o-Xylene	<0.00199	U	0.100	0.08544		mg/Kg		85	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	92		70 - 130

Lab Sample ID: 880-45309-A-12-E MSD

Matrix: Solid

Analysis Batch: 84306

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 84303

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0994	0.1037		mg/Kg		104	70 - 130	27	35
Toluene	<0.00199	U	0.0994	0.09748		mg/Kg		98	70 - 130	23	35
Ethylbenzene	<0.00199	U	0.0994	0.09582		mg/Kg		96	70 - 130	19	35
m-Xylene & p-Xylene	<0.00398	U	0.199	0.2046		mg/Kg		103	70 - 130	19	35
o-Xylene	<0.00199	U	0.0994	0.09993		mg/Kg		101	70 - 130	16	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

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

Lab Sample ID: MB 880-84376/1-A

Matrix: Solid

Analysis Batch: 84437

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 84376

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		06/27/24 14:28	06/28/24 08:41	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		06/27/24 14:28	06/28/24 08:41	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		06/27/24 14:28	06/28/24 08:41	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	136	S1+	70 - 130	06/27/24 14:28	06/28/24 08:41	1
o-Terphenyl	149	S1+	70 - 130	06/27/24 14:28	06/28/24 08:41	1

Lab Sample ID: LCS 880-84376/2-A

Matrix: Solid

Analysis Batch: 84437

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 84376

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	992.9		mg/Kg		99	70 - 130
Diesel Range Organics (Over C10-C28)	1000	985.8		mg/Kg		99	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: ELDER FEDERAL 35

Job ID: 890-6848-1
SDG: 03C2024281

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

Lab Sample ID: LCS 880-84376/2-A

Matrix: Solid

Analysis Batch: 84437

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 84376

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	97		70 - 130

Lab Sample ID: LCSD 880-84376/3-A

Matrix: Solid

Analysis Batch: 84437

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 84376

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1011		mg/Kg		101	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	986.1		mg/Kg		99	70 - 130	0	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	113		70 - 130
o-Terphenyl	115		70 - 130

Lab Sample ID: 880-45332-A-67-D MS

Matrix: Solid

Analysis Batch: 84437

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 84376

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F1	999	362.1	F1	mg/Kg		36	70 - 130
Diesel Range Organics (Over C10-C28)	58.1	F1	999	401.2	F1	mg/Kg		34	70 - 130

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	65	S1-	70 - 130
o-Terphenyl	61	S1-	70 - 130

Lab Sample ID: 880-45332-A-67-E MSD

Matrix: Solid

Analysis Batch: 84437

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 84376

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F1	999	339.7	F1	mg/Kg		34	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	58.1	F1	999	375.2	F1	mg/Kg		32	70 - 130	7	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	62	S1-	70 - 130
o-Terphenyl	56	S1-	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: ELDER FEDERAL 35

Job ID: 890-6848-1
SDG: 03C2024281

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-84369/1-A

Matrix: Solid

Analysis Batch: 84458

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			06/29/24 06:59	1

Lab Sample ID: LCS 880-84369/2-A

Matrix: Solid

Analysis Batch: 84458

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	255.3		mg/Kg		102	90 - 110

Lab Sample ID: LCSD 880-84369/3-A

Matrix: Solid

Analysis Batch: 84458

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	257.1		mg/Kg		103	90 - 110	1	20

Lab Sample ID: 880-45287-A-7-B MS

Matrix: Solid

Analysis Batch: 84458

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	1210		250	1436	4	mg/Kg		91	90 - 110

Lab Sample ID: 880-45287-A-7-C MSD

Matrix: Solid

Analysis Batch: 84458

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1210		250	1441	4	mg/Kg		93	90 - 110	0	20

Lab Sample ID: 880-45304-A-4-B MS

Matrix: Solid

Analysis Batch: 84458

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	38100	F1	12400	44320	F1	mg/Kg		50	90 - 110

Lab Sample ID: 880-45304-A-4-C MSD

Matrix: Solid

Analysis Batch: 84458

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	38100	F1	12400	44370	F1	mg/Kg		51	90 - 110	0	20

Lab Sample ID: MB 880-85090/1-A

Matrix: Solid

Analysis Batch: 85128

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			07/08/24 12:31	1

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QC Sample Results

Client: Ensolum
Project/Site: ELDER FEDERAL 35

Job ID: 890-6848-1
SDG: 03C2024281

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCS 880-85090/2-A				Client Sample ID: Lab Control Sample							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 85128											
Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	250.9		mg/Kg		100	90 - 110		

Lab Sample ID: LCSD 880-85090/3-A				Client Sample ID: Lab Control Sample Duplicate							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 85128											
Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	250.5		mg/Kg		100	90 - 110	0	20

Lab Sample ID: 890-6878-A-66-D MS				Client Sample ID: Matrix Spike							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 85128											
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	18000	F1	5030	23970	F1	mg/Kg		120	90 - 110		

Lab Sample ID: 890-6878-A-66-E MSD				Client Sample ID: Matrix Spike Duplicate							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 85128											
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	18000	F1	5030	24010	F1	mg/Kg		120	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: ELDER FEDERAL 35

Job ID: 890-6848-1
SDG: 03C2024281

GC VOA

Prep Batch: 84303

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6848-1	SS 03	Total/NA	Solid	5035	
890-6848-2	SS 04	Total/NA	Solid	5035	
890-6848-3	SS 05	Total/NA	Solid	5035	
890-6848-4	SS 06	Total/NA	Solid	5035	
MB 880-84303/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-84303/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-84303/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-45309-A-12-D MS	Matrix Spike	Total/NA	Solid	5035	
880-45309-A-12-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 84306

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6848-1	SS 03	Total/NA	Solid	8021B	84303
890-6848-2	SS 04	Total/NA	Solid	8021B	84303
890-6848-3	SS 05	Total/NA	Solid	8021B	84303
890-6848-4	SS 06	Total/NA	Solid	8021B	84303
MB 880-84303/5-A	Method Blank	Total/NA	Solid	8021B	84303
LCS 880-84303/1-A	Lab Control Sample	Total/NA	Solid	8021B	84303
LCSD 880-84303/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	84303
880-45309-A-12-D MS	Matrix Spike	Total/NA	Solid	8021B	84303
880-45309-A-12-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	84303

Analysis Batch: 84490

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6848-1	SS 03	Total/NA	Solid	Total BTEX	
890-6848-2	SS 04	Total/NA	Solid	Total BTEX	
890-6848-3	SS 05	Total/NA	Solid	Total BTEX	
890-6848-4	SS 06	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 84376

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6848-1	SS 03	Total/NA	Solid	8015NM Prep	
890-6848-2	SS 04	Total/NA	Solid	8015NM Prep	
890-6848-3	SS 05	Total/NA	Solid	8015NM Prep	
890-6848-4	SS 06	Total/NA	Solid	8015NM Prep	
MB 880-84376/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-84376/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-84376/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-45332-A-67-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-45332-A-67-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 84437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6848-1	SS 03	Total/NA	Solid	8015B NM	84376
890-6848-2	SS 04	Total/NA	Solid	8015B NM	84376
890-6848-3	SS 05	Total/NA	Solid	8015B NM	84376
890-6848-4	SS 06	Total/NA	Solid	8015B NM	84376
MB 880-84376/1-A	Method Blank	Total/NA	Solid	8015B NM	84376
LCS 880-84376/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	84376

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QC Association Summary

Client: Ensolum
Project/Site: ELDER FEDERAL 35

Job ID: 890-6848-1
SDG: 03C2024281

GC Semi VOA (Continued)

Analysis Batch: 84437 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-84376/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	84376
880-45332-A-67-D MS	Matrix Spike	Total/NA	Solid	8015B NM	84376
880-45332-A-67-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	84376

Analysis Batch: 84782

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6848-1	SS 03	Total/NA	Solid	8015 NM	
890-6848-2	SS 04	Total/NA	Solid	8015 NM	
890-6848-3	SS 05	Total/NA	Solid	8015 NM	
890-6848-4	SS 06	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 84369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6848-2	SS 04	Soluble	Solid	DI Leach	
890-6848-3	SS 05	Soluble	Solid	DI Leach	
890-6848-4	SS 06	Soluble	Solid	DI Leach	
MB 880-84369/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-84369/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-84369/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-45287-A-7-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-45287-A-7-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
880-45304-A-4-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-45304-A-4-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 84458

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6848-2	SS 04	Soluble	Solid	300.0	84369
890-6848-3	SS 05	Soluble	Solid	300.0	84369
890-6848-4	SS 06	Soluble	Solid	300.0	84369
MB 880-84369/1-A	Method Blank	Soluble	Solid	300.0	84369
LCS 880-84369/2-A	Lab Control Sample	Soluble	Solid	300.0	84369
LCSD 880-84369/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	84369
880-45287-A-7-B MS	Matrix Spike	Soluble	Solid	300.0	84369
880-45287-A-7-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	84369
880-45304-A-4-B MS	Matrix Spike	Soluble	Solid	300.0	84369
880-45304-A-4-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	84369

Leach Batch: 85090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6848-1	SS 03	Soluble	Solid	DI Leach	
MB 880-85090/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-85090/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-85090/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-6878-A-66-D MS	Matrix Spike	Soluble	Solid	DI Leach	
890-6878-A-66-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 85128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6848-1	SS 03	Soluble	Solid	300.0	85090

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QC Association Summary

Client: Ensolum
Project/Site: ELDER FEDERAL 35

Job ID: 890-6848-1
SDG: 03C2024281

HPLC/IC (Continued)

Analysis Batch: 85128 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-85090/1-A	Method Blank	Soluble	Solid	300.0	85090
LCS 880-85090/2-A	Lab Control Sample	Soluble	Solid	300.0	85090
LCSD 880-85090/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	85090
890-6878-A-66-D MS	Matrix Spike	Soluble	Solid	300.0	85090
890-6878-A-66-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	85090

