

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural
Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	Enterprise Field Services LLC	OGRID	241602
Contact Name	Maria Lerma	Contact Telephone	432-686-5404
Contact email	mmlerma@eprod.com	Incident #	(assigned by OCD)
Contact mailing address	PO Box 4324, Houston, TX 77210		

Location of Release Source

Latitude 32.1086 Longitude -104.0443
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Line 1002 6"	Site Type	Gathering Pipeline
Date Release Discovered	January 12, 2021	API#	(if applicable)

Unit Letter	Section	Township	Range	County
N	24	25S	28E	Eddy

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (Name: Henry McDonald)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Natural Gas	Volume Released (Mcf) 57.33	Volume Recovered (Mcf) - 0
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Found a leak on 6" pipeline, cause is to be determined.

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

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 (electronic submittals in .pdf format are preferred) 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.

Closure Report Attachment Checklist: *Each of the following items must be included in the closure report.*

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

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.

Printed Name: Maria M Lerma Title: Sr. Field Environmental Scientist

Signature: Maria M. Lerma Date: 4/12/2021

email: mmlerma@eprod.com Telephone: 432-686-5404

OCD Only

Received by: Chad Hensley Date: 06/07/2021

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Chad Hensley Date: 06/07/2021

Printed Name: Chad Hensley Title: Environmental Specialist Advanced



CLOSURE REPORT

Property:

Line 1002

**Eddy County, New Mexico
32.108608 N, 104.044301 W
NMOCD Incident No. NAPP2102646604
Incident ID No. 15683
Enterprise ECIRT No. 93359**

April 12, 2021
Ensolum Project No. 03B1226042

Prepared for:

**Enterprise Field Services, LLC
P.O. Box 4324
Houston, TX 77210
Attn: Mr. Robert Dunaway**

Prepared by:


Beaux Jennings
Senior Project Manager


Liz Scaggs, PG
Principal



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CLOSURE REPORT

Eddy County, New Mexico
32.108608 N, 104.044301 W
NMOCD Incident No. NAPP2102646604
Incident ID No. 15683
Enterprise ECIRT No. 93359

Ensolum Project No. 03B1226042

1.0 INTRODUCTION

1.1 Executive Summary

- On January 12, 2021, a leak was reported due to possible corrosion along Line 1002. Approximately 57.33 thousand standard cubic feet (MSCF) of natural gas was released and the first hour gas loss was reported at 1.29 MSCF. The line was isolated and blown down for repair, with a clamp attached to stop further leaks. The New Mexico Oil Conservation Division (NMOCD) considers an unauthorized release of natural gas of volumes between 50 MSCF and 500 MSCF to be a "minor release" and requires notification, remediation and reporting according to New Mexico Administrative Code (NMAC) 19.15.29 *Releases*. The impacted area was then excavated by New Mexico Rentals (NMR) and all impacted soil was placed into stockpiles that were staged along the Line 1002 impacted area, hereinafter referred to as the "Site".
- On January 22, 2021, Ensolum, LLC (Ensolum) arrived at the Site and collected nine (9) composite soil samples (CS-1 through CS-9) from depths ranging from zero (0) feet to five (5) feet below ground surface (bgs). Additionally, Ensolum collected three (3) soil samples from the soil stockpiles (STP-1 through STP-3).
- On February 11, 2021, NMR continued excavation activities. Ensolum arrived at the Site and collected 12 composite soil samples from soil sample locations (CS-1, CS-2, CS-4 and CS-6 through CS-10) and two (2) soil stockpile samples (STP-4 and STP-5) from the stockpiles staged on-Site.
- Based on analytical results, additional excavation activities were required. On March 9 and 10, 2021, Ensolum arrived at the Site and resampled composite samples CS-4 and CS-6 at depths of five (5) to ten (10) feet bgs.
- The primary objective of the closure activities was to reduce constituents of concern (COCs) concentrations in the on-Site soils to below the applicable New Mexico EMNRD OCD Closure Criteria for Soils Impacted by a Release using the New Mexico EMNRD OCD's NMAC 19.15.29 *Releases* as guidance.
- A total of 23 composite soil samples from ten (10) locations were collected from the excavated area and five (5) stockpile soil samples were collected from the on-Site soil stockpiles. Based on the final soil sample analytical results, the final composite soil samples (CS-1 through CS-10) are below the applicable NMOCD Closure Criteria. Based on the final soil sample analytical results, the soil stockpile samples were above the applicable NMOCD Closure Criteria. The soil stockpiles staged on-Site were taken off-Site by NMR to Lea Land Inc. for proper disposal.

Based on field observations and laboratory analytical results, no additional investigation or corrective action appears warranted at this time.

Enterprise G.C., LLC
 Closure Report
 Line 1002
 April 12, 2021



1.2 Site Description & Background

Operator:	Enterprise Field Services, LLC (Enterprise)
Site Name:	Line 1002
Location:	32.108608 N, 104.044301 W Section 24, Township 25 South, Range 28 East Eddy County, New Mexico
Property:	Private
Regulatory:	New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

On January 12, 2021, a leak was reported due to possible corrosion along Line 1002. Approximately 57.33 MSCF of natural gas was released and the first hour gas loss was reported at 1.29 MSCF. The line was isolated and blown down for repair, with a clamp attached to stop further leaks. The NMOCD considers an unauthorized release of natural gas of volumes between 50 MSCF and 500 MSCF to be a “minor release” and requires notification, remediation and reporting according to NMAC 19.15.29.

The Topographic Map depicting the location of the Site is included as **Figure 1**, the Site Vicinity Map is included as **Figure 2**, the Site Map indicating the locations of composite soil samples and soil stockpiles is included as **Figure 3** in **Appendix A**.

1.3 Project Objective

The primary objective of the closure activities was to reduce COC concentrations in the on-Site soils to below the applicable New Mexico EMNRD OCD closure criteria concentrations.

2.0 CLOSURE CRITERIA

The Site is subject to regulatory oversight by the New Mexico EMNRD OCD. In order to address activities related to exempt oil and gas releases, the New Mexico EMNRD OCD references NMAC 19.15.29 *Releases*, which establishes investigation and abatement action requirements for sites subject to reporting and/or corrective action. Ensolum utilized information provided by Enterprise, the general site characteristics, and information available from the New Mexico Office of the State Engineer (OSE) and the New Mexico EMNRD OCD Imaging database to determine the appropriate closure criteria for the Site.

Supporting documentation associated with the following bullets are provided in **Appendix B**.

- No water wells were identified within a half-mile of the Site on the OSE Water Rights Reporting System (WRRS) database. The nearest well was identified 3,600 feet west of the Site, with a maximum depth of 70 feet.

New Mexico OSE WRRS			
Well #	Distance from Site	Direction from Site	Well Status
C-01453	0.68 miles	West	Livestock

- The Site is not located within 300 feet of a New Mexico ENMRD OCD-defined continuously flowing watercourse or any other significant watercourse.
- The Site is not located within 200 feet of a lakebed, sinkhole, or playa lake.

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 Closure Report
 Line 1002
 April 12, 2021



- The Site is not located within 300 feet from an occupied permanent residence, school, hospital, institution, or church.
- According to the OSE WRSS database there are no private, domestic freshwater wells used by less than five (5) households for domestic or stock water purposes identified within 500 feet of the Site.
- According to the OSE WRSS database there are no freshwater wells identified within 1,000 feet of the Site as declared in the previous bullet.
- The Site is not located within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3.
- The Site is not located within 300 feet of a wetland.
- Based on information identified on the New Mexico Mining and Minerals Division's GIS, Maps and Mine Data database, the Site is not located within an area overlying a subsurface mine.
- The Site is not located within an unstable area.
- The Site is not located within a 100-year floodplain.

Based on the identified siting criteria, cleanup goals for soils remaining in place at the Site include:

Closure Criteria for Soils Impacted by a Release			
Minimum depth below any point within horizontal boundary of the release to groundwater less than 10,000 mg/l TDS	Constituent	Method	Limit
≤50 feet	Chloride	EPA 300.0 or SM4500 Cl B	600 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	100 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg

3.0 SOIL REMEDIATION ACTIVITIES

On January 12, 2021, a leak was reported due to possible corrosion along Line 1002. Approximately 57.33 MSCF of natural gas liquids were released and the first hour gas loss was reported at 1.29 MSCF. The line was isolated and blown down for repair, with a clamp attached to stop further leaks. The impacted area was then excavated by NMR and all impacted soil was placed into stockpiles that were staged along the impacted Line 1002 area.

On January 13, 2021, Ensolum was contacted by Enterprise with the purpose of sampling the excavated area as well as the associated soil stockpiles staged on-Site to determine if further excavation was required.

Enterprise G.C., LLC
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On January 22, 2021, Ensolum arrived on-Site and collected nine (9) composite soil samples (CS-1 through CS-9) from zero (0) to five (5) feet bgs, which were analyzed for benzene, toluene, ethylbenzene, and xylene (BTEX), total petroleum hydrocarbons (TPH) and chloride in accordance with NMOCD Closure Criteria for Soils Impacted by a Release. Composite soil samples CS-1, CS-2 and CS-4 through CS-6 exhibited results below the applicable NMOCD Closure Criteria, while CS-3 and CS-7 through CS-9 exhibited laboratory analytical results above the applicable NMOCD Closure Criteria.

On February 11, 2021, NMR continued excavation activities. Ensolum arrived at the Site and collected 12 composite soil samples from the soil sample locations (CS-1, CS-2, CS-4 and CS-6 through CS-10). The composite soil samples CS-1, CS-2, CS-4 (10'-15') CS-6 (10'-15') and CS-7 through CS-10 all exhibited results below the applicable NMOCD Closure Criteria. The composite soil samples CS-4 (5'-10') and CS-6 (5'-10') exhibited total TPH results of 597 milligrams per kilogram (mg/kg) and 672 mg/kg, respectively, which exceed the applicable NMOCD Closure Criteria of 100 mg/kg.

Based on analytical results, additional excavation activities were required. On March 9 and 10, 2021, Ensolum arrived at the Site and resampled CS-4 (5'-10') and CS-6 (5'-10'). The composite soil samples exhibited results below the applicable NMOCD Closure Criteria.

Between January 22, 2021 and February 11, 2021, Ensolum collected five (5) composite samples (STP-1 through STP-5) from the soil stockpiles on-Site. Based on laboratory analytical results the soil stockpiles exhibited Total TPH concentrations ranging from 440 mg/kg up to 4,020 mg/kg, which exceed the applicable NMOCD Closure Criteria of 100 mg/kg.

All soil stockpiles staged on-Site will be taken off-Site by NMR to Lea Land Inc. for proper disposal.

The final impacted area measured approximately 42 feet long and 18.5 feet wide at the maximum extents. The maximum depth of the excavation measured approximately 15 feet bgs.

The lithology encountered during the completion of sampling activities consisted primarily of fine-grained sand from zero (0) to four (4) feet bgs and silty sand from four (4) to 15 feet bgs.

Figure 3 identifies approximate composite soil sample locations and approximate dimensions of the excavation with respect to the Site (**Appendix A**). Photographic documentation of the field activities is included in **Appendix C**.

4.0 SOIL SAMPLING PROGRAM

Ensolum's soil sampling program included the collection of 23 composite soil samples from 10 locations (CS-1 through CS-10) from the excavation area and five (5) composite stockpile soil samples (STP-1 through STP-5).

The samples were collected and placed in laboratory prepared glassware, labeled/sealed using laboratory supplied labels and custody seals, and stored on ice in a cooler. The samples were relinquished to Eurofins Xenco, LLC in Carlsbad, New Mexico and/or Midland, Texas for an expedited laboratory analysis.

5.0 SOIL LABORATORY ANALYTICAL METHODS

The composite soil samples were analyzed for BTEX utilizing Environmental Protection Agency (EPA) SW-846 Method 8021B, TPH gasoline range organics (GRO), diesel range organics (DRO), and motor oil/lube oil range organics (MRO) utilizing EPA SW-846 Method 8015M, and chloride utilizing EPA Method 300.0. Laboratory analytical results are summarized in **Table 1** for in **Appendix D**. The executed chain-of-custody forms and laboratory analytical reports are provided in **Appendix E**.

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6.0 DATA EVALUATION

Ensolum compared the BTEX, TPH GRO/DRO/MRO, and chloride concentrations associated with the final composite soil samples (CS-1 through CS-10) and composite stockpile soil samples (STP-1 through STP-5) to the applicable NMOCD Closure Criteria.

- Laboratory analytical results indicate benzene concentrations for the final composite soil samples and composite stockpile soil samples are below the applicable NMOCD Closure Criteria of 10 mg/kg.
- Laboratory analytical results indicate that total BTEX concentrations for the final composite soil samples and composite stockpile soil samples are below the laboratory sample detection limits (SDLs) and/or the applicable NMOCD Closure Criteria of 50 mg/kg.
- Laboratory analytical results indicate combined TPH GRO/DRO/MRO concentrations for the final composite soil samples are below the laboratory SDLs and/or the applicable NMOCD Closure Criteria of 100 mg/kg from ≤50 feet. Laboratory analytical results indicate combined TPH GRO/DRO/MRO concentrations for the soil stockpiles composite samples exceed the applicable NMOCD Closure Criteria of 100 mg/kg, with the highest result being 4,020 mg/kg. The soil stockpiles were taken off-Site by NMR to Lea Land Inc. for proper disposal.
- Laboratory analytical results indicate chloride concentrations for the composite soil samples do not exceed the applicable NMOCD Closure Criteria of 600 mg/kg. Laboratory analytical results indicate chloride concentrations for the composite stockpile soil samples STP-4 and STP-5 exceed the applicable NMOCD Closure Criteria of 600 mg/kg, with the highest result being 1,710 mg/kg. The soil stockpiles were taken off-Site by NMR to Lea Land Inc. for proper disposal.

Laboratory analytical results are summarized in **Table 1** in **Appendix D**.

7.0 RECLAMATION AND RE-VEGETATION

During the completion of response action activities, approximately 431 cubic yards (cy) of impacted soil was excavated and stockpiled on-Site. Subsequent to composite soil sample results, the soil stockpiles were taken off-Site by NMR to Lea Land Inc. Based on correspondence with Enterprise, the excavated area will be backfilled with clean fill material and then contoured to the original surrounding grade.