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Lab Chronicle

Client: Ensolum
Project/Site: ELDER FEDERAL 35

Job ID: 890-6848-1
SDG: 03C2024281

Client Sample ID: SS 03**Date Collected: 06/24/24 14:00****Date Received: 06/26/24 08:46****Lab Sample ID: 890-6848-1****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			4.95 g	5 mL	84303	06/27/24 08:22	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84306	06/27/24 18:40	SM	EET MID
Total/NA	Analysis	Total BTEX		1			84490	06/27/24 18:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			84782	06/28/24 16:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	84376	06/27/24 14:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84437	06/28/24 16:04	AJ	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	85090	07/05/24 16:56	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	85128	07/08/24 15:08	CH	EET MID

Client Sample ID: SS 04**Date Collected: 06/24/24 14:35****Date Received: 06/26/24 08:46****Lab Sample ID: 890-6848-2****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			5.01 g	5 mL	84303	06/27/24 08:22	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84306	06/27/24 19:00	SM	EET MID
Total/NA	Analysis	Total BTEX		1			84490	06/27/24 19:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			84782	06/28/24 16:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	84376	06/27/24 14:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84437	06/28/24 16:25	AJ	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	84369	06/27/24 13:54	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84458	06/29/24 09:05	CH	EET MID

Client Sample ID: SS 05**Date Collected: 06/24/24 14:40****Date Received: 06/26/24 08:46****Lab Sample ID: 890-6848-3****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			5.04 g	5 mL	84303	06/27/24 08:22	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84306	06/27/24 19:21	SM	EET MID
Total/NA	Analysis	Total BTEX		1			84490	06/27/24 19:21	SM	EET MID
Total/NA	Analysis	8015 NM		1			84782	06/28/24 16:46	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	84376	06/27/24 14:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84437	06/28/24 16:46	AJ	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	84369	06/27/24 13:54	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84458	06/29/24 09:10	CH	EET MID

Client Sample ID: SS 06**Date Collected: 06/24/24 14:45****Date Received: 06/26/24 08:46****Lab Sample ID: 890-6848-4****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			4.96 g	5 mL	84303	06/27/24 08:22	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84306	06/27/24 19:41	SM	EET MID
Total/NA	Analysis	Total BTEX		1			84490	06/27/24 19:41	SM	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: ELDER FEDERAL 35

Job ID: 890-6848-1
SDG: 03C2024281

Client Sample ID: SS 06

Date Collected: 06/24/24 14:45

Date Received: 06/26/24 08:46

Lab Sample ID: 890-6848-4

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			84782	06/28/24 17:07	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	84376	06/27/24 14:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84437	06/28/24 17:07	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	84369	06/27/24 13:54	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84458	06/29/24 09:15	CH	EET MID

Laboratory References:
EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Ensolum
Project/Site: ELDER FEDERAL 35

Job ID: 890-6848-1
SDG: 03C2024281

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	06-30-25
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: Ensolum
Project/Site: ELDER FEDERAL 35

Job ID: 890-6848-1
SDG: 03C2024281

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: Ensolum
Project/Site: ELDER FEDERAL 35

Job ID: 890-6848-1
SDG: 03C2024281

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-6848-1	SS 03	Solid	06/24/24 14:00	06/26/24 08:46	0.5'
890-6848-2	SS 04	Solid	06/24/24 14:35	06/26/24 08:46	0.5'
890-6848-3	SS 05	Solid	06/24/24 14:40	06/26/24 08:46	0.5'
890-6848-4	SS 06	Solid	06/24/24 14:45	06/26/24 08:46	0.5'

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890-6848 Chain of Custody



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

Work Order No: _____

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Project Manager:	David McInnis	Bill to: (if different)	Harlie Green
Company Name:	Ensolum	Company Name:	Ensolum
Address:	3122 National Parks Hwy	Address:	
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	
Phone:	409-454-3009	Email:	dmcinnis@ensolum.com , HGreen@ensolum.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: 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:	

[illegible]

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 \$45.00 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	
1	<i>[Signature]</i>			2	<i>[Signature]</i>
3				4	<i>[Signature]</i>
5				6	<i>[Signature]</i>

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-6848-1

SDG Number: 03C2024281

Login Number: 6848

List Number: 1

Creator: Bruns, Shannon

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: Ensolum

Job Number: 890-6848-1
SDG Number: 03C2024281

Login Number: 6848
List Number: 2
Creator: Vasquez, Julisa

List Source: Eurofins Midland
List Creation: 06/27/24 07:47 AM

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	



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Hadlie Green

Ensolum

601 N. Marienfeld St.

Suite 400

Midland, Texas 79701

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JOB DESCRIPTION

EIDER FEDERAL 35

03C2024281

JOB NUMBER

890-6849-1

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: Ensolum
Project/Site: EIDER FEDERAL 35

Laboratory Job ID: 890-6849-1
SDG: 03C2024281

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Definitions/Glossary

Client: Ensolum
Project/Site: EIDER FEDERAL 35

Job ID: 890-6849-1
SDG: 03C2024281

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, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
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.
▫	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: Ensolum
Project: EIDER FEDERAL 35

Job ID: 890-6849-1

Job ID: 890-6849-1

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Job Narrative 890-6849-1

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 6/26/2024 8:38 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 8.8°C.

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: SS 1 (890-6849-1) and SS 2 (890-6849-2).

GC VOA

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-84451 recovered above the upper control limit for Benzene, Ethylbenzene, m-Xylene & p-Xylene and o-Xylene. The samples associated with this CCV were ran within 12 hours of passing CCV; therefore, the data have been reported. The associated sample is impacted: (CCV 880-84451/33).

Method 8021B: The laboratory control sample duplicate (LCSD) for preparation batch 880-84468 and analytical batch 880-84451 recovered outside control limits for the following analytes: Ethylbenzene. These analytes were biased high in the LCSD and were not detected in the associated samples; therefore, the data have been reported.

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

Diesel Range Organics

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 - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-84369 and analytical batch 880-84458 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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: Ensolum
Project/Site: EIDER FEDERAL 35

Job ID: 890-6849-1
SDG: 03C2024281

Client Sample ID: SS 1
Date Collected: 06/24/24 13:20
Date Received: 06/26/24 08:38

Lab Sample ID: 890-6849-1
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Xylenes, Total	0.134	*- *1	0.00403	mg/Kg		06/27/24 08:37	06/27/24 17:53	1	
m-Xylene & p-Xylene	0.0918	*- *1	0.00403	mg/Kg		06/27/24 08:37	06/27/24 17:53	1	
Benzene	<0.00202	U	0.00202	mg/Kg		06/27/24 08:37	06/27/24 17:53	1	
o-Xylene	0.0421	*- *1	0.00202	mg/Kg		06/27/24 08:37	06/27/24 17:53	1	
Toluene	0.0175	*-	0.00202	mg/Kg		06/27/24 08:37	06/27/24 17:53	1	
Ethylbenzene	0.0127		0.00202	mg/Kg		06/27/24 08:37	06/27/24 17:53	1	
Total BTEX	0.165	*+ *1	0.00202	mg/Kg		06/27/24 08:37	06/27/24 17:53	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	98		70 - 130			06/27/24 08:37	06/27/24 17:53	1	
1,4-Difluorobenzene (Surr)	84		70 - 130			06/27/24 08:37	06/27/24 17:53	1	

Method: TAL SOP Total BTEX - Total BTEX Calculation									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Total BTEX	0.164		0.00403	mg/Kg			06/27/24 17:53	1	

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Total TPH	353		49.8	mg/Kg			06/28/24 18:51	1	

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Oil Range Organics (Over C28-C36)	229		49.8	mg/Kg		06/27/24 14:29	06/28/24 18:51	1	
Diesel Range Organics (Over C10-C28)	124		49.8	mg/Kg		06/27/24 14:29	06/28/24 18:51	1	
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		06/27/24 14:29	06/28/24 18:51	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
o-Terphenyl	49	S1-	70 - 130			06/27/24 14:29	06/28/24 18:51	1	
1-Chlorooctane	49	S1-	70 - 130			06/27/24 14:29	06/28/24 18:51	1	

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	251		4.98	mg/Kg			06/29/24 09:20	1	

Client Sample ID: SS 2
Date Collected: 06/24/24 13:23
Date Received: 06/26/24 08:38

Lab Sample ID: 890-6849-2
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<0.0504	U	0.0504	mg/Kg		06/28/24 10:09	06/29/24 05:46	25	
Toluene	3.71		0.0504	mg/Kg		06/28/24 10:09	06/29/24 05:46	25	
Ethylbenzene	4.22	*+	0.0504	mg/Kg		06/28/24 10:09	06/29/24 05:46	25	
m-Xylene & p-Xylene	15.9		0.101	mg/Kg		06/28/24 10:09	06/29/24 05:46	25	
o-Xylene	4.73		0.0504	mg/Kg		06/28/24 10:09	06/29/24 05:46	25	
Xylenes, Total	20.6		0.101	mg/Kg		06/28/24 10:09	06/29/24 05:46	25	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	246	S1+	70 - 130			06/28/24 10:09	06/29/24 05:46	25	

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Client Sample Results

Client: Ensolum
Project/Site: EIDER FEDERAL 35

Job ID: 890-6849-1
SDG: 03C2024281

Client Sample ID: SS 2
Date Collected: 06/24/24 13:23
Date Received: 06/26/24 08:38

Lab Sample ID: 890-6849-2
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)									
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1,4-Difluorobenzene (Surr)	97		70 - 130			06/28/24 10:09	06/29/24 05:46	25	
Method: TAL SOP Total BTEX - Total BTEX Calculation									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Total BTEX	28.6		0.101	mg/Kg			06/29/24 05:46	1	
Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Total TPH	3610		249	mg/Kg			06/28/24 18:30	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	461		249	mg/Kg		06/27/24 14:29	06/28/24 18:30	5	
Diesel Range Organics (Over C10-C28)	1120		249	mg/Kg		06/27/24 14:29	06/28/24 18:30	5	
Oil Range Organics (Over C28-C36)	2030		249	mg/Kg		06/27/24 14:29	06/28/24 18:30	5	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1-Chlorooctane	99		70 - 130			06/27/24 14:29	06/28/24 18:30	5	
o-Terphenyl	99		70 - 130			06/27/24 14:29	06/28/24 18:30	5	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	68.2		5.03	mg/Kg			06/29/24 09:25	1	

Surrogate Summary

Client: Ensolum
Project/Site: EIDER FEDERAL 35

Job ID: 890-6849-1
SDG: 03C2024281

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)
880-45318-A-1-A MS	Matrix Spike	116	108
880-45318-A-1-B MSD	Matrix Spike Duplicate	123	104
890-6849-1	SS 1	98	84
890-6849-2	SS 2	246 S1+	97
890-6855-A-21-B MS	Matrix Spike	120	91
890-6855-A-21-C MSD	Matrix Spike Duplicate	98	101
LCS 880-84312/1-A	Lab Control Sample	70	106
LCS 880-84468/1-A	Lab Control Sample	100	105
LCSD 880-84312/2-A	Lab Control Sample Dup	121	110
LCSD 880-84468/2-A	Lab Control Sample Dup	111	105
MB 880-84312/5-A	Method Blank	183 S1+	121
MB 880-84412/5-A	Method Blank	78	87
MB 880-84468/5-A	Method Blank	72	91
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)
880-45332-A-67-D MS	Matrix Spike	65 S1-	61 S1-
880-45332-A-67-E MSD	Matrix Spike Duplicate	62 S1-	56 S1-
890-6849-1	SS 1	49 S1-	49 S1-
890-6849-2	SS 2	99	99
LCS 880-84376/2-A	Lab Control Sample	97	97
LCSD 880-84376/3-A	Lab Control Sample Dup	113	115
MB 880-84376/1-A	Method Blank	136 S1+	149 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Ensolum
Project/Site: EIDER FEDERAL 35

Job ID: 890-6849-1
SDG: 03C2024281

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-84312/5-A

Matrix: Solid

Analysis Batch: 84308

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 84312

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		06/27/24 08:37	06/27/24 11:41	1
Benzene	<0.00200	U	0.00200	mg/Kg		06/27/24 08:37	06/27/24 11:41	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		06/27/24 08:37	06/27/24 11:41	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		06/27/24 08:37	06/27/24 11:41	1
Toluene	<0.00200	U	0.00200	mg/Kg		06/27/24 08:37	06/27/24 11:41	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		06/27/24 08:37	06/27/24 11:41	1
Total BTEX	<0.00200	U	0.00200	mg/Kg		06/27/24 08:37	06/27/24 11:41	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	183	S1+	70 - 130	06/27/24 08:37	06/27/24 11:41	1
1,4-Difluorobenzene (Surr)	121		70 - 130	06/27/24 08:37	06/27/24 11:41	1

Lab Sample ID: LCS 880-84312/1-A

Matrix: Solid

Analysis Batch: 84308

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 84312

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
m-Xylene & p-Xylene	0.200	0.06904	*-	mg/Kg		35	70 - 130
Benzene	0.100	0.07177		mg/Kg		72	70 - 130
o-Xylene	0.100	0.06269	*-	mg/Kg		63	70 - 130
Toluene	0.100	0.06864	*-	mg/Kg		69	70 - 130
Ethylbenzene	0.100	0.08331		mg/Kg		83	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	70		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: LCSD 880-84312/2-A

Matrix: Solid

Analysis Batch: 84308

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 84312

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
m-Xylene & p-Xylene	0.200	0.1684	*1	mg/Kg		84	70 - 130	84	35
Benzene	0.100	0.09926		mg/Kg		99	70 - 130	32	35
o-Xylene	0.100	0.1003	*1	mg/Kg		100	70 - 130	46	35
Toluene	0.100	0.08495		mg/Kg		85	70 - 130	21	35
Ethylbenzene	0.100	0.08414		mg/Kg		84	70 - 130	1	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	121		70 - 130
1,4-Difluorobenzene (Surr)	110		70 - 130

Lab Sample ID: 880-45318-A-1-A MS

Matrix: Solid

Analysis Batch: 84308

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 84312

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
m-Xylene & p-Xylene	<0.00398	U *- *1	0.200	0.1719		mg/Kg		86	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: EIDER FEDERAL 35

Job ID: 890-6849-1
SDG: 03C2024281

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

Lab Sample ID: 880-45318-A-1-A MS
Matrix: Solid
Analysis Batch: 84308

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 84312

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.100	0.09834		mg/Kg		98	70 - 130
o-Xylene	<0.00199	U *- *1	0.100	0.09018		mg/Kg		90	70 - 130
Toluene	<0.00199	U *-	0.100	0.08060		mg/Kg		80	70 - 130
Ethylbenzene	<0.00199	U	0.100	0.08321		mg/Kg		83	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	116		70 - 130						
1,4-Difluorobenzene (Surr)	108		70 - 130						

Lab Sample ID: 880-45318-A-1-B MSD
Matrix: Solid
Analysis Batch: 84308

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 84312

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
m-Xylene & p-Xylene	<0.00398	U *- *1	0.199	0.2004		mg/Kg		101	70 - 130	15	35
Benzene	<0.00199	U	0.0994	0.1027		mg/Kg		103	70 - 130	4	35
o-Xylene	<0.00199	U *- *1	0.0994	0.1055		mg/Kg		106	70 - 130	16	35
Toluene	<0.00199	U *-	0.0994	0.08094		mg/Kg		81	70 - 130	0	35
Ethylbenzene	<0.00199	U	0.0994	0.1008		mg/Kg		101	70 - 130	19	35
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	123		70 - 130								
1,4-Difluorobenzene (Surr)	104		70 - 130								

Lab Sample ID: MB 880-84412/5-A
Matrix: Solid
Analysis Batch: 84451

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 84412

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		06/27/24 16:42	06/28/24 11:23	1
Benzene	<0.00200	U	0.00200	mg/Kg		06/27/24 16:42	06/28/24 11:23	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		06/27/24 16:42	06/28/24 11:23	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		06/27/24 16:42	06/28/24 11:23	1
Toluene	<0.00200	U	0.00200	mg/Kg		06/27/24 16:42	06/28/24 11:23	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		06/27/24 16:42	06/28/24 11:23	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	78		70 - 130			06/27/24 16:42	06/28/24 11:23	1
1,4-Difluorobenzene (Surr)	87		70 - 130			06/27/24 16:42	06/28/24 11:23	1

Lab Sample ID: MB 880-84468/5-A
Matrix: Solid
Analysis Batch: 84451

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 84468

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		06/28/24 10:09	06/28/24 22:10	1
Benzene	<0.00200	U	0.00200	mg/Kg		06/28/24 10:09	06/28/24 22:10	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		06/28/24 10:09	06/28/24 22:10	1

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QC Sample Results

Client: Ensolum
Project/Site: EIDER FEDERAL 35

Job ID: 890-6849-1
SDG: 03C2024281

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

Lab Sample ID: MB 880-84468/5-A

Matrix: Solid

Analysis Batch: 84451

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 84468

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		06/28/24 10:09	06/28/24 22:10	1
Toluene	<0.00200	U	0.00200	mg/Kg		06/28/24 10:09	06/28/24 22:10	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		06/28/24 10:09	06/28/24 22:10	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	72		70 - 130	06/28/24 10:09	06/28/24 22:10	1
1,4-Difluorobenzene (Surr)	91		70 - 130	06/28/24 10:09	06/28/24 22:10	1

Lab Sample ID: LCS 880-84468/1-A

Matrix: Solid

Analysis Batch: 84451

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 84468

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
m-Xylene & p-Xylene	0.200	0.2246		mg/Kg		112	70 - 130
Benzene	0.100	0.1111		mg/Kg		111	70 - 130
o-Xylene	0.100	0.1048		mg/Kg		105	70 - 130
Toluene	0.100	0.1023		mg/Kg		102	70 - 130
Ethylbenzene	0.100	0.1200		mg/Kg		120	70 - 130

Surrogate	LCS	LCS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: LCSD 880-84468/2-A

Matrix: Solid

Analysis Batch: 84451

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 84468

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
		Result	Qualifier						
m-Xylene & p-Xylene	0.200	0.2462		mg/Kg		123	70 - 130	9	35
Benzene	0.100	0.1115		mg/Kg		112	70 - 130	0	35
o-Xylene	0.100	0.1156		mg/Kg		116	70 - 130	10	35
Toluene	0.100	0.1072		mg/Kg		107	70 - 130	5	35
Ethylbenzene	0.100	0.1319	*+	mg/Kg		132	70 - 130	9	35

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: 890-6855-A-21-B MS

Matrix: Solid

Analysis Batch: 84451

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 84468

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier		Result	Qualifier				
m-Xylene & p-Xylene	<0.00398	U	0.199	0.2290		mg/Kg		115	70 - 130
Benzene	<0.00199	U	0.0996	0.09843		mg/Kg		99	70 - 130
o-Xylene	<0.00199	U	0.0996	0.1087		mg/Kg		109	70 - 130
Toluene	<0.00199	U	0.0996	0.09677		mg/Kg		97	70 - 130
Ethylbenzene	<0.00199	U *+	0.0996	0.1277		mg/Kg		128	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: EIDER FEDERAL 35