8.0 FINDINGS AND RECOMMENDATION

- On January 12, 2021, a leak was reported due to possible corrosion along Line 1002. Approximately 57.33 MSCF of natural gas was released and the first hour gas loss was reported at 1.29 MSCF. The line was isolated and blown down for repair, with a clamp attached to stop further leaks. The impacted area was then excavated by NMR and all impacted soil was placed into stockpiles that were staged along the Line 1002 impacted area. The NMOCD considers an unauthorized release of natural gas of volumes between 50 MSCF and 500 MSCF to be a "minor release" and requires notification, remediation and reporting according to NMAC 19.15.29.
- On January 22, 2021, Ensolum arrived at the Site and collected nine (9) composite soil samples (CS-1 through CS-9) from depths ranging from zero (0) feet to five (5) feet bgs. Additionally, Ensolum collected three (3) soil samples from the soil stockpiles (STP-1 through STP-3).
- On February 11, 2021, NMR continued excavation activities. Ensolum arrived at the Site and collected 12 composite soil samples from soil sample locations (CS-1, CS-2, CS-4 and CS-6 through CS-10) and two (2) soil stockpile samples (STP-4 and STP-5) from the stockpiles staged on-Site.

Enterprise G.C., LLC
Closure Report
Line 1002
April 12, 2021



- Based on analytical results and subsequent to additional excavation activities, Ensolum arrived at the Site and resampled CS-4 and CS-6 from five (5) to ten (10) feet bgs.
- The primary objective of the closure activities was to reduce constituents of concern (COCs) concentrations in the on-Site soils to below the applicable New Mexico EMNRD OCD Closure Criteria for Soils Impacted by a Release using the New Mexico EMNRD OCD's NMAC 19.15.29 *Releases* as guidance.
- A total of 23 composite soil samples from 10 locations were collected from depths ranging from zero (0) to 15 feet bgs and five (5) stockpile soil samples were collected from the on-Site soil stockpiles. Based on the final soil sample analytical results, the final composite soil samples (CS-1 through CS-10) are below the applicable NMOCD Closure Criteria. Based on the final soil sample analytical results, the soil stockpile samples were above the applicable NMOCD Closure Criteria. The soil stockpiles staged on-Site will be taken off-Site by NMR to Lea Land Inc. for proper disposal.

Based on field observations and laboratory analytical results, no additional investigation or corrective action appears warranted at this time.

9.0 STANDARDS OF CARE, LIMITATIONS, AND RELIANCE

9.1 Standard of Care

Ensolum's services were performed in accordance with standards customarily provided by a firm rendering the same or similar services in the area during the same time period. Ensolum makes no warranties, express or implied, as to the services performed hereunder. Additionally, Ensolum does not warrant the work of third parties supplying information used in the report (e.g., laboratories, regulatory agencies, or other third parties). This scope of services was performed in accordance with the scope of work agreed with the client, as detailed in our proposal.

9.2 Limitations

Findings, conclusions, and recommendations resulting from these services are based upon information derived from the on-Site activities and other services performed under this scope of work and it should be noted that this information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, or not present during these services, and Ensolum cannot represent that the Site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during the investigation. Environmental conditions at other areas or portions of the Site may vary from those encountered at actual sample locations. Ensolum's findings, and recommendations are based solely upon data available to Ensolum at the time of these services.

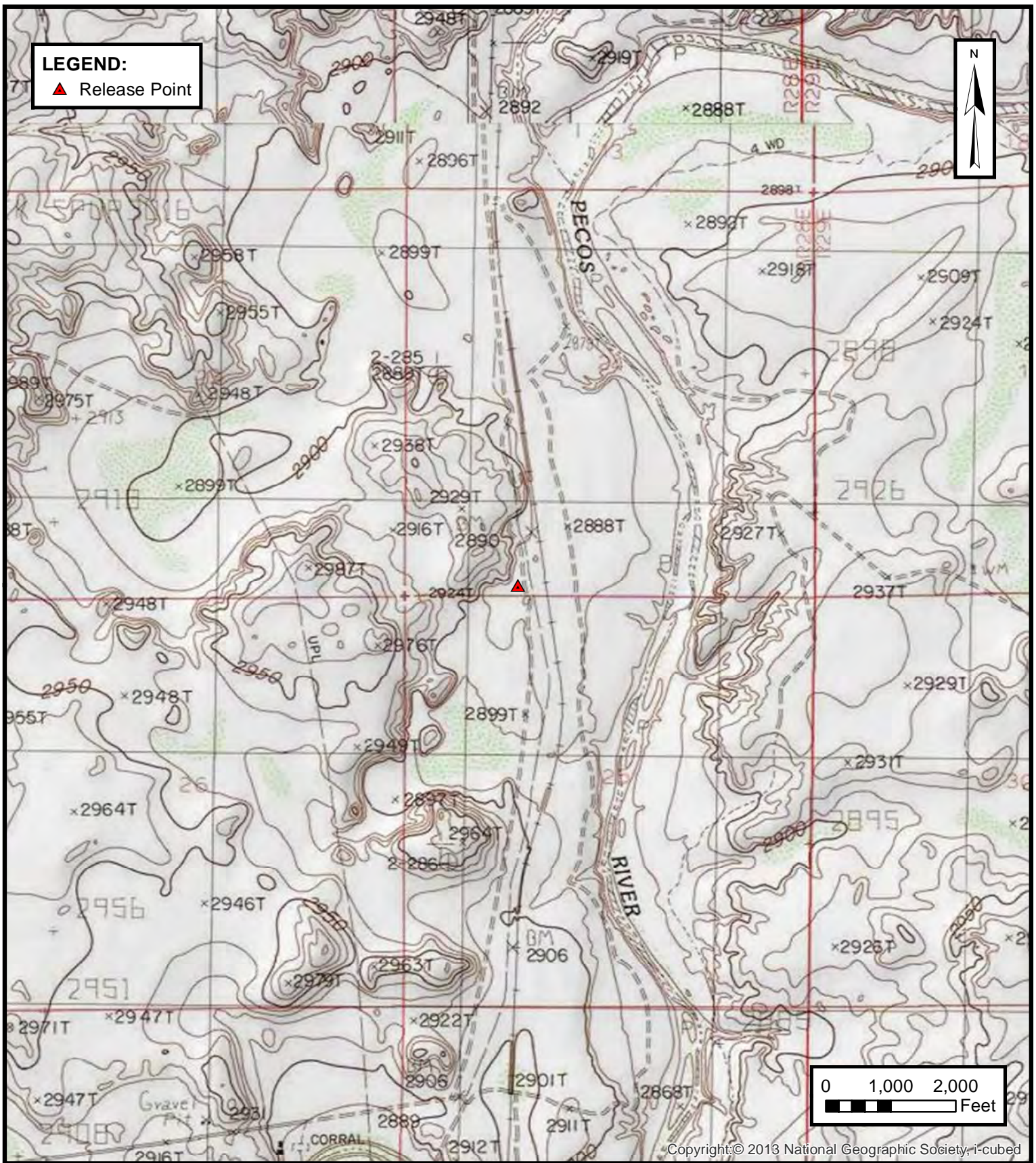
9.3 Reliance

This report has been prepared for the exclusive use of Enterprise Field Services, LLC, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the express written authorization Enterprise Field Services, LLC and Ensolum. Any unauthorized distribution or reuse is at the client's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions and limitations stated in the Closure Report, and Ensolum's Master Services Agreement. The limitation of liability defined in the agreement is the aggregate limit of Ensolum's liability to the client.



APPENDIX A

Figures



ENSOLUM

Environmental & Hydrogeologic Consultants

TOPOGRAPHIC MAP

ENTERPRISE FIELD SERVICES, LLC

LINE 1002

Eddy County, New Mexico

32.108608° N, 104.044301° W

PROJECT NUMBER: 03B1226042

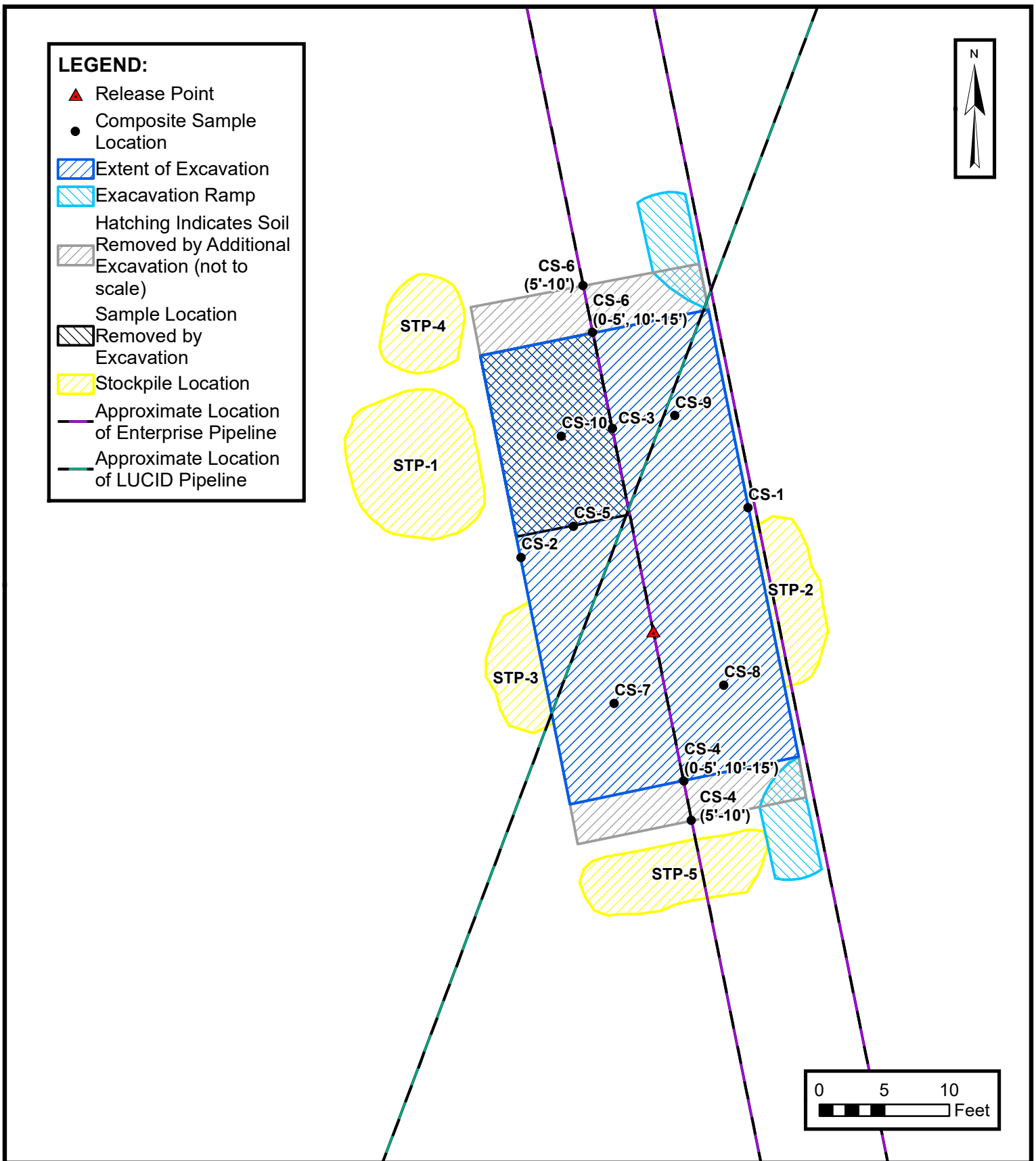
FIGURE

1



SITE VICINITY MAP
ENTERPRISE FIELD SERVICES, LLC
LINE 1002
Eddy County, New Mexico
32.108608° N, 104.044301° W
PROJECT NUMBER: 03B1226042

FIGURE
2





APPENDIX B

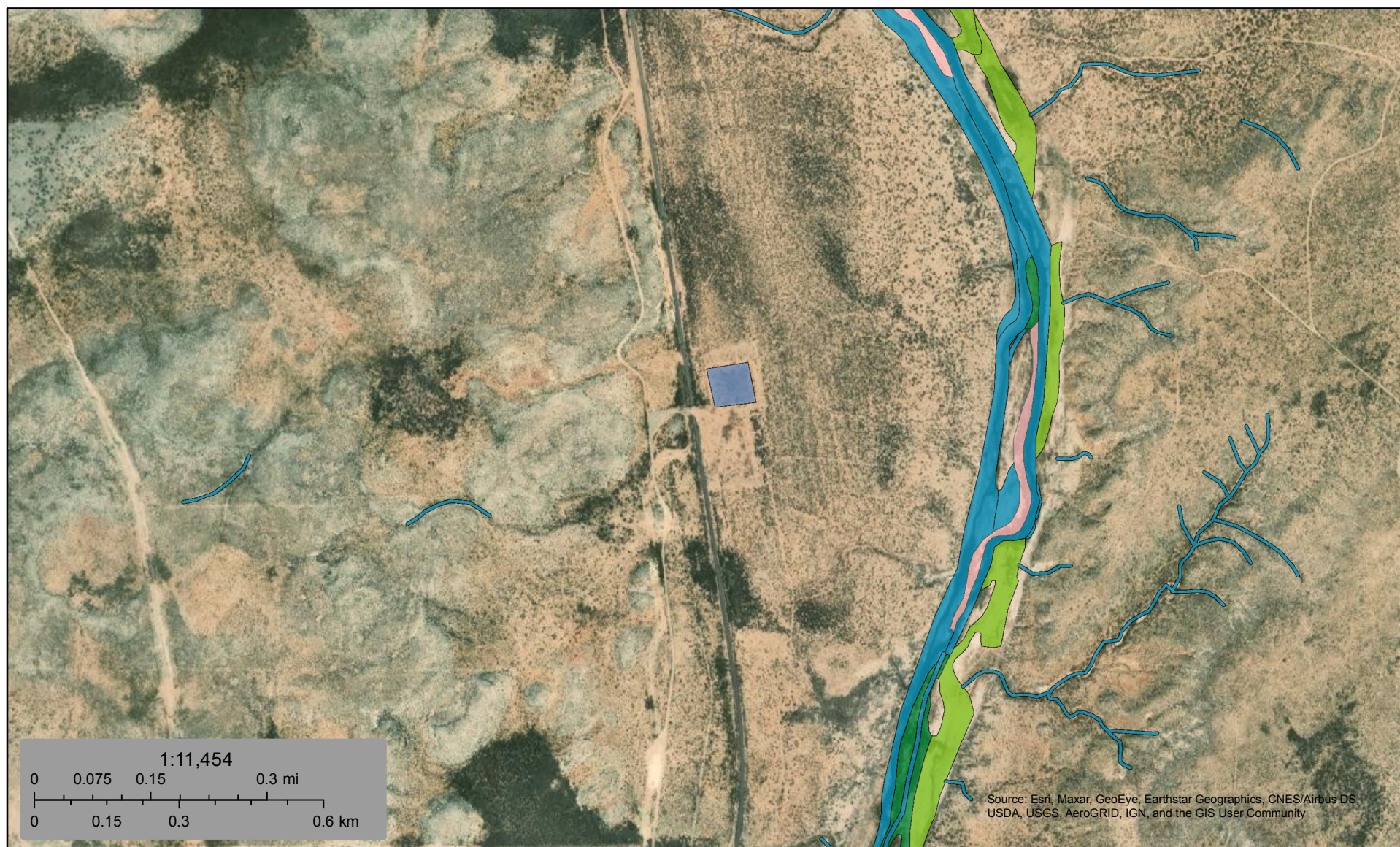
Supporting Documentation



U.S. Fish and Wildlife Service

National Wetlands Inventory

Wetlands Map



January 25, 2021

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland

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

- Lake
- Other
- Riverine

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

Half Mile Closure Criteria Map



1/25/2021, 4:23:25 PM

Override 1

Override 1

GIS WATERS PODs

Active

OSE District Boundary

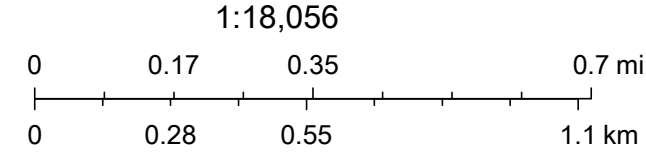
Federal Lands

New Mexico State Trust Lands

Subsurface Estate

Both Estates

SiteBoundaries



USDA FSA, GeoEye, Maxar, Esri, HERE, iPC, U.S. Department of Energy Office of Legacy Management, Esri, HERE, Garmin, iPC