Job ID: 890-6849-1
SDG: 03C2024281

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

				MS	MS							
Surrogate	%Recovery	Qualifier	Limits									
4-Bromofluorobenzene (Surr)	120		70 - 130									
1,4-Difluorobenzene (Surr)	91		70 - 130									
Lab Sample ID: 890-6855-A-21-C MSD				Client Sample ID: Matrix Spike Duplicate								
Matrix: Solid				Prep Type: Total/NA								
Analysis Batch: 84451				Prep Batch: 84468								
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit	
m-Xylene & p-Xylene	<0.00398	U	0.202	0.1713		mg/Kg		85	70 - 130	29	35	
Benzene	<0.00199	U	0.101	0.09307		mg/Kg		92	70 - 130	6	35	
o-Xylene	<0.00199	U	0.101	0.08088		mg/Kg		80	70 - 130	29	35	
Toluene	<0.00199	U	0.101	0.08590		mg/Kg		85	70 - 130	12	35	
Ethylbenzene	<0.00199	U *+	0.101	0.09514		mg/Kg		94	70 - 130	29	35	
				MSD	MSD							
Surrogate	%Recovery	Qualifier	Limits									
4-Bromofluorobenzene (Surr)	98		70 - 130									
1,4-Difluorobenzene (Surr)	101		70 - 130									

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

Lab Sample ID: MB 880-84376/1-A						Client Sample ID: Method Blank			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 84437						Prep Batch: 84376			
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		06/27/24 14:28	06/28/24 08:41	1	
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		06/27/24 14:28	06/28/24 08:41	1	
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		06/27/24 14:28	06/28/24 08:41	1	
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1-Chlorooctane	136	S1+	70 - 130			06/27/24 14:28	06/28/24 08:41	1	
o-Terphenyl	149	S1+	70 - 130			06/27/24 14:28	06/28/24 08:41	1	

Lab Sample ID: LCS 880-84376/2-A					Client Sample ID: Lab Control Sample					
Matrix: Solid					Prep Type: Total/NA					
Analysis Batch: 84437					Prep Batch: 84376					
Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
	Diesel Range Organics (Over C10-C28)		1000	985.8		mg/Kg		99	70 - 130	
	Gasoline Range Organics (GRO)-C6-C10		1000	992.9		mg/Kg		99	70 - 130	
Surrogate		LCS	LCS							
		%Recovery	Qualifier	Limits						
	1-Chlorooctane		97						70 - 130	
	o-Terphenyl		97						70 - 130	

QC Sample Results

Client: Ensolum
Project/Site: EIDER FEDERAL 35

Job ID: 890-6849-1
SDG: 03C2024281

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

Lab Sample ID: LCSD 880-84376/3-A

Matrix: Solid

Analysis Batch: 84437

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 84376

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Diesel Range Organics (Over C10-C28)	1000	986.1		mg/Kg		99	70 - 130	0	20
Gasoline Range Organics (GRO)-C6-C10	1000	1011		mg/Kg		101	70 - 130	2	20
	LCSD	LCSD							
Surrogate	%Recovery	Qualifier	Limits						
1-Chlorooctane	113		70 - 130						
o-Terphenyl	115		70 - 130						

Lab Sample ID: 880-45332-A-67-D MS

Matrix: Solid

Analysis Batch: 84437

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 84376

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Diesel Range Organics (Over C10-C28)	Err	F1	999	401.2	F1	mg/Kg		34	70 - 130		
Gasoline Range Organics (GRO)-C6-C10	Err	F1	999	362.1	F1	mg/Kg		35	70 - 130		
	MS	MS									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	65	S1-	70 - 130								
o-Terphenyl	61	S1-	70 - 130								

Lab Sample ID: 880-45332-A-67-E MSD

Matrix: Solid

Analysis Batch: 84437

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 84376

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Diesel Range Organics (Over C10-C28)	Err	F1	999	375.2	F1	mg/Kg		32	70 - 130	7	20
Gasoline Range Organics (GRO)-C6-C10	Err	F1	999	339.7	F1	mg/Kg		33	70 - 130	6	20
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	62	S1-	70 - 130								
o-Terphenyl	56	S1-	70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-84369/1-A

Matrix: Solid

Analysis Batch: 84458

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			06/29/24 06:59	1

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QC Sample Results

Client: Ensolum
Project/Site: EIDER FEDERAL 35

Job ID: 890-6849-1
SDG: 03C2024281

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-84369/2-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 84458

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	255.3		mg/Kg		102	90 - 110		

Lab Sample ID: LCSD 880-84369/3-A

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 84458

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	257.1		mg/Kg		103	90 - 110	1	20

Lab Sample ID: 880-45287-A-7-B MS

Client Sample ID: Matrix Spike

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 84458

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	1210		250	1436	4	mg/Kg		91	90 - 110		

Lab Sample ID: 880-45287-A-7-C MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 84458

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1210		250	1441	4	mg/Kg		93	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: EIDER FEDERAL 35

Job ID: 890-6849-1
SDG: 03C2024281

GC VOA

Analysis Batch: 84308

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6849-1	SS 1	Total/NA	Solid	8021B	84312
MB 880-84312/5-A	Method Blank	Total/NA	Solid	8021B	84312
LCS 880-84312/1-A	Lab Control Sample	Total/NA	Solid	8021B	84312
LCSD 880-84312/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	84312
880-45318-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	84312
880-45318-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	84312

Prep Batch: 84312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6849-1	SS 1	Total/NA	Solid	5035	
MB 880-84312/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-84312/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-84312/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-45318-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-45318-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 84412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-84412/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 84451

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6849-2	SS 2	Total/NA	Solid	8021B	84468
MB 880-84412/5-A	Method Blank	Total/NA	Solid	8021B	84412
MB 880-84468/5-A	Method Blank	Total/NA	Solid	8021B	84468
LCS 880-84468/1-A	Lab Control Sample	Total/NA	Solid	8021B	84468
LCSD 880-84468/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	84468
890-6855-A-21-B MS	Matrix Spike	Total/NA	Solid	8021B	84468
890-6855-A-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	84468

Analysis Batch: 84463

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6849-1	SS 1	Total/NA	Solid	Total BTEX	
890-6849-2	SS 2	Total/NA	Solid	Total BTEX	

Prep Batch: 84468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6849-2	SS 2	Total/NA	Solid	5035	
MB 880-84468/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-84468/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-84468/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-6855-A-21-B MS	Matrix Spike	Total/NA	Solid	5035	
890-6855-A-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 84376

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6849-1	SS 1	Total/NA	Solid	8015NM Prep	
890-6849-2	SS 2	Total/NA	Solid	8015NM Prep	
MB 880-84376/1-A	Method Blank	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: Ensolum
Project/Site: EIDER FEDERAL 35

Job ID: 890-6849-1
SDG: 03C2024281

GC Semi VOA (Continued)

Prep Batch: 84376 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-84376/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-84376/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-45332-A-67-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-45332-A-67-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 84437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6849-1	SS 1	Total/NA	Solid	8015B NM	84376
890-6849-2	SS 2	Total/NA	Solid	8015B NM	84376
MB 880-84376/1-A	Method Blank	Total/NA	Solid	8015B NM	84376
LCS 880-84376/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	84376
LCSD 880-84376/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	84376
880-45332-A-67-D MS	Matrix Spike	Total/NA	Solid	8015B NM	84376
880-45332-A-67-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	84376

Analysis Batch: 84783

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6849-1	SS 1	Total/NA	Solid	8015 NM	
890-6849-2	SS 2	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 84369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6849-1	SS 1	Soluble	Solid	DI Leach	
890-6849-2	SS 2	Soluble	Solid	DI Leach	
MB 880-84369/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-84369/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-84369/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-45287-A-7-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-45287-A-7-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 84458

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-6849-1	SS 1	Soluble	Solid	300.0	84369
890-6849-2	SS 2	Soluble	Solid	300.0	84369
MB 880-84369/1-A	Method Blank	Soluble	Solid	300.0	84369
LCS 880-84369/2-A	Lab Control Sample	Soluble	Solid	300.0	84369
LCSD 880-84369/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	84369
880-45287-A-7-B MS	Matrix Spike	Soluble	Solid	300.0	84369
880-45287-A-7-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	84369

Lab Chronicle

Client: Ensolum
Project/Site: EIDER FEDERAL 35

Job ID: 890-6849-1
SDG: 03C2024281

Client Sample ID: SS 1
Date Collected: 06/24/24 13:20
Date Received: 06/26/24 08:38

Lab Sample ID: 890-6849-1
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			4.96 g	5 mL	84312	06/27/24 08:37	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	84308	06/27/24 17:53	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84463	06/27/24 17:53	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84783	06/28/24 18:51	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	84376	06/27/24 14:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	84437	06/28/24 18:51	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	84369	06/27/24 13:54	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84458	06/29/24 09:20	CH	EET MID

Client Sample ID: SS 2
Date Collected: 06/24/24 13:23
Date Received: 06/26/24 08:38

Lab Sample ID: 890-6849-2
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	84468	06/28/24 10:09	MNR	EET MID
Total/NA	Analysis	8021B		25	5 mL	5 mL	84451	06/29/24 05:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			84463	06/29/24 05:46	AJ	EET MID
Total/NA	Analysis	8015 NM		1			84783	06/28/24 18:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	84376	06/27/24 14:29	EL	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	84437	06/28/24 18:30	AJ	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	84369	06/27/24 13:54	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	84458	06/29/24 09:25	CH	EET MID

Laboratory References:
EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Ensolum
Project/Site: EIDER FEDERAL 35

Job ID: 890-6849-1
SDG: 03C2024281

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	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
8021B	5035	Solid	Total BTEX
Total BTEX		Solid	Total BTEX

Method Summary

Client: Ensolum
Project/Site: EIDER FEDERAL 35

Job ID: 890-6849-1
SDG: 03C2024281

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: Ensolum
Project/Site: EIDER FEDERAL 35

Job ID: 890-6849-1
SDG: 03C2024281

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-6849-1	SS 1	Solid	06/24/24 13:20	06/26/24 08:38
890-6849-2	SS 2	Solid	06/24/24 13:23	06/26/24 08:38

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890-6849 Chain of Custody



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

Work Order No: _____

www.xenco.com Page 1 of 1

[illegible]

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-6849-1

SDG Number: 03C2024281

Login Number: 6849

List Number: 1

Creator: Bruns, Shannon

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: Ensolum

Job Number: 890-6849-1

SDG Number: 03C2024281

Login Number: 6849

List Number: 2

Creator: Vasquez, Julisa

List Source: Eurofins Midland

List Creation: 06/27/24 07:47 AM

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	



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Hadlie Green
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701
Generated 8/6/2024 5:34:08 PM

JOB DESCRIPTION

Eider Federal 35
Lea County NM

JOB NUMBER

880-46746-1

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



Generated
8/6/2024 5:34:08 PM

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

Client: Ensolum
Project/Site: Eider Federal 35

Laboratory Job ID: 880-46746-1
SDG: Lea County NM

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Definitions/Glossary

Client: Ensolum
Project/Site: Eider Federal 35

Job ID: 880-46746-1
SDG: Lea County NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high 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.
⬤	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: Ensolum
Project: Eider Federal 35

Job ID: 880-46746-1

Job ID: 880-46746-1

Eurofins Midland

Job Narrative 880-46746-1

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 and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided 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 7/31/2024 2:31 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 5.5°C.

GC VOA

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-87238 and analytical batch 880-87227 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.

Diesel Range Organics

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (880-46579-A-1-E), (880-46579-A-1-T MS) and (880-46579-A-1-U MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: SW01 (880-46746-2). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: An incorrect volume of surrogate spiking solution was inadvertently added the following samples: FS01 (880-46746-1). Percent recoveries are based on the amount spiked.

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 - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-87299 and analytical batch 880-87317 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Eurofins Midland

Client Sample Results

Client: Ensolum
Project/Site: Eider Federal 35

Job ID: 880-46746-1
SDG: Lea County NM

Client Sample ID: FS01

Lab Sample ID: 880-46746-1

Date Collected: 07/30/24 12:10

Matrix: Solid

Date Received: 07/31/24 14:31

Sample Depth: 18"

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		08/01/24 08:47	08/01/24 12:27	1
Toluene	<0.00201	U	0.00201	mg/Kg		08/01/24 08:47	08/01/24 12:27	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		08/01/24 08:47	08/01/24 12:27	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		08/01/24 08:47	08/01/24 12:27	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		08/01/24 08:47	08/01/24 12:27	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		08/01/24 08:47	08/01/24 12:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	08/01/24 08:47	08/01/24 12:27	1
1,4-Difluorobenzene (Surr)	117		70 - 130	08/01/24 08:47	08/01/24 12:27	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			08/01/24 12:27	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			08/02/24 18:24	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	<49.8	U	49.8	mg/Kg		08/01/24 07:20	08/02/24 18:24	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		08/01/24 07:20	08/02/24 18:24	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		08/01/24 07:20	08/02/24 18:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	222	S1+	70 - 130	08/01/24 07:20	08/02/24 18:24	1
o-Terphenyl	222	S1+	70 - 130	08/01/24 07:20	08/02/24 18:24	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	55.5		5.02	mg/Kg			08/04/24 05:13	1

Client Sample ID: SW01

Lab Sample ID: 880-46746-2

Date Collected: 07/30/24 12:15

Matrix: Solid

Date Received: 07/31/24 14:31

Sample Depth: 18"

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		08/01/24 08:47	08/01/24 12:48	1
Toluene	<0.00200	U	0.00200	mg/Kg		08/01/24 08:47	08/01/24 12:48	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		08/01/24 08:47	08/01/24 12:48	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		08/01/24 08:47	08/01/24 12:48	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		08/01/24 08:47	08/01/24 12:48	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		08/01/24 08:47	08/01/24 12:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	08/01/24 08:47	08/01/24 12:48	1

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Client Sample Results

Client: Ensolum
Project/Site: Eider Federal 35

Job ID: 880-46746-1
SDG: Lea County NM

Client Sample ID: SW01

Lab Sample ID: 880-46746-2

Date Collected: 07/30/24 12:15

Matrix: Solid

Date Received: 07/31/24 14:31

Sample Depth: 18"

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	109		70 - 130	08/01/24 08:47	08/01/24 12:48	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			08/01/24 12:48	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			08/02/24 21:21	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		08/01/24 07:20	08/02/24 21:21	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7	mg/Kg		08/01/24 07:20	08/02/24 21:21	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7	mg/Kg		08/01/24 07:20	08/02/24 21:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	124		70 - 130	08/01/24 07:20	08/02/24 21:21	1
o-Terphenyl	253	S1+	70 - 130	08/01/24 07:20	08/02/24 21:21	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23.0		5.04	mg/Kg			08/04/24 05:22	1

Surrogate Summary

Client: Ensolum
Project/Site: Eider Federal 35

Job ID: 880-46746-1
SDG: Lea County NM

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)
880-46746-1	FS01	105	117
880-46746-2	SW01	101	109
LCS 880-87238/1-A	Lab Control Sample	89	107
LCSD 880-87238/2-A	Lab Control Sample Dup	94	106
MB 880-87238/5-A	Method Blank	148 S1+	118
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)
880-46746-1	FS01	222 S1+	222 S1+
880-46746-2	SW01	124	253 S1+
LCS 880-87225/2-A	Lab Control Sample	99	109
LCSD 880-87225/3-A	Lab Control Sample Dup	123	108
MB 880-87225/1-A	Method Blank	84	86
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Ensolum
Project/Site: Eider Federal 35

Job ID: 880-46746-1
SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-87238/5-A

Matrix: Solid

Analysis Batch: 87227

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 87238

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		08/01/24 08:47	08/01/24 11:38	1
Toluene	<0.00200	U	0.00200	mg/Kg		08/01/24 08:47	08/01/24 11:38	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		08/01/24 08:47	08/01/24 11:38	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		08/01/24 08:47	08/01/24 11:38	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		08/01/24 08:47	08/01/24 11:38	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		08/01/24 08:47	08/01/24 11:38	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	148	S1+	70 - 130	08/01/24 08:47	08/01/24 11:38	1
1,4-Difluorobenzene (Surr)	118		70 - 130	08/01/24 08:47	08/01/24 11:38	1

Lab Sample ID: LCS 880-87238/1-A

Matrix: Solid

Analysis Batch: 87227

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 87238

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1019		mg/Kg		102	70 - 130
Toluene	0.100	0.09486		mg/Kg		95	70 - 130
Ethylbenzene	0.100	0.08019		mg/Kg		80	70 - 130
m-Xylene & p-Xylene	0.200	0.1865		mg/Kg		93	70 - 130
o-Xylene	0.100	0.1068		mg/Kg		107	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	89		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: LCSD 880-87238/2-A

Matrix: Solid

Analysis Batch: 87227

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 87238

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1138		mg/Kg		114	70 - 130	11	35
Toluene	0.100	0.1011		mg/Kg		101	70 - 130	6	35
Ethylbenzene	0.100	0.1105		mg/Kg		111	70 - 130	32	35
m-Xylene & p-Xylene	0.200	0.2014		mg/Kg		101	70 - 130	8	35
o-Xylene	0.100	0.1124		mg/Kg		112	70 - 130	5	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Eurofins Midland

QC Sample Results

Client: Ensolum
Project/Site: Eider Federal 35

Job ID: 880-46746-1
SDG: Lea County NM

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

Lab Sample ID: MB 880-87225/1-A

Matrix: Solid

Analysis Batch: 87292

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 87225

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		08/01/24 07:20	08/02/24 09:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		08/01/24 07:20	08/02/24 09:45	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		08/01/24 07:20	08/02/24 09:45	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	84		70 - 130			08/01/24 07:20	08/02/24 09:45	1
o-Terphenyl	86		70 - 130			08/01/24 07:20	08/02/24 09:45	1

Lab Sample ID: LCS 880-87225/2-A

Matrix: Solid

Analysis Batch: 87292

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 87225

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	974.5		mg/Kg		97	70 - 130
Diesel Range Organics (Over C10-C28)	1000	977.6		mg/Kg		98	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	99		70 - 130				
o-Terphenyl	109		70 - 130				

Lab Sample ID: LCSD 880-87225/3-A

Matrix: Solid

Analysis Batch: 87292

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 87225

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	983.7		mg/Kg		98	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	977.0		mg/Kg		98	70 - 130	0	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	123		70 - 130						
o-Terphenyl	108		70 - 130						

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-87299/1-A

Matrix: Solid

Analysis Batch: 87317

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			08/04/24 04:11	1

Eurofins Midland

QC Sample Results

Client: Ensolum
Project/Site: Eider Federal 35

Job ID: 880-46746-1
SDG: Lea County NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-87299/2-A					Client Sample ID: Lab Control Sample				
Matrix: Solid					Prep Type: Soluble				
Analysis Batch: 87317									
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	250	227.8		mg/Kg		91	90 - 110		

Lab Sample ID: LCSD 880-87299/3-A					Client Sample ID: Lab Control Sample Dup				
Matrix: Solid					Prep Type: Soluble				
Analysis Batch: 87317									
Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	230.5		mg/Kg		92	90 - 110	1	20

QC Association Summary

Client: Ensolum
Project/Site: Eider Federal 35

Job ID: 880-46746-1
SDG: Lea County NM

GC VOA

Analysis Batch: 87227

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-46746-1	FS01	Total/NA	Solid	8021B	87238
880-46746-2	SW01	Total/NA	Solid	8021B	87238
MB 880-87238/5-A	Method Blank	Total/NA	Solid	8021B	87238
LCS 880-87238/1-A	Lab Control Sample	Total/NA	Solid	8021B	87238
LCSD 880-87238/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	87238