New Mexico Office of the State Engineer

Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tw	Rng	X	Y
C	01453	1	2	26	25S	28E	589096	3552612*	

x

Driller License: 30 **Driller Company:** BARRON, EMMETT

Driller Name: BARRON, EMMETT

Drill Start Date: 07/17/1971

Drill Finish Date: 07/20/1971

Plug Date:

Log File Date: 08/02/1971

PCW Rcv Date:

Source: Shallow

Pump Type:

Pipe Discharge Size:

Estimated Yield:

Casing Size: 6.00

Depth Well: 70 feet

Depth Water: 40 feet

x

Water Bearing Stratifications:

Top	Bottom	Description
-----	--------	-------------

50	70	Shale/Mudstone/Siltstone
----	----	--------------------------

x

*UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

1/25/21 2:48 PM

POINT OF DIVERSION SUMMARY

National Flood Hazard Layer FIRMette



104°2'58"W 32°6'46"N



0 250 500 1,000 1,500 2,000 Feet 1:6,000 104°2'21"W 32°6'16"N
Released to Imaging: 6/7/2021 11:40:13 AM
Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
		Profile Baseline
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped



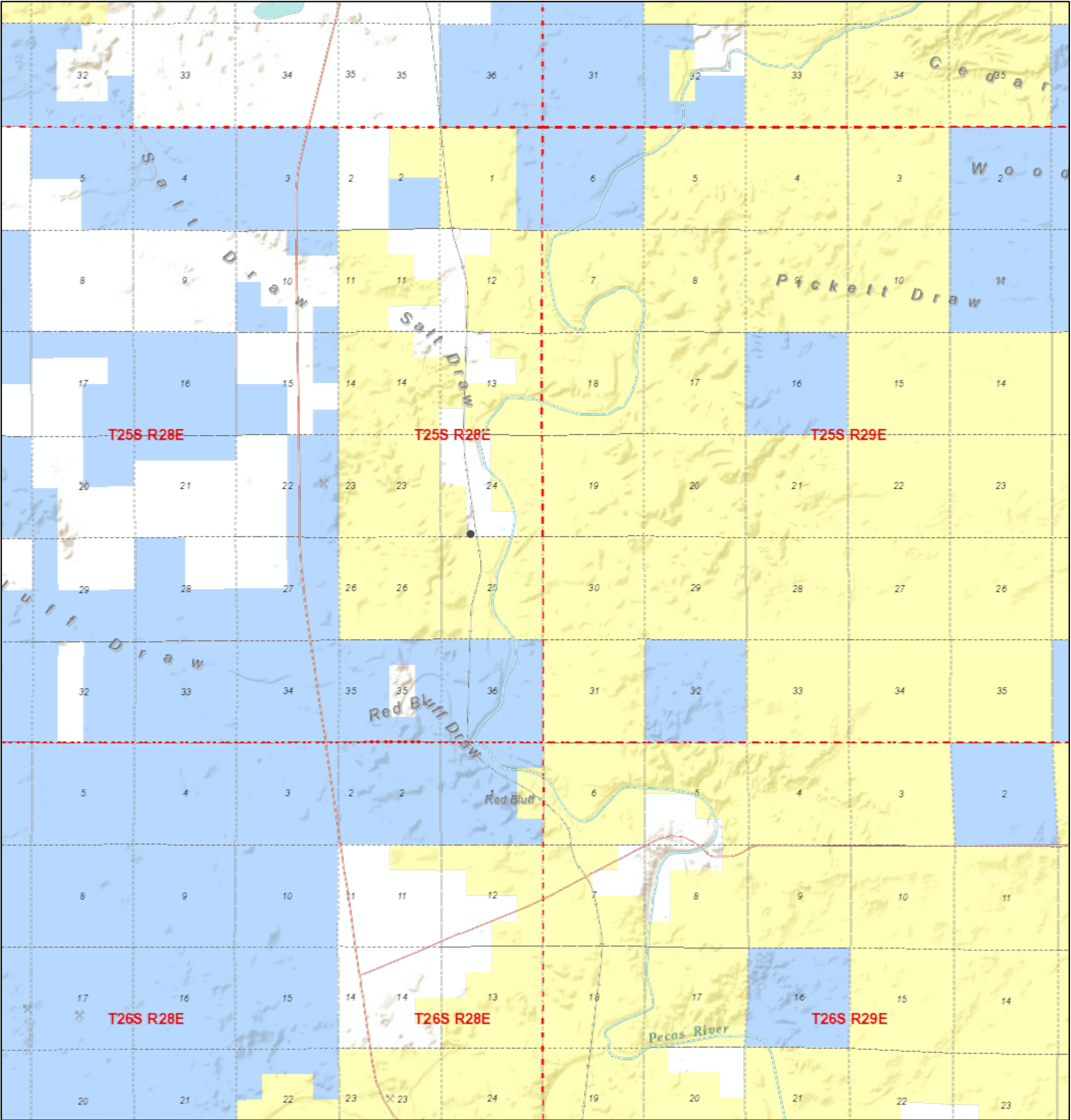
The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 1/25/2021 at 5:29 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

BLM and Private Land Map



1/25/2021, 4:26:43 PM

1:72,224

Township / Range

Sections

Land Ownership

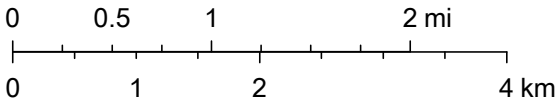
- Bureau of Land Management
- Bureau of Reclamation
- Department of Agriculture
- Department of Defense
- Department of Energy
- National Park Service

Private Land

- State Game and Fish
- State Land
- State Parks
- Tribal
- US Fish and Wildlife Service
- US Forest Service

Registered Mines

- Aggregate, Stone etc.
- Aggregate, Stone etc.



U.S. Bureau of Land Management - New Mexico State Office,
Sources: Esri, USGS, NOAA, Sources: Esri, Garmin, USGS, NPS



APPENDIX C

Photographic Documentation

Date & Time: Fri, Jan 22, 2021, 07:58:26 MST
Position: 032°06'31.07"N / 104°02'39.60"W (± 15.1 ft)
Altitude: 2904ft (± 11.6 ft)
Datum: WGS-84
Azimuth/Bearing: 095° S85E 1689mils True ($\pm 10^\circ$)
Elevation Angle: -74.7°
Horizon Angle: $+22.5^\circ$
Zoom: 1.0X



View of the release source during remediation activities, facing southeast.

Date & Time: Wed, Mar 10, 2021, 11:59:16 MST
Position: 032°06'30.81"N / 104°02'39.58"W (± 15.5 ft)
Altitude: 2898ft (± 11.1 ft)
Datum: WGS-84
Azimuth/Bearing: 359° N01W 6382mils True ($\pm 13^\circ$)
Elevation Angle: -17.1°
Horizon Angle: -00.8°
Zoom: 1.0X



View of release area during remediation activities, facing north.

Date & Time: Wed, Mar 10, 2021, 11:58:38 MST
Position: 032°06'31.21"N / 104°02'39.22"W (± 15.7 ft)
Altitude: 2897ft (± 10.9 ft)
Datum: WGS-84
Azimuth/Bearing: 276° N84W 4907mils True ($\pm 13^\circ$)
Elevation Angle: -03.2°
Horizon Angle: $+00.3^\circ$
Zoom: 1.0X



View of impacted area and soil stockpile during remediation activities, facing northwest.

Date & Time: Wed, Mar 10, 2021, 11:58:13 MST
Position: 032°06'31.65"N / 104°02'39.55"W (± 11.6 ft)
Altitude: 2899ft (± 9.8 ft)
Datum: WGS-84
Azimuth/Bearing: 186° S06W 3307mils True ($\pm 14^\circ$)
Elevation Angle: -09.8°
Horizon Angle: $+01.0^\circ$
Zoom: 1.0X



View of impacted area and soil stockpile during remediation activities, facing south.



APPENDIX D

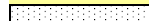
Table

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Enterprise Field Services, LLC - Line 1002
Eddy County, New Mexico

Ensolum Project No. 03B1226042

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total TPH (GRO+DRO+MRO) (mg/kg)	Chloride (mg/kg)
New Mexico Oil Conservation Division Closure Criteria for Soils Impacted by a Release (≤ 50 feet)			10	NE	NE	NE	50	NE	NE	NE	100	600
Composite Soil Sample Analytical Results												
CS-1	1/22/2021	0 - 5	<0.000486	0.00293	<0.000407	0.0133	0.0162	<15.0	<15.0	<15.0	<15.0	135
	2/11/2021	5 - 10	NS					<15.0	<15.0	<15.0	<15.0	NS
	2/11/2021	10 - 15	NS					<15.0	17.7 J	<15.0	17.7 J	NS
CS-2	1/22/2021	0 - 5	<0.000487	0.00469	<0.000408	0.0143	0.0190	<15.0	<15.0	<15.0	<15.0	262
	2/11/2021	5 - 10	NS					<15.0	17.1 J	<15.0	17.1 J	NS
	2/11/2021	10 - 15	NS					<14.9	17.7 J	<14.9	17.7 J	NS
CS-3	1/22/2021	0 - 5	<0.000485	<0.000527	<0.000405	<0.000402	<0.000402	<15.0	128	21.5	150	61.2
CS-4	1/22/2021	0 - 5	<0.000482	0.00308	<0.000403	0.0117	0.0148	<15.0	37.9 J	<15.0	37.9 J	78.1
	2/11/2021	5 - 10	NS					<15.0	544	52.5	597	NS
	3/9/2021	5 - 10	NS					78.8	<50.0	<50.0	78.8	NS
	2/11/2021	10 - 15	NS					<15.0	<15.0	<15.0	<15.0	NS
CS-5	1/22/2021	0 - 5	0.00647	0.0449	0.00623	0.103	0.160	<15.0	20.4 J	<15.0	20.4 J	244
CS-6	1/22/2021	0 - 5	<0.000484	<0.000526	<0.000405	<0.000401	<0.000401	<15.0	18.4 J	<15.0	18.4 J	62.2
	2/11/2021	5 - 10	NS					21.8 J	594	56.1	672	NS
	3/10/2021	5 - 10	NS					38.4 J	<15.0	<15.0	75.4	NS
	2/11/2021	10 - 15	NS					<15.0	<15.0	<15.0	<15.0	NS
CS-7	1/22/2021	5	<0.0187	0.395	0.321	4.60	5.32	155	498	34.7 J	688	243
	2/11/2021	15	NS					<15.0	<15.0	<15.0	<15.0	NS
CS-8	1/22/2021	5	<0.0243	0.652	0.244	3.01	3.91	33.3 J	495	52.3	581	568
	2/11/2021	15	NS					<15.0	<15.0	<15.0	<15.0	NS
CS-9	1/22/2021	5	0.00723	0.101	0.0259	0.319	0.453	150	7,450	771	8,370	357
	2/11/2021	15	NS					<15.0	<15.0	<15.0	<15.0	NS
CS-10	2/11/2021	15	NS					<15.0	53.2	<15.0	53.2	NS
Composite Stockpile Soil Sample Analytical Results												
STP-1	1/22/2021	NA	<0.000486	0.0236	0.0167	0.250	0.290	85.7	2,750	285	3,120	304
STP-2	1/22/2021	NA	0.00415	0.126	0.136	0.621	0.887	125	3,570	329	4,020	147
STP-3	1/22/2021	NA	<0.000490	0.00613	0.119	0.0642	0.189	25.9 J	1,050	120	1,200	220
STP-4	2/11/2021	NA	<0.000386	0.000581 J	<0.000566	0.00444	0.00502	18.9 J	382	39.1 J	440	1,480
STP-5	2/11/2021	NA	<0.000386	0.00235	0.00208	0.0463	0.0507	20.8 J	817	77.8	916	1,710

Concentrations in **bold** and yellow exceed the New Mexico Oil Conservation Division Closure Criteria for Soils Impacted by a Release (≤ 50 feet)

 Soil Removed and Re-Sampled

bgs: below ground surface

J: The target analyte was positively identified below the quantitation limit and above the detection limit.

mg/kg: milligrams per kilogram

NA: Not Applicable

NE: Not Established

NS: Not Sampled

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

MRO: Motor Oil/Lube Oil Range Organics

TPH: Total Petroleum Hydrocarbon



APPENDIX E

Laboratory Analytical Reports & Chain-of-Custody Documentation

Certificate of Analysis Summary 685808



Ensolum, Dallas, TX

Project Name: Line 1002

Project Id: 03B1226042
Contact: Beaux Jennings
Project Location: Carlsbad, New Mexico