Prep Batch: 87238

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-46746-1	FS01	Total/NA	Solid	5035	
880-46746-2	SW01	Total/NA	Solid	5035	
MB 880-87238/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-87238/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-87238/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 87324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-46746-1	FS01	Total/NA	Solid	Total BTEX	
880-46746-2	SW01	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 87225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-46746-1	FS01	Total/NA	Solid	8015NM Prep	
880-46746-2	SW01	Total/NA	Solid	8015NM Prep	
MB 880-87225/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-87225/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-87225/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 87292

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-46746-1	FS01	Total/NA	Solid	8015B NM	87225
880-46746-2	SW01	Total/NA	Solid	8015B NM	87225
MB 880-87225/1-A	Method Blank	Total/NA	Solid	8015B NM	87225
LCS 880-87225/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	87225
LCSD 880-87225/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	87225

Analysis Batch: 87573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-46746-1	FS01	Total/NA	Solid	8015 NM	
880-46746-2	SW01	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 87299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-46746-1	FS01	Soluble	Solid	DI Leach	
880-46746-2	SW01	Soluble	Solid	DI Leach	
MB 880-87299/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-87299/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-87299/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: Ensolum
Project/Site: Eider Federal 35

Job ID: 880-46746-1
SDG: Lea County NM

HPLC/IC

Analysis Batch: 87317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-46746-1	FS01	Soluble	Solid	300.0	87299
880-46746-2	SW01	Soluble	Solid	300.0	87299
MB 880-87299/1-A	Method Blank	Soluble	Solid	300.0	87299
LCS 880-87299/2-A	Lab Control Sample	Soluble	Solid	300.0	87299
LCSD 880-87299/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	87299

Lab Chronicle

Client: Ensolum
Project/Site: Eider Federal 35

Job ID: 880-46746-1
SDG: Lea County NM

Client Sample ID: FS01
Date Collected: 07/30/24 12:10
Date Received: 07/31/24 14:31

Lab Sample ID: 880-46746-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			87238	MNR	EET MID	08/01/24 08:47
Total/NA	Analysis	8021B		1	87227	MNR	EET MID	08/01/24 12:27
Total/NA	Analysis	Total BTEX		1	87324	MNR	EET MID	08/01/24 12:27
Total/NA	Analysis	8015 NM		1	87573	SM	EET MID	08/02/24 18:24
Total/NA	Prep	8015NM Prep			87225	EL	EET MID	08/01/24 07:20
Total/NA	Analysis	8015B NM		1	87292	TKC	EET MID	08/02/24 18:24
Soluble	Leach	DI Leach			87299	SA	EET MID	08/01/24 13:44
Soluble	Analysis	300.0		1	87317	CH	EET MID	08/04/24 05:13

Client Sample ID: SW01
Date Collected: 07/30/24 12:15
Date Received: 07/31/24 14:31

Lab Sample ID: 880-46746-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			87238	MNR	EET MID	08/01/24 08:47
Total/NA	Analysis	8021B		1	87227	MNR	EET MID	08/01/24 12:48
Total/NA	Analysis	Total BTEX		1	87324	MNR	EET MID	08/01/24 12:48
Total/NA	Analysis	8015 NM		1	87573	SM	EET MID	08/02/24 21:21
Total/NA	Prep	8015NM Prep			87225	EL	EET MID	08/01/24 07:20
Total/NA	Analysis	8015B NM		1	87292	TKC	EET MID	08/02/24 21:21
Soluble	Leach	DI Leach			87299	SA	EET MID	08/01/24 13:44
Soluble	Analysis	300.0		1	87317	CH	EET MID	08/04/24 05:22

Laboratory References:
EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Ensolum
Project/Site: Eider Federal 35

Job ID: 880-46746-1
SDG: Lea County NM

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	06-30-25
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: Ensolum
Project/Site: Eider Federal 35

Job ID: 880-46746-1
SDG: Lea County NM

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: Ensolum
Project/Site: Eider Federal 35

Job ID: 880-46746-1
SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-46746-1	FS01	Solid	07/30/24 12:10	07/31/24 14:31	18"
880-46746-2	SW01	Solid	07/30/24 12:15	07/31/24 14:31	18"

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Environment Testing

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
El Paso, NM (575) 392-7550, Carlsbad, NM (575) 988-3199
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Chain of Custody



880-467 46 Chain of Custody

Page 1 of 1 www.xenco.com

Project Manager:						Bill to: (if different)					
Company Name:						Company Name:					
Address:						Address:					
City, State ZIP:						City, State ZIP:					
Phone:						Email:					
Project Name:						Turn Around					
P Project Number:						<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush					
Project Location:						Due Date:					
Sampler's Name:						TAT starts the day received by the lab, if received by 4:30pm					
PO #:											
SAMPLE RECEIPT						Parameters					
Samples Received Intact:						Wet Ice:					
Cooler Custody Seals:						Thermometer ID:					
Sample Custody Seals:						Correction Factor:					
Total Containers:						Temperature Reading:					
						Corrected Temperature:					
Sample Identification						Matrix					
Date Sampled						Time Sampled					
Depth						Grab/Comp					
# of Cont											
BTEX 8021											
TPH 8015M											
Chlorides 300											
ANALYSIS REQUEST											
Preservative Codes											
None: NO						DI Water: H ₂ O					
Cool: Cool						MeOH: Me					
HCL: HC						HNO ₃ : HN					
H ₂ SO ₄ : H ₂						NaOH: Na					
H ₃ PO ₄ : HP											
NaHSO ₄ : NABIS											
Na ₂ S ₂ O ₃ : NaSO ₃											
Zn Acetate+NaOH: Zn											
NaOH+Ascorbic Acid: SAPC											
Sample Comments											

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-46746-1

SDG Number: Lea County NM

Login Number: 46746

List Number: 1

Creator: Kramer, Jessica

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.	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").	N/A	



APPENDIX B

Photographic Log



Photographic Log
COG Operating, LLC
Eider Federal 35
nAPP2418343772



Photograph: 1
Description: Backfilled excavation
View: South

Date: 11/27/2024



Photograph: 2
Description: Backfilled excavation
View: Northeast

Date: 11/27/2024



Photograph: 3
Description: Backfilled excavation
View: North

Date: 11/27/2024



Photograph: 4
Description: Backfilled excavation
View: Northwest

Date: 11/27/2024



APPENDIX C

Laboratory Analytical Report & Chain of Custody Documentation



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Hadlie Green
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701
Generated 12/6/2024 8:55:15 AM

JOB DESCRIPTION

EIDER FEDERAL 35
03D2024281

JOB NUMBER

890-7425-1

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
12/6/2024 8:55:15 AM

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

Client: Ensolum
Project/Site: EIDER FEDERAL 35

Laboratory Job ID: 890-7425-1
SDG: 03D2024281

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Definitions/Glossary

Client: Ensolum
Project/Site: EIDER FEDERAL 35

Job ID: 890-7425-1
SDG: 03D2024281

Qualifiers

GC 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
F1	MS and/or MSD recovery exceeds control limits.
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: Ensolum
Project: EIDER FEDERAL 35

Job ID: 890-7425-1

Job ID: 890-7425-1

Eurofins Carlsbad

Job Narrative 890-7425-1

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 and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided 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 sample was received on 11/27/2024 12:29 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 6.0°C.

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: BF 01 (890-7425-1).

GC VOA

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-96841 recovered above the upper control limit for o-Xylene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 880-96841/20).

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

Diesel Range Organics

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-96831/2-A) and (LCSD 880-96831/3-A). Evidence of matrix interferences is not obvious.

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 - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-96899 and analytical batch 880-96958 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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: Ensolum
Project/Site: EIDER FEDERAL 35

Job ID: 890-7425-1
SDG: 03D2024281

Client Sample ID: BF 01

Lab Sample ID: 890-7425-1

Date Collected: 11/27/24 08:33

Matrix: Solid

Date Received: 11/27/24 12:29

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		12/02/24 08:36	12/02/24 18:52	1
Toluene	<0.00199	U	0.00199	mg/Kg		12/02/24 08:36	12/02/24 18:52	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		12/02/24 08:36	12/02/24 18:52	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		12/02/24 08:36	12/02/24 18:52	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		12/02/24 08:36	12/02/24 18:52	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		12/02/24 08:36	12/02/24 18:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	12/02/24 08:36	12/02/24 18:52	1
1,4-Difluorobenzene (Surr)	100		70 - 130	12/02/24 08:36	12/02/24 18:52	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			12/02/24 18:52	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			12/02/24 17:25	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		12/02/24 07:54	12/02/24 17:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		12/02/24 07:54	12/02/24 17:25	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/02/24 07:54	12/02/24 17:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130	12/02/24 07:54	12/02/24 17:25	1
o-Terphenyl	91		70 - 130	12/02/24 07:54	12/02/24 17:25	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	159		9.98	mg/Kg			12/06/24 04:13	1

Eurofins Carlsbad

Surrogate Summary

Client: Ensolum
Project/Site: EIDER FEDERAL 35

Job ID: 890-7425-1
SDG: 03D2024281

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)
890-7425-1	BF 01	110	100
890-7428-A-61-A MS	Matrix Spike	106	101
890-7428-A-61-B MSD	Matrix Spike Duplicate	107	98
LCS 880-96835/1-A	Lab Control Sample	107	99
LCSD 880-96835/2-A	Lab Control Sample Dup	105	100
MB 880-96835/5-A	Method Blank	97	95
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)
890-7423-A-10-C MS	Matrix Spike	100	92
890-7423-A-10-D MSD	Matrix Spike Duplicate	99	89
890-7425-1	BF 01	87	91
LCS 880-96831/2-A	Lab Control Sample	147 S1+	135 S1+
LCSD 880-96831/3-A	Lab Control Sample Dup	147 S1+	135 S1+
MB 880-96831/1-A	Method Blank	78	82
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Ensolum
Project/Site: EIDER FEDERAL 35