Date Received in Lab: Fri 01.22.2021 16:40
Report Date: 01.27.2021 16:49
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	685808-001	685808-002	685808-003	685808-004	685808-005	685808-006
	<i>Field Id:</i>	CS-1	CS-2	CS-3	CS-4	CS-5	CS-6
	<i>Depth:</i>	0-5 ft	0-5 ft	0-5 ft	0-5 ft	0-5 ft	0-5 ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	01.22.2021 13:40	01.22.2021 13:20	01.22.2021 13:50	01.22.2021 14:10	01.22.2021 14:20	01.22.2021 14:30
BTEX by EPA 8021B	<i>Extracted:</i>	01.22.2021 18:00	01.22.2021 18:00	01.22.2021 18:00	01.22.2021 18:00	01.22.2021 18:00	01.22.2021 18:00
	<i>Analyzed:</i>	01.23.2021 00:40	01.23.2021 01:02	01.23.2021 01:25	01.23.2021 01:47	01.23.2021 02:10	01.23.2021 02:32
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.000486 0.00200	<0.000487 0.00201	<0.000485 0.00200	<0.000482 0.00198	0.00647 0.00200	<0.000484 0.00199
Toluene		0.00293 0.00200	0.00469 0.00201	<0.000527 0.00200	0.00308 0.00198	0.0449 0.00200	<0.000526 0.00199
Ethylbenzene		<0.000407 0.00200	<0.000408 0.00201	<0.000405 0.00200	<0.000403 0.00198	0.00623 0.00200	<0.000405 0.00199
m,p-Xylenes		0.0104 0.00401	0.0113 0.00402	<0.000752 0.00399	0.00524 0.00397	0.0828 0.00399	<0.000751 0.00398
o-Xylene		0.00289 0.00200	0.00299 0.00201	<0.000402 0.00200	0.00643 0.00198	0.0199 0.00200	<0.000401 0.00199
Total Xylenes		0.0133 0.00200	0.0143 0.00201	<0.000402 0.00200	0.0117 0.00198	0.103 0.00200	<0.000401 0.00199
Total BTEX		0.0162 0.00200	0.0190 0.00201	<0.000402 0.00200	0.0148 0.00198	0.160 0.00200	<0.000401 0.00199
Chloride by EPA 300	<i>Extracted:</i>	*** ** *	*** ** *	*** ** *	*** ** *	*** ** *	*** ** *
	<i>Analyzed:</i>	01.23.2021 01:59	01.23.2021 02:05	01.23.2021 02:11	01.23.2021 02:16	01.23.2021 02:22	01.23.2021 02:28
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		135 10.1	262 D 49.5	61.2 10.1	78.1 10.0	244 9.92	62.2 10.1
TPH by SW8015 Mod SUB: T104704400-20-21	<i>Extracted:</i>	01.26.2021 17:00	01.26.2021 17:00	01.26.2021 17:00	01.26.2021 17:00	01.26.2021 17:00	01.26.2021 17:00
	<i>Analyzed:</i>	01.27.2021 03:36	01.27.2021 04:41	01.27.2021 05:03	01.27.2021 05:24	01.27.2021 05:45	01.27.2021 06:06
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<15.0 50.0	<15.0 50.0	<15.0 50.0	<15.0 49.9	<15.0 50.0	<15.0 49.9
Diesel Range Organics (DRO)		<15.0 50.0	<15.0 50.0	128 50.0	37.9 J 49.9	20.4 J 50.0	18.4 J 49.9
Motor Oil Range Hydrocarbons (MRO)		<15.0 50.0	<15.0 50.0	21.5 J 50.0	<15.0 49.9	<15.0 50.0	<15.0 49.9
Total TPH		<15.0 50.0	<15.0 50.0	150 50.0	37.9 J 49.9	20.4 J 50.0	18.4 J 49.9

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Certificate of Analysis Summary 685808



Ensolum, Dallas, TX

Project Name: Line 1002

Project Id: 03B1226042
Contact: Beaux Jennings
Project Location: Carlsbad, New Mexico

Date Received in Lab: Fri 01.22.2021 16:40
Report Date: 01.27.2021 16:49
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	685808-007	685808-008	685808-009	685808-010	685808-011	685808-012
	<i>Field Id:</i>	CS-7	CS-8	CS-9	STP-1	STP-2	STP-3
	<i>Depth:</i>	5- ft	5- ft	5- ft			
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	01.22.2021 14:54	01.22.2021 15:05	01.22.2021 15:10	01.22.2021 15:30	01.22.2021 15:35	01.22.2021 15:40
BTEX by EPA 8021B	<i>Extracted:</i>	01.22.2021 18:00	01.22.2021 18:00	01.22.2021 18:00	01.22.2021 18:00	01.22.2021 18:00	01.22.2021 18:00
	<i>Analyzed:</i>	01.23.2021 02:55	01.23.2021 03:17	01.23.2021 03:40	01.22.2021 21:50	01.22.2021 22:12	01.22.2021 22:34
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.0187 0.0769	<0.0243 0.100	0.00723 0.00202	<0.000486 0.00200	0.00415 0.00202	<0.000490 0.00202
Toluene		0.395 0.0769	0.652 0.100	0.101 0.00202	0.0236 0.00200	0.126 0.00202	0.00613 0.00202
Ethylbenzene		0.321 0.0769	0.244 0.100	0.0259 0.00202	0.0167 0.00200	0.136 0.00202	0.119 0.00202
m,p-Xylenes		3.58 0.154	2.32 0.200	0.243 0.00403	0.189 0.00401	0.485 0.00403	0.0495 0.00404
o-Xylene		1.02 0.0769	0.690 0.100	0.0761 0.00202	0.0610 0.00200	0.136 0.00202	0.0147 0.00202
Total Xylenes		4.60 0.0769	3.01 0.100	0.319 0.00202	0.250 0.00200	0.621 0.00202	0.0642 0.00202
Total BTEX		5.32 0.0769	3.91 0.100	0.453 0.00202	0.290 0.00200	0.887 0.00202	0.189 0.00202
Chloride by EPA 300	<i>Extracted:</i>	*** ** *	*** ** *	*** ** *	*** ** *	*** ** *	*** ** *
	<i>Analyzed:</i>	01.23.2021 02:33	01.23.2021 02:39	01.23.2021 03:08	01.23.2021 03:13	01.23.2021 03:19	01.23.2021 03:25
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		243 D 50.4	568 10.0	357 D 49.8	304 D 49.8	147 9.92	220 10.0
TPH by SW8015 Mod SUB: T104704400-20-21	<i>Extracted:</i>	01.26.2021 17:00	01.26.2021 17:00	01.26.2021 17:00	01.26.2021 17:00	01.26.2021 17:00	01.26.2021 17:00
	<i>Analyzed:</i>	01.27.2021 06:27	01.27.2021 06:48	01.27.2021 07:09	01.27.2021 07:30	01.27.2021 08:14	01.27.2021 08:35
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		155 49.8	33.3 J 50.0	150 49.9	85.7 49.9	125 50.0	25.9 J 50.0
Diesel Range Organics (DRO)		498 49.8	495 50.0	7450 49.9	2750 49.9	3570 50.0	1050 50.0
Motor Oil Range Hydrocarbons (MRO)		34.7 J 49.8	52.3 50.0	771 49.9	285 49.9	329 50.0	120 50.0
Total TPH		688 49.8	581 50.0	8370 49.9	3120 49.9	4020 50.0	1200 50.0

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



Analytical Report 685808

for

Ensolum

Project Manager: Beaux Jennings

Line 1002

03B1226042

01.27.2021

Collected By: Client

**1089 N Canal Street
Carlsbad, NM 88220**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-24)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



01.27.2021

Project Manager: **Beaux Jennings**

Ensolum

2351 W Northwest Highway

Suite 1203

Dallas, TX 75220

Reference: Eurofins Xenco, LLC Report No(s): **685808**

Line 1002

Project Address: Carlsbad, New Mexico

Beaux Jennings:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 685808. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 685808 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

Jessica Kramer

Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

**Sample Cross Reference 685808****Ensolum, Dallas, TX**

Line 1002

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
CS-1	S	01.22.2021 13:40	0 - 5 ft	685808-001
CS-2	S	01.22.2021 13:20	0 - 5 ft	685808-002
CS-3	S	01.22.2021 13:50	0 - 5 ft	685808-003
CS-4	S	01.22.2021 14:10	0 - 5 ft	685808-004
CS-5	S	01.22.2021 14:20	0 - 5 ft	685808-005
CS-6	S	01.22.2021 14:30	0 - 5 ft	685808-006
CS-7	S	01.22.2021 14:54	5 ft	685808-007
CS-8	S	01.22.2021 15:05	5 ft	685808-008
CS-9	S	01.22.2021 15:10	5 ft	685808-009
STP-1	S	01.22.2021 15:30		685808-010
STP-2	S	01.22.2021 15:35		685808-011
STP-3	S	01.22.2021 15:40		685808-012

**CASE NARRATIVE****Client Name: Ensolum****Project Name: Line 1002**Project ID: 03B1226042
Work Order Number(s): 685808Report Date: 01.27.2021
Date Received: 01.22.2021

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:**Sample receipt non conformances and comments per sample:**

None

Analytical non conformances and comments:

Batch: LBA-3149102 TPH by SW8015 Mod

Surrogate o-Terphenyl recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 685808-009,685808-012,685808-011,685808-010.



Certificate of Analytical Results 685808

Ensolum, Dallas, TX

Line 1002

Sample Id: **CS-1**
Lab Sample Id: 685808-001

Matrix: Soil
Date Collected: 01.22.2021 13:40

Date Received: 01.22.2021 16:40
Sample Depth: 0 - 5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 01.22.2021 12:25

% Moisture:
Basis: Wet Weight

Seq Number: 3148800

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	135	10.1	0.358	mg/kg	01.23.2021 01:59		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.26.2021 17:00

% Moisture:
Basis: Wet Weight
SUB: T104704400-20-21

Seq Number: 3149102

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	50.0	15.0	mg/kg	01.27.2021 03:36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	01.27.2021 03:36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	01.27.2021 03:36	U	1
Total TPH	PHC635	<15.0	50.0	15.0	mg/kg	01.27.2021 03:36	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-130	01.27.2021 03:36	
o-Terphenyl	84-15-1	104	%	70-130	01.27.2021 03:36	



Certificate of Analytical Results 685808

Ensolum, Dallas, TX

Line 1002

Sample Id: **CS-1**
 Lab Sample Id: 685808-001

Matrix: Soil
 Date Collected: 01.22.2021 13:40

Date Received: 01.22.2021 16:40
 Sample Depth: 0 - 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.22.2021 18:00

% Moisture:
 Basis: Wet Weight

Seq Number: 3148776

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000486	0.00200	0.000486	mg/kg	01.23.2021 00:40	U	1
Toluene	108-88-3	0.00293	0.00200	0.000529	mg/kg	01.23.2021 00:40		1
Ethylbenzene	100-41-4	<0.000407	0.00200	0.000407	mg/kg	01.23.2021 00:40	U	1
m,p-Xylenes	179601-23-1	0.0104	0.00401	0.000755	mg/kg	01.23.2021 00:40		1
o-Xylene	95-47-6	0.00289	0.00200	0.000404	mg/kg	01.23.2021 00:40		1
Total Xylenes	1330-20-7	0.0133	0.00200	0.000404	mg/kg	01.23.2021 00:40		1
Total BTEX		0.0162	0.00200	0.000404	mg/kg	01.23.2021 00:40		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
4-Bromofluorobenzene	460-00-4	113	%	70-130	01.23.2021 00:40			
1,4-Difluorobenzene	540-36-3	105	%	70-130	01.23.2021 00:40			



Certificate of Analytical Results 685808

Ensolum, Dallas, TX

Line 1002

Sample Id: **CS-2**
Lab Sample Id: 685808-002

Matrix: Soil
Date Collected: 01.22.2021 13:20

Date Received: 01.22.2021 16:40
Sample Depth: 0 - 5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 01.22.2021 12:25

% Moisture:
Basis: Wet Weight

Seq Number: 3148800

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	262	49.5	1.75	mg/kg	01.25.2021 22:03	D	5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.26.2021 17:00

% Moisture:
Basis: Wet Weight
SUB: T104704400-20-21

Seq Number: 3149102

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	50.0	15.0	mg/kg	01.27.2021 04:41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	01.27.2021 04:41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	01.27.2021 04:41	U	1
Total TPH	PHC635	<15.0	50.0	15.0	mg/kg	01.27.2021 04:41	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-130	01.27.2021 04:41	
o-Terphenyl	84-15-1	104	%	70-130	01.27.2021 04:41	



Certificate of Analytical Results 685808

Ensolum, Dallas, TX

Line 1002

Sample Id: **CS-2**
 Lab Sample Id: 685808-002

Matrix: Soil
 Date Collected: 01.22.2021 13:20

Date Received: 01.22.2021 16:40
 Sample Depth: 0 - 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.22.2021 18:00

% Moisture:
 Basis: Wet Weight

Seq Number: 3148776

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000487	0.00201	0.000487	mg/kg	01.23.2021 01:02	U	1
Toluene	108-88-3	0.00469	0.00201	0.000530	mg/kg	01.23.2021 01:02		1
Ethylbenzene	100-41-4	<0.000408	0.00201	0.000408	mg/kg	01.23.2021 01:02	U	1
m,p-Xylenes	179601-23-1	0.0113	0.00402	0.000757	mg/kg	01.23.2021 01:02		1
o-Xylene	95-47-6	0.00299	0.00201	0.000405	mg/kg	01.23.2021 01:02		1
Total Xylenes	1330-20-7	0.0143	0.00201	0.000405	mg/kg	01.23.2021 01:02		1
Total BTEX		0.0190	0.00201	0.000405	mg/kg	01.23.2021 01:02		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1,4-Difluorobenzene	540-36-3	96	%	70-130	01.23.2021 01:02			
4-Bromofluorobenzene	460-00-4	104	%	70-130	01.23.2021 01:02			



Certificate of Analytical Results 685808

Ensolum, Dallas, TX

Line 1002

Sample Id: **CS-3**
Lab Sample Id: 685808-003

Matrix: Soil
Date Collected: 01.22.2021 13:50

Date Received: 01.22.2021 16:40
Sample Depth: 0 - 5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 01.22.2021 12:25

% Moisture:
Basis: Wet Weight

Seq Number: 3148800

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	61.2	10.1	0.358	mg/kg	01.23.2021 02:11		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.26.2021 17:00

% Moisture:
Basis: Wet Weight
SUB: T104704400-20-21

Seq Number: 3149102

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	50.0	15.0	mg/kg	01.27.2021 05:03	U	1
Diesel Range Organics (DRO)	C10C28DRO	128	50.0	15.0	mg/kg	01.27.2021 05:03		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	21.5	50.0	15.0	mg/kg	01.27.2021 05:03	J	1
Total TPH	PHC635	150	50.0	15.0	mg/kg	01.27.2021 05:03		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	105	%	70-130	01.27.2021 05:03	
o-Terphenyl	84-15-1	122	%	70-130	01.27.2021 05:03	