Job ID: 890-7425-1
SDG: 03D2024281

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-96835/5-A					Client Sample ID: Method Blank				
Matrix: Solid					Prep Type: Total/NA				
Analysis Batch: 96841					Prep Batch: 96835				
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<0.00200	U	0.00200	mg/Kg		12/02/24 08:36	12/02/24 12:08	1	
Toluene	<0.00200	U	0.00200	mg/Kg		12/02/24 08:36	12/02/24 12:08	1	
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		12/02/24 08:36	12/02/24 12:08	1	
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		12/02/24 08:36	12/02/24 12:08	1	
o-Xylene	<0.00200	U	0.00200	mg/Kg		12/02/24 08:36	12/02/24 12:08	1	
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		12/02/24 08:36	12/02/24 12:08	1	
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	97		70 - 130			12/02/24 08:36	12/02/24 12:08	1	
1,4-Difluorobenzene (Surr)	95		70 - 130			12/02/24 08:36	12/02/24 12:08	1	

Lab Sample ID: LCS 880-96835/1-A					Client Sample ID: Lab Control Sample					
Matrix: Solid					Prep Type: Total/NA					
Analysis Batch: 96841					Prep Batch: 96835					
			Spike	LCS	LCS			%Rec		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene			0.100	0.1083		mg/Kg		108	70 - 130	
Toluene			0.100	0.1066		mg/Kg		107	70 - 130	
Ethylbenzene			0.100	0.1158		mg/Kg		116	70 - 130	
m-Xylene & p-Xylene			0.200	0.2290		mg/Kg		114	70 - 130	
o-Xylene			0.100	0.1280		mg/Kg		128	70 - 130	
			LCS	LCS						
Surrogate		%Recovery	Qualifier	Limits						
4-Bromofluorobenzene (Surr)		107		70 - 130						
1,4-Difluorobenzene (Surr)		99		70 - 130						

Lab Sample ID: LCSD 880-96835/2-A						Client Sample ID: Lab Control Sample Dup				
Matrix: Solid						Prep Type: Total/NA				
Analysis Batch: 96841						Prep Batch: 96835				
Analyte		Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene		0.100	0.1103		mg/Kg		110	70 - 130	2	35
Toluene		0.100	0.1079		mg/Kg		108	70 - 130	1	35
Ethylbenzene		0.100	0.1154		mg/Kg		115	70 - 130	0	35
m-Xylene & p-Xylene		0.200	0.2285		mg/Kg		114	70 - 130	0	35
o-Xylene		0.100	0.1275		mg/Kg		127	70 - 130	0	35
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits							
4-Bromofluorobenzene (Surr)	105		70 - 130							
1,4-Difluorobenzene (Surr)	100		70 - 130							

Lab Sample ID: 890-7428-A-61-A MS						Client Sample ID: Matrix Spike			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 96841						Prep Batch: 96835			
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.100	0.1089		mg/Kg		109	70 - 130
Toluene	<0.00199	U	0.100	0.1071		mg/Kg		107	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: EIDER FEDERAL 35

Job ID: 890-7425-1
SDG: 03D2024281

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

Lab Sample ID: 890-7428-A-61-A MS
Matrix: Solid
Analysis Batch: 96841

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 96835

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U	0.100	0.1136		mg/Kg		113	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.200	0.2271		mg/Kg		113	70 - 130
o-Xylene	<0.00199	U	0.100	0.1255		mg/Kg		125	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	106		70 - 130						
1,4-Difluorobenzene (Surr)	101		70 - 130						

Lab Sample ID: 890-7428-A-61-B MSD
Matrix: Solid
Analysis Batch: 96841

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 96835

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0994	0.1048		mg/Kg		105	70 - 130	4	35
Toluene	<0.00199	U	0.0994	0.1045		mg/Kg		105	70 - 130	2	35
Ethylbenzene	<0.00199	U	0.0994	0.1113		mg/Kg		112	70 - 130	2	35
m-Xylene & p-Xylene	<0.00398	U	0.199	0.2221		mg/Kg		112	70 - 130	2	35
o-Xylene	<0.00199	U	0.0994	0.1231		mg/Kg		124	70 - 130	2	35
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
4-Bromofluorobenzene (Surr)	107		70 - 130								
1,4-Difluorobenzene (Surr)	98		70 - 130								

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

Lab Sample ID: MB 880-96831/1-A
Matrix: Solid
Analysis Batch: 96862

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 96831

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		12/02/24 07:54	12/02/24 10:08	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		12/02/24 07:54	12/02/24 10:08	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		12/02/24 07:54	12/02/24 10:08	1
Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac		
1-Chlorooctane	78		70 - 130	12/02/24 07:54	12/02/24 10:08	1		
o-Terphenyl	82		70 - 130	12/02/24 07:54	12/02/24 10:08	1		

Lab Sample ID: LCS 880-96831/2-A
Matrix: Solid
Analysis Batch: 96862

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 96831

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1214		mg/Kg		121	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1187		mg/Kg		119	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: EIDER FEDERAL 35

Job ID: 890-7425-1
SDG: 03D2024281

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

Lab Sample ID: LCS 880-96831/2-A

Matrix: Solid

Analysis Batch: 96862

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 96831

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	147	S1+	70 - 130
o-Terphenyl	135	S1+	70 - 130

Lab Sample ID: LCSD 880-96831/3-A

Matrix: Solid

Analysis Batch: 96862

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 96831

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1231		mg/Kg		123	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	1196		mg/Kg		120	70 - 130	1	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	147	S1+	70 - 130
o-Terphenyl	135	S1+	70 - 130

Lab Sample ID: 890-7423-A-10-C MS

Matrix: Solid

Analysis Batch: 96862

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 96831

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	994	906.3		mg/Kg		91	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U	994	884.3		mg/Kg		89	70 - 130

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	100		70 - 130
o-Terphenyl	92		70 - 130

Lab Sample ID: 890-7423-A-10-D MSD

Matrix: Solid

Analysis Batch: 96862

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 96831

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	994	910.7		mg/Kg		92	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<49.8	U	994	855.0		mg/Kg		86	70 - 130	3	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	99		70 - 130
o-Terphenyl	89		70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: EIDER FEDERAL 35

Job ID: 890-7425-1
SDG: 03D2024281

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-96899/1-A Matrix: Solid Analysis Batch: 96958										Client Sample ID: Method Blank Prep Type: Soluble	
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac			
Chloride	<10.0	U	10.0	mg/Kg			12/06/24 03:32	1			

Lab Sample ID: LCS 880-96899/2-A Matrix: Solid Analysis Batch: 96958										Client Sample ID: Lab Control Sample Prep Type: Soluble	
Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	251.2		mg/Kg		100	90 - 110		

Lab Sample ID: LCSD 880-96899/3-A Matrix: Solid Analysis Batch: 96958										Client Sample ID: Lab Control Sample Dup Prep Type: Soluble	
Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	270.6		mg/Kg		108	90 - 110	7	20

Lab Sample ID: 890-7424-A-21-D MS Matrix: Solid Analysis Batch: 96958										Client Sample ID: Matrix Spike Prep Type: Soluble	
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	500	F1	252	878.3	F1	mg/Kg		150	90 - 110		

Lab Sample ID: 890-7424-A-21-E MSD Matrix: Solid Analysis Batch: 96958										Client Sample ID: Matrix Spike Duplicate Prep Type: Soluble	
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	500	F1	252	811.3	F1	mg/Kg		123	90 - 110	8	20

QC Association Summary

Client: Ensolum
Project/Site: EIDER FEDERAL 35

Job ID: 890-7425-1
SDG: 03D2024281

GC VOA

Prep Batch: 96835

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7425-1	BF 01	Total/NA	Solid	5035	
MB 880-96835/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-96835/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-96835/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-7428-A-61-A MS	Matrix Spike	Total/NA	Solid	5035	
890-7428-A-61-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 96841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7425-1	BF 01	Total/NA	Solid	8021B	96835
MB 880-96835/5-A	Method Blank	Total/NA	Solid	8021B	96835
LCS 880-96835/1-A	Lab Control Sample	Total/NA	Solid	8021B	96835
LCSD 880-96835/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	96835
890-7428-A-61-A MS	Matrix Spike	Total/NA	Solid	8021B	96835
890-7428-A-61-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	96835

Analysis Batch: 96978

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7425-1	BF 01	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 96831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7425-1	BF 01	Total/NA	Solid	8015NM Prep	
MB 880-96831/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-96831/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-96831/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-7423-A-10-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-7423-A-10-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 96862

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7425-1	BF 01	Total/NA	Solid	8015B NM	96831
MB 880-96831/1-A	Method Blank	Total/NA	Solid	8015B NM	96831
LCS 880-96831/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	96831
LCSD 880-96831/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	96831
890-7423-A-10-C MS	Matrix Spike	Total/NA	Solid	8015B NM	96831
890-7423-A-10-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	96831

Analysis Batch: 96996

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7425-1	BF 01	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 96899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7425-1	BF 01	Soluble	Solid	DI Leach	
MB 880-96899/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-96899/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-96899/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

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QC Association Summary

Client: Ensolum
Project/Site: EIDER FEDERAL 35

Job ID: 890-7425-1
SDG: 03D2024281

HPLC/IC (Continued)