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Ensolum, Dallas, TX

Line 1002

Sample Id: **CS-3**
 Lab Sample Id: 685808-003

Matrix: Soil
 Date Collected: 01.22.2021 13:50

Date Received: 01.22.2021 16:40
 Sample Depth: 0 - 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.22.2021 18:00

% Moisture:
 Basis: Wet Weight

Seq Number: 3148776

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000485	0.00200	0.000485	mg/kg	01.23.2021 01:25	U	1
Toluene	108-88-3	<0.000527	0.00200	0.000527	mg/kg	01.23.2021 01:25	U	1
Ethylbenzene	100-41-4	<0.000405	0.00200	0.000405	mg/kg	01.23.2021 01:25	U	1
m,p-Xylenes	179601-23-1	<0.000752	0.00399	0.000752	mg/kg	01.23.2021 01:25	U	1
o-Xylene	95-47-6	<0.000402	0.00200	0.000402	mg/kg	01.23.2021 01:25	U	1
Total Xylenes	1330-20-7	<0.000402	0.00200	0.000402	mg/kg	01.23.2021 01:25	U	1
Total BTEX		<0.000402	0.00200	0.000402	mg/kg	01.23.2021 01:25	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
4-Bromofluorobenzene	460-00-4	119	%	70-130	01.23.2021 01:25			
1,4-Difluorobenzene	540-36-3	107	%	70-130	01.23.2021 01:25			



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Ensolum, Dallas, TX

Line 1002

Sample Id: **CS-4**
Lab Sample Id: 685808-004

Matrix: Soil
Date Collected: 01.22.2021 14:10

Date Received: 01.22.2021 16:40
Sample Depth: 0 - 5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 01.22.2021 12:25

% Moisture:
Basis: Wet Weight

Seq Number: 3148800

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	78.1	10.0	0.355	mg/kg	01.23.2021 02:16		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.26.2021 17:00

% Moisture:
Basis: Wet Weight
SUB: T104704400-20-21

Seq Number: 3149102

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	49.9	15.0	mg/kg	01.27.2021 05:24	U	1
Diesel Range Organics (DRO)	C10C28DRO	37.9	49.9	15.0	mg/kg	01.27.2021 05:24	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	49.9	15.0	mg/kg	01.27.2021 05:24	U	1
Total TPH	PHC635	37.9	49.9	15.0	mg/kg	01.27.2021 05:24	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-130	01.27.2021 05:24	
o-Terphenyl	84-15-1	105	%	70-130	01.27.2021 05:24	



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Ensolum, Dallas, TX

Line 1002

Sample Id: **CS-4**
 Lab Sample Id: 685808-004

Matrix: Soil
 Date Collected: 01.22.2021 14:10

Date Received: 01.22.2021 16:40
 Sample Depth: 0 - 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.22.2021 18:00

% Moisture:
 Basis: Wet Weight

Seq Number: 3148776

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000482	0.00198	0.000482	mg/kg	01.23.2021 01:47	U	1
Toluene	108-88-3	0.00308	0.00198	0.000524	mg/kg	01.23.2021 01:47		1
Ethylbenzene	100-41-4	<0.000403	0.00198	0.000403	mg/kg	01.23.2021 01:47	U	1
m,p-Xylenes	179601-23-1	0.00524	0.00397	0.000748	mg/kg	01.23.2021 01:47		1
o-Xylene	95-47-6	0.00643	0.00198	0.000400	mg/kg	01.23.2021 01:47		1
Total Xylenes	1330-20-7	0.0117	0.00198	0.000400	mg/kg	01.23.2021 01:47		1
Total BTEX		0.0148	0.00198	0.000400	mg/kg	01.23.2021 01:47		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	102	%	70-130	01.23.2021 01:47	
4-Bromofluorobenzene	460-00-4	115	%	70-130	01.23.2021 01:47	



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Ensolum, Dallas, TX

Line 1002

Sample Id: **CS-5** Matrix: Soil Date Received: 01.22.2021 16:40
 Lab Sample Id: 685808-005 Date Collected: 01.22.2021 14:20 Sample Depth: 0 - 5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.22.2021 12:25 % Moisture:
 Seq Number: 3148800 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	244	9.92	0.351	mg/kg	01.23.2021 02:22		1

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.26.2021 17:00 % Moisture:
 Seq Number: 3149102 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	50.0	15.0	mg/kg	01.27.2021 05:45	U	1
Diesel Range Organics (DRO)	C10C28DRO	20.4	50.0	15.0	mg/kg	01.27.2021 05:45	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	01.27.2021 05:45	U	1
Total TPH	PHC635	20.4	50.0	15.0	mg/kg	01.27.2021 05:45	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-130	01.27.2021 05:45	
o-Terphenyl	84-15-1	105	%	70-130	01.27.2021 05:45	



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Ensolum, Dallas, TX

Line 1002

Sample Id: **CS-5**
 Lab Sample Id: 685808-005

Matrix: Soil
 Date Collected: 01.22.2021 14:20

Date Received: 01.22.2021 16:40
 Sample Depth: 0 - 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.22.2021 18:00

% Moisture:
 Basis: Wet Weight

Seq Number: 3148776

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.00647	0.00200	0.000485	mg/kg	01.23.2021 02:10		1
Toluene	108-88-3	0.0449	0.00200	0.000527	mg/kg	01.23.2021 02:10		1
Ethylbenzene	100-41-4	0.00623	0.00200	0.000405	mg/kg	01.23.2021 02:10		1
m,p-Xylenes	179601-23-1	0.0828	0.00399	0.000752	mg/kg	01.23.2021 02:10		1
o-Xylene	95-47-6	0.0199	0.00200	0.000402	mg/kg	01.23.2021 02:10		1
Total Xylenes	1330-20-7	0.103	0.00200	0.000402	mg/kg	01.23.2021 02:10		1
Total BTEX		0.160	0.00200	0.000402	mg/kg	01.23.2021 02:10		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	99	%	70-130	01.23.2021 02:10	
4-Bromofluorobenzene	460-00-4	111	%	70-130	01.23.2021 02:10	



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Ensolum, Dallas, TX

Line 1002

Sample Id: **CS-6**
Lab Sample Id: 685808-006

Matrix: Soil
Date Collected: 01.22.2021 14:30

Date Received: 01.22.2021 16:40
Sample Depth: 0 - 5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 01.22.2021 12:25

% Moisture:
Basis: Wet Weight

Seq Number: 3148800

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	62.2	10.1	0.356	mg/kg	01.23.2021 02:28		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.26.2021 17:00

% Moisture:
Basis: Wet Weight
SUB: T104704400-20-21

Seq Number: 3149102

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	49.9	15.0	mg/kg	01.27.2021 06:06	U	1
Diesel Range Organics (DRO)	C10C28DRO	18.4	49.9	15.0	mg/kg	01.27.2021 06:06	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	49.9	15.0	mg/kg	01.27.2021 06:06	U	1
Total TPH	PHC635	18.4	49.9	15.0	mg/kg	01.27.2021 06:06	J	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-130	01.27.2021 06:06	
o-Terphenyl	84-15-1	107	%	70-130	01.27.2021 06:06	



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Ensolum, Dallas, TX

Line 1002

Sample Id: **CS-6**
 Lab Sample Id: 685808-006

Matrix: Soil
 Date Collected: 01.22.2021 14:30

Date Received: 01.22.2021 16:40
 Sample Depth: 0 - 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.22.2021 18:00

% Moisture:
 Basis: Wet Weight

Seq Number: 3148776

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000484	0.00199	0.000484	mg/kg	01.23.2021 02:32	U	1
Toluene	108-88-3	<0.000526	0.00199	0.000526	mg/kg	01.23.2021 02:32	U	1
Ethylbenzene	100-41-4	<0.000405	0.00199	0.000405	mg/kg	01.23.2021 02:32	U	1
m,p-Xylenes	179601-23-1	<0.000751	0.00398	0.000751	mg/kg	01.23.2021 02:32	U	1
o-Xylene	95-47-6	<0.000401	0.00199	0.000401	mg/kg	01.23.2021 02:32	U	1
Total Xylenes	1330-20-7	<0.000401	0.00199	0.000401	mg/kg	01.23.2021 02:32	U	1
Total BTEX		<0.000401	0.00199	0.000401	mg/kg	01.23.2021 02:32	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
4-Bromofluorobenzene	460-00-4	111	%	70-130	01.23.2021 02:32			
1,4-Difluorobenzene	540-36-3	96	%	70-130	01.23.2021 02:32			



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Line 1002

Sample Id: **CS-7**
Lab Sample Id: 685808-007

Matrix: Soil
Date Collected: 01.22.2021 14:54

Date Received: 01.22.2021 16:40
Sample Depth: 5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 01.22.2021 12:25

% Moisture:
Basis: Wet Weight

Seq Number: 3148800

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	243	50.4	1.78	mg/kg	01.25.2021 22:09	D	5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.26.2021 17:00

% Moisture:
Basis: Wet Weight
SUB: T104704400-20-21

Seq Number: 3149102

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	155	49.8	14.9	mg/kg	01.27.2021 06:27		1
Diesel Range Organics (DRO)	C10C28DRO	498	49.8	14.9	mg/kg	01.27.2021 06:27		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	34.7	49.8	14.9	mg/kg	01.27.2021 06:27	J	1
Total TPH	PHC635	688	49.8	14.9	mg/kg	01.27.2021 06:27		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	117	%	70-130	01.27.2021 06:27	
o-Terphenyl	84-15-1	112	%	70-130	01.27.2021 06:27	



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Ensolum, Dallas, TX

Line 1002

Sample Id: **CS-7**
 Lab Sample Id: 685808-007

Matrix: Soil
 Date Collected: 01.22.2021 14:54

Date Received: 01.22.2021 16:40
 Sample Depth: 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.22.2021 18:00

% Moisture:
 Basis: Wet Weight

Seq Number: 3148776

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0187	0.0769	0.0187	mg/kg	01.23.2021 02:55	U	1
Toluene	108-88-3	0.395	0.0769	0.0203	mg/kg	01.23.2021 02:55		1
Ethylbenzene	100-41-4	0.321	0.0769	0.0156	mg/kg	01.23.2021 02:55		1
m,p-Xylenes	179601-23-1	3.58	0.154	0.0290	mg/kg	01.23.2021 02:55		1
o-Xylene	95-47-6	1.02	0.0769	0.0155	mg/kg	01.23.2021 02:55		1
Total Xylenes	1330-20-7	4.60	0.0769	0.0155	mg/kg	01.23.2021 02:55		1
Total BTEX		5.32	0.0769	0.0155	mg/kg	01.23.2021 02:55		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
4-Bromofluorobenzene	460-00-4	116	%	70-130	01.23.2021 02:55			
1,4-Difluorobenzene	540-36-3	96	%	70-130	01.23.2021 02:55			



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Line 1002

Sample Id: **CS-8**
Lab Sample Id: 685808-008

Matrix: Soil
Date Collected: 01.22.2021 15:05

Date Received: 01.22.2021 16:40
Sample Depth: 5 ft

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 01.22.2021 12:25

% Moisture:
Basis: Wet Weight

Seq Number: 3148800

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	568	10.0	0.355	mg/kg	01.23.2021 02:39		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.26.2021 17:00

% Moisture:
Basis: Wet Weight
SUB: T104704400-20-21

Seq Number: 3149102

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	33.3	50.0	15.0	mg/kg	01.27.2021 06:48	J	1
Diesel Range Organics (DRO)	C10C28DRO	495	50.0	15.0	mg/kg	01.27.2021 06:48		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	52.3	50.0	15.0	mg/kg	01.27.2021 06:48		1
Total TPH	PHC635	581	50.0	15.0	mg/kg	01.27.2021 06:48		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-130	01.27.2021 06:48	
o-Terphenyl	84-15-1	127	%	70-130	01.27.2021 06:48	



Certificate of Analytical Results 685808

Ensolum, Dallas, TX

Line 1002

Sample Id: **CS-8**
 Lab Sample Id: 685808-008

Matrix: Soil
 Date Collected: 01.22.2021 15:05

Date Received: 01.22.2021 16:40
 Sample Depth: 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.22.2021 18:00

% Moisture:
 Basis: Wet Weight

Seq Number: 3148776

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.0243	0.100	0.0243	mg/kg	01.23.2021 03:17	U	1
Toluene	108-88-3	0.652	0.100	0.0264	mg/kg	01.23.2021 03:17		1
Ethylbenzene	100-41-4	0.244	0.100	0.0203	mg/kg	01.23.2021 03:17		1
m,p-Xylenes	179601-23-1	2.32	0.200	0.0377	mg/kg	01.23.2021 03:17		1
o-Xylene	95-47-6	0.690	0.100	0.0202	mg/kg	01.23.2021 03:17		1
Total Xylenes	1330-20-7	3.01	0.100	0.0202	mg/kg	01.23.2021 03:17		1
Total BTEX		3.91	0.100	0.0202	mg/kg	01.23.2021 03:17		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	105	%	70-130	01.23.2021 03:17	
1,4-Difluorobenzene	540-36-3	96	%	70-130	01.23.2021 03:17	



Certificate of Analytical Results 685808

Ensolum, Dallas, TX

Line 1002

Sample Id: **CS-9** Matrix: Soil Date Received: 01.22.2021 16:40
 Lab Sample Id: 685808-009 Date Collected: 01.22.2021 15:10 Sample Depth: 5 ft
 Analytical Method: Chloride by EPA 300 Prep Method: E300P
 Tech: MAB
 Analyst: MAB Date Prep: 01.22.2021 12:25 % Moisture:
 Seq Number: 3148800 Basis: Wet Weight

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	357	49.8	1.76	mg/kg	01.25.2021 22:43	D	5

Analytical Method: TPH by SW8015 Mod Prep Method: SW8015P
 Tech: DVM
 Analyst: ARM Date Prep: 01.26.2021 17:00 % Moisture:
 Seq Number: 3149102 Basis: Wet Weight
 SUB: T104704400-20-21

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	150	49.9	15.0	mg/kg	01.27.2021 07:09		1
Diesel Range Organics (DRO)	C10C28DRO	7450	49.9	15.0	mg/kg	01.27.2021 07:09		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	771	49.9	15.0	mg/kg	01.27.2021 07:09		1
Total TPH	PHC635	8370	49.9	15.0	mg/kg	01.27.2021 07:09		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	122	%	70-130	01.27.2021 07:09	
o-Terphenyl	84-15-1	210	%	70-130	01.27.2021 07:09	**



Certificate of Analytical Results 685808

Ensolum, Dallas, TX

Line 1002

Sample Id: **CS-9**
 Lab Sample Id: 685808-009

Matrix: Soil
 Date Collected: 01.22.2021 15:10

Date Received: 01.22.2021 16:40
 Sample Depth: 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.22.2021 18:00

% Moisture:
 Basis: Wet Weight

Seq Number: 3148776

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.00723	0.00202	0.000489	mg/kg	01.23.2021 03:40		1
Toluene	108-88-3	0.101	0.00202	0.000532	mg/kg	01.23.2021 03:40		1
Ethylbenzene	100-41-4	0.0259	0.00202	0.000409	mg/kg	01.23.2021 03:40		1
m,p-Xylenes	179601-23-1	0.243	0.00403	0.000760	mg/kg	01.23.2021 03:40		1
o-Xylene	95-47-6	0.0761	0.00202	0.000406	mg/kg	01.23.2021 03:40		1
Total Xylenes	1330-20-7	0.319	0.00202	0.000406	mg/kg	01.23.2021 03:40		1
Total BTEX		0.453	0.00202	0.000406	mg/kg	01.23.2021 03:40		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
4-Bromofluorobenzene	460-00-4	126	%	70-130	01.23.2021 03:40			
1,4-Difluorobenzene	540-36-3	97	%	70-130	01.23.2021 03:40			



Certificate of Analytical Results 685808

Ensolum, Dallas, TX

Line 1002

Sample Id: **STP-1**
Lab Sample Id: 685808-010

Matrix: Soil
Date Collected: 01.22.2021 15:30

Date Received: 01.22.2021 16:40

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 01.22.2021 12:25

% Moisture:
Basis: Wet Weight

Seq Number: 3148800

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	304	49.8	1.76	mg/kg	01.25.2021 22:48	D	5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.26.2021 17:00

% Moisture:
Basis: Wet Weight
SUB: T104704400-20-21

Seq Number: 3149102

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	85.7	49.9	15.0	mg/kg	01.27.2021 07:30		1
Diesel Range Organics (DRO)	C10C28DRO	2750	49.9	15.0	mg/kg	01.27.2021 07:30		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	285	49.9	15.0	mg/kg	01.27.2021 07:30		1
Total TPH	PHC635	3120	49.9	15.0	mg/kg	01.27.2021 07:30		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-130	01.27.2021 07:30	
o-Terphenyl	84-15-1	138	%	70-130	01.27.2021 07:30	**



Certificate of Analytical Results 685808

Ensolum, Dallas, TX

Line 1002

Sample Id: **STP-1**
 Lab Sample Id: 685808-010

Matrix: Soil
 Date Collected: 01.22.2021 15:30

Date Received: 01.22.2021 16:40

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.22.2021 18:00

% Moisture:
 Basis: Wet Weight

Seq Number: 3148770

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000486	0.00200	0.000486	mg/kg	01.22.2021 21:50	U	1
Toluene	108-88-3	0.0236	0.00200	0.000529	mg/kg	01.22.2021 21:50		1
Ethylbenzene	100-41-4	0.0167	0.00200	0.000407	mg/kg	01.22.2021 21:50		1
m,p-Xylenes	179601-23-1	0.189	0.00401	0.000755	mg/kg	01.22.2021 21:50		1
o-Xylene	95-47-6	0.0610	0.00200	0.000404	mg/kg	01.22.2021 21:50		1
Total Xylenes	1330-20-7	0.250	0.00200	0.000404	mg/kg	01.22.2021 21:50		1
Total BTEX		0.290	0.00200	0.000404	mg/kg	01.22.2021 21:50		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1,4-Difluorobenzene	540-36-3	87	%	70-130	01.22.2021 21:50			
4-Bromofluorobenzene	460-00-4	104	%	70-130	01.22.2021 21:50			



Certificate of Analytical Results 685808

Ensolum, Dallas, TX

Line 1002

Sample Id: **STP-2**
Lab Sample Id: 685808-011

Matrix: Soil
Date Collected: 01.22.2021 15:35

Date Received: 01.22.2021 16:40

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 01.22.2021 12:25

% Moisture:
Basis: Wet Weight

Seq Number: 3148800

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	147	9.92	0.351	mg/kg	01.23.2021 03:19		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.26.2021 17:00

% Moisture:
Basis: Wet Weight
SUB: T104704400-20-21

Seq Number: 3149102

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	125	50.0	15.0	mg/kg	01.27.2021 08:14		1
Diesel Range Organics (DRO)	C10C28DRO	3570	50.0	15.0	mg/kg	01.27.2021 08:14		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	329	50.0	15.0	mg/kg	01.27.2021 08:14		1
Total TPH	PHC635	4020	50.0	15.0	mg/kg	01.27.2021 08:14		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-130	01.27.2021 08:14	
o-Terphenyl	84-15-1	159	%	70-130	01.27.2021 08:14	**



Certificate of Analytical Results 685808

Ensolum, Dallas, TX

Line 1002

Sample Id: **STP-2**
 Lab Sample Id: 685808-011

Matrix: Soil
 Date Collected: 01.22.2021 15:35

Date Received: 01.22.2021 16:40

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.22.2021 18:00

% Moisture:
 Basis: Wet Weight

Seq Number: 3148770

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.00415	0.00202	0.000489	mg/kg	01.22.2021 22:12		1
Toluene	108-88-3	0.126	0.00202	0.000532	mg/kg	01.22.2021 22:12		1
Ethylbenzene	100-41-4	0.136	0.00202	0.000409	mg/kg	01.22.2021 22:12		1
m,p-Xylenes	179601-23-1	0.485	0.00403	0.000760	mg/kg	01.22.2021 22:12		1
o-Xylene	95-47-6	0.136	0.00202	0.000406	mg/kg	01.22.2021 22:12		1
Total Xylenes	1330-20-7	0.621	0.00202	0.000406	mg/kg	01.22.2021 22:12		1
Total BTEX		0.887	0.00202	0.000406	mg/kg	01.22.2021 22:12		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	93	%	70-130	01.22.2021 22:12	
4-Bromofluorobenzene	460-00-4	119	%	70-130	01.22.2021 22:12	



Certificate of Analytical Results 685808

Ensolum, Dallas, TX

Line 1002

Sample Id: **STP-3**
Lab Sample Id: 685808-012

Matrix: Soil
Date Collected: 01.22.2021 15:40

Date Received: 01.22.2021 16:40

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: MAB

Analyst: MAB

Date Prep: 01.22.2021 12:25

% Moisture:
Basis: Wet Weight

Seq Number: 3148800

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	220	10.0	0.354	mg/kg	01.23.2021 03:25		1

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 01.26.2021 17:00

% Moisture:
Basis: Wet Weight
SUB: T104704400-20-21

Seq Number: 3149102

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	25.9	50.0	15.0	mg/kg	01.27.2021 08:35	J	1
Diesel Range Organics (DRO)	C10C28DRO	1050	50.0	15.0	mg/kg	01.27.2021 08:35		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	120	50.0	15.0	mg/kg	01.27.2021 08:35		1
Total TPH	PHC635	1200	50.0	15.0	mg/kg	01.27.2021 08:35		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	118	%	70-130	01.27.2021 08:35	
o-Terphenyl	84-15-1	147	%	70-130	01.27.2021 08:35	**



Certificate of Analytical Results 685808

Ensolum, Dallas, TX

Line 1002

Sample Id: **STP-3**
 Lab Sample Id: 685808-012

Matrix: Soil
 Date Collected: 01.22.2021 15:40

Date Received: 01.22.2021 16:40

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

Analyst: MAB

Date Prep: 01.22.2021 18:00

% Moisture:
 Basis: Wet Weight

Seq Number: 3148770

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000490	0.00202	0.000490	mg/kg	01.22.2021 22:34	U	1
Toluene	108-88-3	0.00613	0.00202	0.000533	mg/kg	01.22.2021 22:34		1
Ethylbenzene	100-41-4	0.119	0.00202	0.000410	mg/kg	01.22.2021 22:34		1
m,p-Xylenes	179601-23-1	0.0495	0.00404	0.000761	mg/kg	01.22.2021 22:34		1
o-Xylene	95-47-6	0.0147	0.00202	0.000407	mg/kg	01.22.2021 22:34		1
Total Xylenes	1330-20-7	0.0642	0.00202	0.000407	mg/kg	01.22.2021 22:34		1
Total BTEX		0.189	0.00202	0.000407	mg/kg	01.22.2021 22:34		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1,4-Difluorobenzene	540-36-3	90	%	70-130	01.22.2021 22:34			
4-Bromofluorobenzene	460-00-4	127	%	70-130	01.22.2021 22:34			

Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation



Ensolum

Line 1002

Analytical Method: Chloride by EPA 300

Seq Number: 3148800

MB Sample Id: 7719911-1-BLK

Matrix: Solid

LCS Sample Id: 7719911-1-BKS

Prep Method: E300P

Date Prep: 01.22.2021

LCSD Sample Id: 7719911-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.354	200	215	108	212	106	90-110	1	20	mg/kg	01.23.2021 00:57	

Analytical Method: Chloride by EPA 300

Seq Number: 3148800

Parent Sample Id: 685783-041

Matrix: Soil

MS Sample Id: 685783-041 S

Prep Method: E300P

Date Prep: 01.22.2021

MSD Sample Id: 685783-041 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	3080	201	3260	90	3280	100	90-110	1	20	mg/kg	01.23.2021 01:14	

Analytical Method: Chloride by EPA 300

Seq Number: 3148800

Parent Sample Id: 685808-008

Matrix: Soil

MS Sample Id: 685808-008 S

Prep Method: E300P

Date Prep: 01.22.2021

MSD Sample Id: 685808-008 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	568	200	779	106	779	106	90-110	0	20	mg/kg	01.23.2021 02:56	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3149102

MB Sample Id: 7720103-1-BLK

Matrix: Solid

LCS Sample Id: 7720103-1-BKS

Prep Method: SW8015P

Date Prep: 01.26.2021

LCSD Sample Id: 7720103-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	1130	113	1140	114	70-130	1	20	mg/kg	01.27.2021 02:53	
Diesel Range Organics (DRO)	<15.0	1000	1150	115	1190	119	70-130	3	20	mg/kg	01.27.2021 02:53	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	110		108		112		70-130	%	01.27.2021 02:53
o-Terphenyl	124		119		124		70-130	%	01.27.2021 02:53

Analytical Method: TPH by SW8015 Mod

Seq Number: 3149102

Matrix: Solid

MB Sample Id: 7720103-1-BLK

Prep Method: SW8015P

Date Prep: 01.26.2021

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<15.0	mg/kg	01.27.2021 02:31	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * | (C - E) / (C + E) |$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Ensolum

Line 1002

Analytical Method: TPH by SW8015 Mod

Seq Number: 3149102

Parent Sample Id: 685808-001

Matrix: Soil

MS Sample Id: 685808-001 S

Prep Method: SW8015P

Date Prep: 01.26.2021

MSD Sample Id: 685808-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	997	1010	101	1100	110	70-130	9	20	mg/kg	01.27.2021 03:58	
Diesel Range Organics (DRO)	<15.0	997	973	98	1180	118	70-130	19	20	mg/kg	01.27.2021 03:58	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	93		111		70-130	%	01.27.2021 03:58
o-Terphenyl	96		115		70-130	%	01.27.2021 03:58

Analytical Method: BTEX by EPA 8021B

Seq Number: 3148770

MB Sample Id: 7719890-1-BLK

Matrix: Solid

LCS Sample Id: 7719890-1-BKS

Prep Method: SW5035A

Date Prep: 01.22.2021

LCSD Sample Id: 7719890-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000486	0.100	0.0941	94	0.0932	93	70-130	1	35	mg/kg	01.22.2021 12:30	
Toluene	<0.000528	0.100	0.0896	90	0.0894	89	70-130	0	35	mg/kg	01.22.2021 12:30	
Ethylbenzene	<0.000406	0.100	0.0830	83	0.0820	82	71-129	1	35	mg/kg	01.22.2021 12:30	
m,p-Xylenes	<0.000754	0.200	0.167	84	0.164	82	70-135	2	35	mg/kg	01.22.2021 12:30	
o-Xylene	<0.000403	0.100	0.0833	83	0.0826	83	71-133	1	35	mg/kg	01.22.2021 12:30	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	97		95		96		70-130	%	01.22.2021 12:30
4-Bromofluorobenzene	89		86		84		70-130	%	01.22.2021 12:30

Analytical Method: BTEX by EPA 8021B

Seq Number: 3148776

MB Sample Id: 7719896-1-BLK

Matrix: Solid

LCS Sample Id: 7719896-1-BKS

Prep Method: SW5035A

Date Prep: 01.22.2021

LCSD Sample Id: 7719896-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000486	0.100	0.0994	99	0.0928	93	70-130	7	35	mg/kg	01.22.2021 17:09	
Toluene	<0.000528	0.100	0.0985	99	0.0901	90	70-130	9	35	mg/kg	01.22.2021 17:09	
Ethylbenzene	<0.000406	0.100	0.0977	98	0.0927	93	71-129	5	35	mg/kg	01.22.2021 17:09	
m,p-Xylenes	<0.000754	0.200	0.202	101	0.188	94	70-135	7	35	mg/kg	01.22.2021 17:09	
o-Xylene	<0.000403	0.100	0.100	100	0.0920	92	71-133	8	35	mg/kg	01.22.2021 17:09	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	101		102		100		70-130	%	01.22.2021 17:09
4-Bromofluorobenzene	114		107		107		70-130	%	01.22.2021 17:09

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Ensolum

Line 1002

Analytical Method: BTEX by EPA 8021B

Seq Number: 3148770

Parent Sample Id: 685633-001

Matrix: Soil

MS Sample Id: 685633-001 S

Prep Method: SW5035A

Date Prep: 01.22.2021

MSD Sample Id: 685633-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000486	0.100	0.101	101	0.106	106	70-130	5	35	mg/kg	01.22.2021 13:15	
Toluene	<0.000529	0.100	0.0907	91	0.0996	100	70-130	9	35	mg/kg	01.22.2021 13:15	
Ethylbenzene	<0.000407	0.100	0.0752	75	0.0878	88	71-129	15	35	mg/kg	01.22.2021 13:15	
m,p-Xylenes	<0.000755	0.200	0.150	75	0.176	88	70-135	16	35	mg/kg	01.22.2021 13:15	
o-Xylene	<0.000404	0.100	0.0743	74	0.0853	85	71-133	14	35	mg/kg	01.22.2021 13:15	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	96		95		70-130	%	01.22.2021 13:15
4-Bromofluorobenzene	90		88		70-130	%	01.22.2021 13:15