Leach Batch: 96899 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7424-A-21-D MS	Matrix Spike	Soluble	Solid	DI Leach	
890-7424-A-21-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 96958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-7425-1	BF 01	Soluble	Solid	300.0	96899
MB 880-96899/1-A	Method Blank	Soluble	Solid	300.0	96899
LCS 880-96899/2-A	Lab Control Sample	Soluble	Solid	300.0	96899
LCSD 880-96899/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	96899
890-7424-A-21-D MS	Matrix Spike	Soluble	Solid	300.0	96899
890-7424-A-21-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	96899

Lab Chronicle

Client: Ensolum
Project/Site: EIDER FEDERAL 35

Job ID: 890-7425-1
SDG: 03D2024281

Client Sample ID: BF 01
Date Collected: 11/27/24 08:33
Date Received: 11/27/24 12:29

Lab Sample ID: 890-7425-1
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	96835	12/02/24 08:36	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	96841	12/02/24 18:52	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			96978	12/02/24 18:52	SM	EET MID
Total/NA	Analysis	8015 NM		1			96996	12/02/24 17:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	96831	12/02/24 07:54	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	96862	12/02/24 17:25	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	96899	12/02/24 16:13	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	96958	12/06/24 04:13	CH	EET MID

Laboratory References:
EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Ensolum
Project/Site: EIDER FEDERAL 35

Job ID: 890-7425-1
SDG: 03D2024281

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	06-30-25
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: Ensolum
Project/Site: EIDER FEDERAL 35

Job ID: 890-7425-1
SDG: 03D2024281

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: Ensolum
Project/Site: EIDER FEDERAL 35

Job ID: 890-7425-1
SDG: 03D2024281

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-7425-1	BF 01	Solid	11/27/24 08:33	11/27/24 12:29

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



Environment Testing
Xerco

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

Chain of Custody


Work Order No:

www.xenco.com Page 1 of 1

Project Manager:	Hadlie Green	Bill to: (if different)	Hadlie Green
Company Name:	Ensolum	Company Name:	Ensolum, LLC
Address:	3122 National Parks Hwy	Address:	3122 National Parks Hwy
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	432-557-8895	Email:	hgreen@ensolum.com / msarkis@ensolum.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:	
Reporting: Level II	<input checked="" 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:

[illegible]

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	CHLOR	TPH (8)	BTEX	Sample Comments
BA MS BFO1	S	11/27/24	0833	—	G	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
		TCLP/SPLP 6010:	8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U
			Hg: 163.1 / 245.1 / 7470 / 7477

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xeno. Its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xeno 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 Xeno. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xeno, 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 		11/27 12:21			
2					
3					
4					
5					
6					

Printed Date: 08/25/2020 Row: 2020

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-7425-1

SDG Number: 03D2024281

Login Number: 7425
List Number: 1
Creator: Bruns, Shannon

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: Ensolum

Job Number: 890-7425-1

SDG Number: 03D2024281

Login Number: 7425

List Number: 2

Creator: Vasquez, Julisa

List Source: Eurofins Midland

List Creation: 12/02/24 08:24 AM

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	

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

QUESTIONS

Action 417918

QUESTIONS

Operator: COG PRODUCTION, LLC 600 W. Illinois Ave Midland, TX 79701	OGRID: 217955
	Action Number: 417918
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2418343772
Incident Name	NAPP2418343772 EIDER FEDERAL 35 @ 0
Incident Type	Other
Incident Status	Reclamation Report Received
Incident Facility	[fAPP2132634113] EIDER FED 35 BATTERY

Location of Release Source	
Please answer all the questions in this group.	
Site Name	Eider Federal 35
Date Release Discovered	06/07/2024
Surface Owner	Federal

Incident Details	
Please answer all the questions in this group.	
Incident Type	Other
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	Not answered.
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	Cause: Corrosion Flow Line - Production Condensate Released: 0 BBL Recovered: 0 BBL Lost: 0 BBL.
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 417918

QUESTIONS (continued)

Operator: COG PRODUCTION, LLC 600 W. Illinois Ave Midland, TX 79701	OGRID: 217955
	Action Number: 417918
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	More info needed to determine if this will be treated as a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	Unavailable.
Reasons why this would be considered a submission for a notification of a major release	Unavailable.
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: Brittany Esparza Title: Environmental Technician Email: brittany.Esparza@ConocoPhillips.com Date: 07/01/2024
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Action 417918

QUESTIONS (continued)

Operator: COG PRODUCTION, LLC 600 W. Illinois Ave Midland, TX 79701	OGRID: 217955
	Action Number: 417918
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

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 100 and 500 (ft.)
What method was used to determine the depth to ground water	U.S. Geological Survey
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	Between 1 and 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1 and 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 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 1 and 5 (mi.)
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	None
A 100-year floodplain	Between 1 and 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
<i>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.</i>	
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)	0
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	07/12/2024
On what date will (or did) the final sampling or liner inspection occur	07/12/2024
On what date will (or was) the remediation complete(d)	07/12/2024
What is the estimated surface area (in square feet) that will be reclaimed	0
What is the estimated volume (in cubic yards) that will be reclaimed	0
What is the estimated surface area (in square feet) that will be remediated	10762
What is the estimated volume (in cubic yards) that will be remediated	0

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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Action 417918

QUESTIONS (continued)

Operator: COG PRODUCTION, LLC 600 W. Illinois Ave Midland, TX 79701	OGRID:
	217955
	Action Number:
	417918
Action Type:	
[C-141] Reclamation Report C-141 (C-141-v-Reclamation)	

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:	
(Select all answers below that apply.)	
(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	EIDER FED 35 BATTERY [APP2132634113]
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	No
OR is the off-site disposal site, to be used, an NMED facility	No
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	No
(In Situ) Soil Vapor Extraction	No
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	No
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	No
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	No
Ground Water Abatement pursuant to 19.15.30 NMAC	No
OTHER (Non-listed remedial process)	No
<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: Brittany Esparza Title: Environmental Technician Email: brittany.Esparza@ConocoPhillips.com Date: 08/22/2024
<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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Action 417918

QUESTIONS (continued)

Operator: COG PRODUCTION, LLC 600 W. Illinois Ave Midland, TX 79701	OGRID: 217955
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QUESTIONS

Deferral Requests Only	
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.	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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Action 417918

QUESTIONS (continued)

Operator: COG PRODUCTION, LLC 600 W. Illinois Ave Midland, TX 79701	OGRID: 217955
	Action Number: 417918
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	366991
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	07/30/2024
What was the (estimated) number of samples that were to be gathered	5
What was the sampling surface area in square feet	21

Remediation Closure Request	
<i>Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.</i>	
Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	35
What was the total volume (cubic yards) remediated	1.3
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	35
What was the total volume (in cubic yards) reclaimed	1.3
Summarize any additional remediation activities not included by answers (above)	Initial response efforts, excavation of impacted soil, and remediation activities have mitigated impacts at this Site. Depth to groundwater has been estimated to be greater than 100 feet bgs and no other sensitive receptors were identified near the release extent.
<i>The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (in .pdf format) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.</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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.	
I hereby agree and sign off to the above statement	Name: Brittany Esparza Title: Environmental Technician Email: brittany.Esparza@ConocoPhillips.com Date: 08/22/2024

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Action 417918

QUESTIONS (continued)

Operator: COG PRODUCTION, LLC 600 W. Illinois Ave Midland, TX 79701	OGRID: 217955
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QUESTIONS

Reclamation Report	
<i>Only answer the questions in this group if all reclamation steps have been completed.</i>	
Requesting a reclamation approval with this submission	Yes
What was the total reclamation surface area (in square feet) for this site	35
What was the total volume of replacement material (in cubic yards) for this site	1.3
<i>Per Paragraph (1) of Subsection D of 19.15.29.13 NMAC the reclamation must contain a minimum of four feet of non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, or other test methods approved by the division. The soil cover must include a top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater.</i>	
Is the soil top layer complete and is it suitable material to establish vegetation	Yes
On what (estimated) date will (or was) the reseeding commence(d)	10/23/2024
Summarize any additional reclamation activities not included by answers (above)	NA
<i>The responsible party must attach information demonstrating they have complied with all applicable reclamation requirements and any conditions or directives of the OCD. This demonstration should be in the form of attachments (in .pdf format) including a scaled site map, any proposed reseeding plans or relevant field notes, photographs of reclaimed area, and a narrative of the reclamation activities. Refer to 19.15.29.13 NMAC.</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. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.	
I hereby agree and sign off to the above statement	Name: Brittany Esparza Title: Environmental Technician Email: brittany.Esparza@ConocoPhillips.com Date: 01/07/2025

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Action 417918

QUESTIONS (continued)

Operator: COG PRODUCTION, LLC 600 W. Illinois Ave Midland, TX 79701	OGRID: 217955
	Action Number: 417918
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Revegetation Report	
<i>Only answer the questions in this group if all surface restoration, reclamation and re-vegetation obligations have been satisfied.</i>	
Requesting a restoration complete approval with this submission	No
<i>Per Paragraph (4) of Subsection (D) of 19.15.29.13 NMAC for any major or minor release containing liquids, the responsible party must notify the division when reclamation and re-vegetation are complete.</i>	

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CONDITIONS

Action 417918

CONDITIONS

Operator: COG PRODUCTION, LLC 600 W. Illinois Ave Midland, TX 79701	OGRID: 217955
	Action Number: 417918
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your reclamation report for Incident #NAPP2418343772 EIDER FEDERAL 35. This reclamation report is approved. Future reclamation reports will need to include: Executive Summary of the reclamation activities; Scaled Site Map including sampling locations; Analytical results including, but not limited to, results showing that any remaining impacts meet the reclamation standards and results to prove the backfill is non-waste containing; At least one (1) representative 5-point composite sample will need to be collected from the backfill material that will be used for the reclamation of the top four feet of the excavation. OCD reserves the right to request additional sampling if needed; pictures of the backfilled areas showing that the area is back, as nearly as practical, to the original condition or the final land use and maintain those areas to control dust and minimize erosion to the extent practical.	4/29/2025