Analytical Method: BTEX by EPA 8021B

Seq Number: 3148776

Parent Sample Id: 685671-001

Matrix: Soil

MS Sample Id: 685671-001 S

Prep Method: SW5035A

Date Prep: 01.22.2021

MSD Sample Id: 685671-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000484	0.0996	0.102	102	0.0964	97	70-130	6	35	mg/kg	01.22.2021 17:54	
Toluene	<0.000526	0.0996	0.0970	97	0.0892	90	70-130	8	35	mg/kg	01.22.2021 17:54	
Ethylbenzene	<0.000405	0.0996	0.0948	95	0.0942	95	71-129	1	35	mg/kg	01.22.2021 17:54	
m,p-Xylenes	<0.000751	0.199	0.193	97	0.191	96	70-135	1	35	mg/kg	01.22.2021 17:54	
o-Xylene	<0.000401	0.0996	0.0952	96	0.0938	94	71-133	1	35	mg/kg	01.22.2021 17:54	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		104		70-130	%	01.22.2021 17:54
4-Bromofluorobenzene	110		107		70-130	%	01.22.2021 17:54

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec

Inter-Office Shipment

IOS Number : **76961**

Date/Time: 01.25.2021

Created by: Cloe Clifton

Please send report to: Jessica Kramer

Lab# From: **Carlsbad**

Delivery Priority:

Address: 1089 N Canal Street

Lab# To: **Midland**

Air Bill No.:

E-Mail: jessica.kramer@eurofinset.com

Sample Id	Matrix	Client Sample Id	Sample Collection	Method	Method Name	Lab Due	HT Due	PM	Analytes	Sign
685808-001	S	CS-1	01.22.2021 13:40	SW8015MOD_NM	TPH by SW8015 Mod	01.26.2021	02.05.2021	JKR	PHCC10C28 PHCC28C3:	
685808-002	S	CS-2	01.22.2021 13:20	SW8015MOD_NM	TPH by SW8015 Mod	01.26.2021	02.05.2021	JKR	PHCC10C28 PHCC28C3:	
685808-003	S	CS-3	01.22.2021 13:50	SW8015MOD_NM	TPH by SW8015 Mod	01.26.2021	02.05.2021	JKR	PHCC10C28 PHCC28C3:	
685808-004	S	CS-4	01.22.2021 14:10	SW8015MOD_NM	TPH by SW8015 Mod	01.26.2021	02.05.2021	JKR	PHCC10C28 PHCC28C3:	
685808-005	S	CS-5	01.22.2021 14:20	SW8015MOD_NM	TPH by SW8015 Mod	01.26.2021	02.05.2021	JKR	PHCC10C28 PHCC28C3:	
685808-006	S	CS-6	01.22.2021 14:30	SW8015MOD_NM	TPH by SW8015 Mod	01.26.2021	02.05.2021	JKR	PHCC10C28 PHCC28C3:	
685808-007	S	CS-7	01.22.2021 14:54	SW8015MOD_NM	TPH by SW8015 Mod	01.26.2021	02.05.2021	JKR	PHCC10C28 PHCC28C3:	
685808-008	S	CS-8	01.22.2021 15:05	SW8015MOD_NM	TPH by SW8015 Mod	01.26.2021	02.05.2021	JKR	PHCC10C28 PHCC28C3:	
685808-009	S	CS-9	01.22.2021 15:10	SW8015MOD_NM	TPH by SW8015 Mod	01.26.2021	02.05.2021	JKR	PHCC10C28 PHCC28C3:	
685808-010	S	STP-1	01.22.2021 15:30	SW8015MOD_NM	TPH by SW8015 Mod	01.26.2021	02.05.2021	JKR	PHCC10C28 PHCC28C3:	
685808-011	S	STP-2	01.22.2021 15:35	SW8015MOD_NM	TPH by SW8015 Mod	01.26.2021	02.05.2021	JKR	PHCC10C28 PHCC28C3:	
685808-012	S	STP-3	01.22.2021 15:40	SW8015MOD_NM	TPH by SW8015 Mod	01.26.2021	02.05.2021	JKR	PHCC10C28 PHCC28C3:	

Inter Office Shipment or Sample Comments:

Relinquished By:



Cloe Clifton

Date Relinquished: 01.25.2021

Received By: _____

Date Received: _____

Cooler Temperature: _____

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Ensolum, LLC

Date/ Time Received: 01.22.2021 04.40.00 PM

Work Order #: 685808

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : T_NM_007

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	20.8
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles?	Yes
#6 *Custody Seals Signed and dated?	Yes
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	No
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	Yes
#18 Water VOC samples have zero headspace?	N/A

Samples received in bulk containers.

TPH samples sent to Midland.

* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Analyst:

PH Device/Lot#:

Checklist completed by:



Cloe Clifton

Date: 01.25.2021

Checklist reviewed by:



Jessica Kramer

Date: 01.26.2021

Certificate of Analysis Summary 688218



Ensolum, Dallas, TX

Project Name: Line 1002

Project Id: 03B1226042
Contact: Beaux Jennings
Project Location: Carlsbad, NM

Date Received in Lab: Fri 02.12.2021 08:53
Report Date: 02.18.2021 15:45
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	688218-001		688218-002		688218-003		688218-004		688218-005		688218-006	
	<i>Field Id:</i>	CS-2		CS-2		CS-10		CS-9		CS-6		CS-6	
	<i>Depth:</i>	5-10 ft		10-15 ft		15- ft		15- ft		10-15 ft		5-10 ft	
	<i>Matrix:</i>	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	<i>Sampled:</i>	02.11.2021 14:00		02.11.2021 13:05		02.11.2021 13:20		02.11.2021 13:30		02.11.2021 13:40		02.11.2021 13:50	
TPH by SW8015 Mod	<i>Extracted:</i>	02.12.2021 12:00		02.12.2021 12:00		02.12.2021 12:00		02.12.2021 12:00		02.12.2021 12:00		02.12.2021 12:00	
	<i>Analyzed:</i>	02.12.2021 12:27		02.12.2021 13:32		02.12.2021 13:53		02.12.2021 14:14		02.12.2021 14:36		02.12.2021 14:57	
	<i>Units/RL:</i>	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	50.0	<14.9	49.8	<15.0	49.9	<15.0	50.0	<15.0	49.9	21.8 J	49.8
Diesel Range Organics (DRO)		17.1 J	50.0	17.7 J	49.8	53.2	49.9	<15.0	50.0	<15.0	49.9	594	49.8
Motor Oil Range Hydrocarbons (MRO)		<15.0	50.0	<14.9	49.8	<15.0	49.9	<15.0	50.0	<15.0	49.9	56.1	49.8
Total TPH		17.1 J	50.0	17.7 J	49.8	53.2	49.9	<15.0	50.0	<15.0	49.9	672	49.8

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Certificate of Analysis Summary 688218



Ensolum, Dallas, TX

Project Name: Line 1002

Project Id: 03B1226042
Contact: Beaux Jennings
Project Location: Carlsbad, NM

Date Received in Lab: Fri 02.12.2021 08:53
Report Date: 02.18.2021 15:45
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	688218-007		688218-008		688218-009		688218-010		688218-011		688218-012	
	<i>Field Id:</i>	CS-1		CS-1		CS-8		CS-7		CS-4		CS-4	
	<i>Depth:</i>	10-15 ft		5-10 ft		15- ft		15- ft		10-15 ft		5-10 ft	
	<i>Matrix:</i>	SOIL		SOIL		SOIL		SOIL		SOIL		SOIL	
	<i>Sampled:</i>	02.11.2021 14:15		02.11.2021 14:20		02.11.2021 14:25		02.11.2021 14:35		02.11.2021 14:40		02.11.2021 14:50	
TPH by SW8015 Mod	<i>Extracted:</i>	02.12.2021 12:00		02.12.2021 12:00		02.12.2021 12:00		02.12.2021 12:00		02.12.2021 12:00		02.12.2021 12:00	
	<i>Analyzed:</i>	02.12.2021 15:19		02.12.2021 15:41		02.12.2021 16:02		02.12.2021 16:24		02.12.2021 17:07		02.12.2021 17:29	
	<i>Units/RL:</i>	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL	mg/kg	RL
Gasoline Range Hydrocarbons (GRO)		<15.0	50.0	<15.0	50.0	<15.0	49.9	<15.0	49.9	<15.0	49.9	<15.0	49.9
Diesel Range Organics (DRO)		17.7 J	50.0	<15.0	50.0	<15.0	49.9	<15.0	49.9	<15.0	49.9	544	49.9
Motor Oil Range Hydrocarbons (MRO)		<15.0	50.0	<15.0	50.0	<15.0	49.9	<15.0	49.9	<15.0	49.9	52.5	49.9
Total TPH		17.7 J	50.0	<15.0	50.0	<15.0	49.9	<15.0	49.9	<15.0	49.9	597	49.9

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Certificate of Analysis Summary 688218

Ensolum, Dallas, TX

Project Name: Line 1002

Project Id: 03B1226042
 Contact: Beaux Jennings
 Project Location: Carlsbad, NM

Date Received in Lab: Fri 02.12.2021 08:53
 Report Date: 02.18.2021 15:45
 Project Manager: Jessica Kramer

Analysis Requested	Lab Id: 688218-013 Field Id: STP-4 Depth: Matrix: SOIL Sampled: 02.11.2021 15:10	688218-014 STP-5 SOIL 02.11.2021 15:15				
BTEX by EPA 8021B	Extracted: 02.17.2021 15:00 Analyzed: 02.18.2021 13:33 Units/RL: mg/kg RL	02.17.2021 15:00 02.18.2021 14:21 mg/kg RL				
Benzene	<0.000386	0.00200	<0.000386	0.00200		
Toluene	0.000581 J	0.00200	0.00235	0.00200		
Ethylbenzene	<0.000566	0.00200	0.00208	0.00200		
m,p-Xylenes	0.00294 J	0.00401	0.0229	0.00401		
o-Xylene	0.00150 J	0.00200	0.0234	0.00200		
Total Xylenes	0.00444	0.00200	0.0463	0.00200		
Total BTEX	0.00502	0.00200	0.0507	0.00200		
Chloride by EPA 300	Extracted: 02.12.2021 15:45 Analyzed: 02.12.2021 21:06 Units/RL: mg/kg RL	02.12.2021 15:45 02.12.2021 21:11 mg/kg RL				
Chloride	1480	24.8	1710	25.2		
TPH by SW8015 Mod	Extracted: 02.12.2021 12:00 Analyzed: 02.12.2021 17:51 Units/RL: mg/kg RL	02.12.2021 12:00 02.12.2021 18:13 mg/kg RL				
Gasoline Range Hydrocarbons (GRO)	18.9 J	49.8	20.8 J	49.9		
Diesel Range Organics (DRO)	382	49.8	817	49.9		
Motor Oil Range Hydrocarbons (MRO)	39.1 J	49.8	77.8	49.9		
Total TPH	440	49.8	916	49.9		

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



Analytical Report 688218

for

Ensolum

Project Manager: Beaux Jennings

Line 1002

03B1226042

02.18.2021

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-24)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



02.18.2021

Project Manager: **Beaux Jennings**

Ensolum

2351 W Northwest Highway

Suite 1203

Dallas, TX 75220

Reference: Eurofins Xenco, LLC Report No(s): **688218**

Line 1002

Project Address: Carlsbad, NM

Beaux Jennings:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 688218. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 688218 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

Jessica Kramer

Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

**Sample Cross Reference 688218****Ensolum, Dallas, TX**

Line 1002

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
CS-2	S	02.11.2021 14:00	5 - 10 ft	688218-001
CS-2	S	02.11.2021 13:05	10 - 15 ft	688218-002
CS-10	S	02.11.2021 13:20	15 ft	688218-003
CS-9	S	02.11.2021 13:30	15 ft	688218-004
CS-6	S	02.11.2021 13:40	10 - 15 ft	688218-005
CS-6	S	02.11.2021 13:50	5 - 10 ft	688218-006
CS-1	S	02.11.2021 14:15	10 - 15 ft	688218-007
CS-1	S	02.11.2021 14:20	5 - 10 ft	688218-008
CS-8	S	02.11.2021 14:25	15 ft	688218-009
CS-7	S	02.11.2021 14:35	15 ft	688218-010
CS-4	S	02.11.2021 14:40	10 - 15 ft	688218-011
CS-4	S	02.11.2021 14:50	5 - 10 ft	688218-012
STP-4	S	02.11.2021 15:10		688218-013
STP-5	S	02.11.2021 15:15		688218-014

**CASE NARRATIVE****Client Name: Ensolum****Project Name: Line 1002**Project ID: 03B1226042
Work Order Number(s): 688218Report Date: 02.18.2021
Date Received: 02.12.2021

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3151056 BTEX by EPA 8021B

Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected;

Samples affected are: 688220-002 S, 688220-002 SD.

Batch: LBA-3151062 TPH by SW8015 Mod

Surrogate 1-Chlorooctane recovered below QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 688218-005, 688218-013, 688218-012, 688218-008, 688218-007, 688218-006.

Surrogate o-Terphenyl recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 688218-011, 688218-010, 688218-009, 688218-004, 688218-003, 688218-002, 688218-014, 688218-001.



Certificate of Analytical Results 688218

Ensolum, Dallas, TX

Line 1002

Sample Id: **CS-2**
 Lab Sample Id: 688218-001

Matrix: Soil
 Date Collected: 02.11.2021 14:00

Date Received: 02.12.2021 08:53
 Sample Depth: 5 - 10 ft

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.12.2021 12:00

% Moisture:
 Basis: Wet Weight

Seq Number: 3151062

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	50.0	15.0	mg/kg	02.12.2021 12:27	U	1
Diesel Range Organics (DRO)	C10C28DRO	17.1	50.0	15.0	mg/kg	02.12.2021 12:27	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	02.12.2021 12:27	U	1
Total TPH	PHC635	17.1	50.0	15.0	mg/kg	02.12.2021 12:27	J	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1-Chlorooctane	111-85-3	130	%	70-130	02.12.2021 12:27			
o-Terphenyl	84-15-1	137	%	70-130	02.12.2021 12:27	**		



Certificate of Analytical Results 688218

Ensolum, Dallas, TX

Line 1002

Sample Id: **CS-2**
 Lab Sample Id: 688218-002

Matrix: Soil
 Date Collected: 02.11.2021 13:05

Date Received: 02.12.2021 08:53
 Sample Depth: 10 - 15 ft

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.12.2021 12:00

% Moisture:
 Basis: Wet Weight

Seq Number: 3151062

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	49.8	14.9	mg/kg	02.12.2021 13:32	U	1
Diesel Range Organics (DRO)	C10C28DRO	17.7	49.8	14.9	mg/kg	02.12.2021 13:32	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	49.8	14.9	mg/kg	02.12.2021 13:32	U	1
Total TPH	PHC635	17.7	49.8	14.9	mg/kg	02.12.2021 13:32	J	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1-Chlorooctane	111-85-3	130	%	70-130	02.12.2021 13:32			
o-Terphenyl	84-15-1	142	%	70-130	02.12.2021 13:32	**		



Certificate of Analytical Results 688218

Ensolum, Dallas, TX

Line 1002

Sample Id: **CS-10**
 Lab Sample Id: 688218-003

Matrix: Soil
 Date Collected: 02.11.2021 13:20

Date Received: 02.12.2021 08:53
 Sample Depth: 15 ft

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.12.2021 12:00

% Moisture:
 Basis: Wet Weight

Seq Number: 3151062

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	49.9	15.0	mg/kg	02.12.2021 13:53	U	1
Diesel Range Organics (DRO)	C10C28DRO	53.2	49.9	15.0	mg/kg	02.12.2021 13:53		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	49.9	15.0	mg/kg	02.12.2021 13:53	U	1
Total TPH	PHC635	53.2	49.9	15.0	mg/kg	02.12.2021 13:53		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1-Chlorooctane	111-85-3	130	%	70-130	02.12.2021 13:53			
o-Terphenyl	84-15-1	144	%	70-130	02.12.2021 13:53	**		



Certificate of Analytical Results 688218

Ensolum, Dallas, TX

Line 1002

Sample Id: **CS-9**
 Lab Sample Id: 688218-004

Matrix: Soil
 Date Collected: 02.11.2021 13:30

Date Received: 02.12.2021 08:53
 Sample Depth: 15 ft

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.12.2021 12:00

% Moisture:
 Basis: Wet Weight

Seq Number: 3151062

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	50.0	15.0	mg/kg	02.12.2021 14:14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	02.12.2021 14:14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	02.12.2021 14:14	U	1
Total TPH	PHC635	<15.0	50.0	15.0	mg/kg	02.12.2021 14:14	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1-Chlorooctane	111-85-3	125	%	70-130	02.12.2021 14:14			
o-Terphenyl	84-15-1	137	%	70-130	02.12.2021 14:14	**		



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Ensolum, Dallas, TX

Line 1002

Sample Id: **CS-6**
Lab Sample Id: 688218-005

Matrix: Soil
Date Collected: 02.11.2021 13:40

Date Received: 02.12.2021 08:53
Sample Depth: 10 - 15 ft

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.12.2021 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3151062

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	49.9	15.0	mg/kg	02.12.2021 14:36	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	49.9	15.0	mg/kg	02.12.2021 14:36	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	49.9	15.0	mg/kg	02.12.2021 14:36	U	1
Total TPH	PHC635	<15.0	49.9	15.0	mg/kg	02.12.2021 14:36	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1-Chlorooctane	111-85-3	68	%	70-130	02.12.2021 14:36	**		
o-Terphenyl	84-15-1	74	%	70-130	02.12.2021 14:36			



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Ensolum, Dallas, TX

Line 1002

Sample Id: **CS-6**
 Lab Sample Id: 688218-006

Matrix: Soil
 Date Collected: 02.11.2021 13:50

Date Received: 02.12.2021 08:53
 Sample Depth: 5 - 10 ft

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.12.2021 12:00

% Moisture:
 Basis: Wet Weight

Seq Number: 3151062

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	21.8	49.8	14.9	mg/kg	02.12.2021 14:57	J	1
Diesel Range Organics (DRO)	C10C28DRO	594	49.8	14.9	mg/kg	02.12.2021 14:57		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	56.1	49.8	14.9	mg/kg	02.12.2021 14:57		1
Total TPH	PHC635	672	49.8	14.9	mg/kg	02.12.2021 14:57		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1-Chlorooctane	111-85-3	68	%	70-130	02.12.2021 14:57	**		
o-Terphenyl	84-15-1	75	%	70-130	02.12.2021 14:57			



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Ensolum, Dallas, TX

Line 1002

Sample Id: **CS-1**
 Lab Sample Id: 688218-007

Matrix: Soil
 Date Collected: 02.11.2021 14:15

Date Received: 02.12.2021 08:53
 Sample Depth: 10 - 15 ft

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.12.2021 12:00

% Moisture:
 Basis: Wet Weight

Seq Number: 3151062

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	50.0	15.0	mg/kg	02.12.2021 15:19	U	1
Diesel Range Organics (DRO)	C10C28DRO	17.7	50.0	15.0	mg/kg	02.12.2021 15:19	J	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	02.12.2021 15:19	U	1
Total TPH	PHC635	17.7	50.0	15.0	mg/kg	02.12.2021 15:19	J	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1-Chlorooctane	111-85-3	68	%	70-130	02.12.2021 15:19	**		
o-Terphenyl	84-15-1	74	%	70-130	02.12.2021 15:19			



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Ensolum, Dallas, TX

Line 1002

Sample Id: **CS-1**
 Lab Sample Id: 688218-008

Matrix: Soil
 Date Collected: 02.11.2021 14:20

Date Received: 02.12.2021 08:53
 Sample Depth: 5 - 10 ft

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.12.2021 12:00

% Moisture:
 Basis: Wet Weight

Seq Number: 3151062

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	50.0	15.0	mg/kg	02.12.2021 15:41	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	50.0	15.0	mg/kg	02.12.2021 15:41	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	50.0	15.0	mg/kg	02.12.2021 15:41	U	1
Total TPH	PHC635	<15.0	50.0	15.0	mg/kg	02.12.2021 15:41	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1-Chlorooctane	111-85-3	69	%	70-130	02.12.2021 15:41	**		
o-Terphenyl	84-15-1	75	%	70-130	02.12.2021 15:41			



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Ensolum, Dallas, TX

Line 1002

Sample Id: **CS-8**
 Lab Sample Id: 688218-009

Matrix: Soil
 Date Collected: 02.11.2021 14:25

Date Received: 02.12.2021 08:53
 Sample Depth: 15 ft

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.12.2021 12:00

% Moisture:
 Basis: Wet Weight

Seq Number: 3151062

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	49.9	15.0	mg/kg	02.12.2021 16:02	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	49.9	15.0	mg/kg	02.12.2021 16:02	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	49.9	15.0	mg/kg	02.12.2021 16:02	U	1
Total TPH	PHC635	<15.0	49.9	15.0	mg/kg	02.12.2021 16:02	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1-Chlorooctane	111-85-3	128	%	70-130	02.12.2021 16:02			
o-Terphenyl	84-15-1	139	%	70-130	02.12.2021 16:02	**		



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Ensolum, Dallas, TX

Line 1002

Sample Id: **CS-7**
 Lab Sample Id: 688218-010

Matrix: Soil
 Date Collected: 02.11.2021 14:35

Date Received: 02.12.2021 08:53
 Sample Depth: 15 ft

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.12.2021 12:00

% Moisture:
 Basis: Wet Weight

Seq Number: 3151062

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	49.9	15.0	mg/kg	02.12.2021 16:24	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	49.9	15.0	mg/kg	02.12.2021 16:24	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	49.9	15.0	mg/kg	02.12.2021 16:24	U	1
Total TPH	PHC635	<15.0	49.9	15.0	mg/kg	02.12.2021 16:24	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1-Chlorooctane	111-85-3	126	%	70-130	02.12.2021 16:24			
o-Terphenyl	84-15-1	138	%	70-130	02.12.2021 16:24	**		



Certificate of Analytical Results 688218

Ensolum, Dallas, TX

Line 1002

Sample Id: **CS-4**
 Lab Sample Id: 688218-011

Matrix: Soil
 Date Collected: 02.11.2021 14:40

Date Received: 02.12.2021 08:53
 Sample Depth: 10 - 15 ft

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.12.2021 12:00

% Moisture:
 Basis: Wet Weight

Seq Number: 3151062

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	49.9	15.0	mg/kg	02.12.2021 17:07	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	49.9	15.0	mg/kg	02.12.2021 17:07	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	49.9	15.0	mg/kg	02.12.2021 17:07	U	1
Total TPH	PHC635	<15.0	49.9	15.0	mg/kg	02.12.2021 17:07	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1-Chlorooctane	111-85-3	124	%	70-130	02.12.2021 17:07			
o-Terphenyl	84-15-1	136	%	70-130	02.12.2021 17:07	**		



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Ensolum, Dallas, TX

Line 1002

Sample Id: **CS-4**
 Lab Sample Id: 688218-012

Matrix: Soil
 Date Collected: 02.11.2021 14:50

Date Received: 02.12.2021 08:53
 Sample Depth: 5 - 10 ft

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.12.2021 12:00

% Moisture:
 Basis: Wet Weight

Seq Number: 3151062

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	49.9	15.0	mg/kg	02.12.2021 17:29	U	1
Diesel Range Organics (DRO)	C10C28DRO	544	49.9	15.0	mg/kg	02.12.2021 17:29		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	52.5	49.9	15.0	mg/kg	02.12.2021 17:29		1
Total TPH	PHC635	597	49.9	15.0	mg/kg	02.12.2021 17:29		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1-Chlorooctane	111-85-3	68	%	70-130	02.12.2021 17:29	**		
o-Terphenyl	84-15-1	76	%	70-130	02.12.2021 17:29			



Certificate of Analytical Results 688218

Ensolum, Dallas, TX

Line 1002

Sample Id: **STP-4**
Lab Sample Id: 688218-013

Matrix: Soil
Date Collected: 02.11.2021 15:10

Date Received: 02.12.2021 08:53

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 02.12.2021 15:45

% Moisture:
Basis: Wet Weight

Seq Number: 3151008

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1480	24.8	4.25	mg/kg	02.12.2021 21:06		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.12.2021 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3151062

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	18.9	49.8	14.9	mg/kg	02.12.2021 17:51	J	1
Diesel Range Organics (DRO)	C10C28DRO	382	49.8	14.9	mg/kg	02.12.2021 17:51		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	39.1	49.8	14.9	mg/kg	02.12.2021 17:51	J	1
Total TPH	PHC635	440	49.8	14.9	mg/kg	02.12.2021 17:51		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	68	%	70-130	02.12.2021 17:51	**
o-Terphenyl	84-15-1	75	%	70-130	02.12.2021 17:51	



Certificate of Analytical Results 688218

Ensolum, Dallas, TX

Line 1002

Sample Id: **STP-4**
 Lab Sample Id: 688218-013

Matrix: Soil
 Date Collected: 02.11.2021 15:10

Date Received: 02.12.2021 08:53

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 02.17.2021 15:00

% Moisture:
 Basis: Wet Weight

Seq Number: 3151056

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000386	0.00200	0.000386	mg/kg	02.18.2021 13:33	U	1
Toluene	108-88-3	0.000581	0.00200	0.000457	mg/kg	02.18.2021 13:33	J	1
Ethylbenzene	100-41-4	<0.000566	0.00200	0.000566	mg/kg	02.18.2021 13:33	U	1
m,p-Xylenes	179601-23-1	0.00294	0.00401	0.00102	mg/kg	02.18.2021 13:33	J	1
o-Xylene	95-47-6	0.00150	0.00200	0.000345	mg/kg	02.18.2021 13:33	J	1
Total Xylenes	1330-20-7	0.00444	0.00200	0.000345	mg/kg	02.18.2021 13:33		1
Total BTEX		0.00502	0.00200	0.000345	mg/kg	02.18.2021 13:33		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	90	%	70-130	02.18.2021 13:33	
4-Bromofluorobenzene	460-00-4	118	%	70-130	02.18.2021 13:33	



Certificate of Analytical Results 688218

Ensolum, Dallas, TX

Line 1002

Sample Id: **STP-5**
Lab Sample Id: 688218-014

Matrix: Soil
Date Collected: 02.11.2021 15:15

Date Received: 02.12.2021 08:53

Analytical Method: Chloride by EPA 300

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 02.12.2021 15:45

% Moisture:
Basis: Wet Weight

Seq Number: 3151008

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1710	25.2	4.32	mg/kg	02.12.2021 21:11		5

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 02.12.2021 12:00

% Moisture:
Basis: Wet Weight

Seq Number: 3151062

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	20.8	49.9	15.0	mg/kg	02.12.2021 18:13	J	1
Diesel Range Organics (DRO)	C10C28DRO	817	49.9	15.0	mg/kg	02.12.2021 18:13		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	77.8	49.9	15.0	mg/kg	02.12.2021 18:13		1
Total TPH	PHC635	916	49.9	15.0	mg/kg	02.12.2021 18:13		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	128	%	70-130	02.12.2021 18:13	
o-Terphenyl	84-15-1	149	%	70-130	02.12.2021 18:13	**



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Ensolum, Dallas, TX

Line 1002

Sample Id: **STP-5**
 Lab Sample Id: 688218-014

Matrix: Soil
 Date Collected: 02.11.2021 15:15

Date Received: 02.12.2021 08:53

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 02.17.2021 15:00

% Moisture:
 Basis: Wet Weight

Seq Number: 3151056

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.000386	0.00200	0.000386	mg/kg	02.18.2021 14:21	U	1
Toluene	108-88-3	0.00235	0.00200	0.000457	mg/kg	02.18.2021 14:21		1
Ethylbenzene	100-41-4	0.00208	0.00200	0.000566	mg/kg	02.18.2021 14:21		1
m,p-Xylenes	179601-23-1	0.0229	0.00401	0.00102	mg/kg	02.18.2021 14:21		1
o-Xylene	95-47-6	0.0234	0.00200	0.000345	mg/kg	02.18.2021 14:21		1
Total Xylenes	1330-20-7	0.0463	0.00200	0.000345	mg/kg	02.18.2021 14:21		1
Total BTEX		0.0507	0.00200	0.000345	mg/kg	02.18.2021 14:21		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1,4-Difluorobenzene	540-36-3	89	%	70-130	02.18.2021 14:21	
4-Bromofluorobenzene	460-00-4	126	%	70-130	02.18.2021 14:21	

Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation



Ensolum

Line 1002

Analytical Method: Chloride by EPA 300

Seq Number: 3151008

MB Sample Id: 7721416-1-BLK

Matrix: Solid

LCS Sample Id: 7721416-1-BKS

Prep Method: E300P

Date Prep: 02.12.2021

LCSD Sample Id: 7721416-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	252	101	251	100	90-110	0	20	mg/kg	02.12.2021 19:24	

Analytical Method: Chloride by EPA 300

Seq Number: 3151008

Parent Sample Id: 688219-001

Matrix: Soil

MS Sample Id: 688219-001 S

Prep Method: E300P

Date Prep: 02.12.2021

MSD Sample Id: 688219-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	624	1250	2070	116	1860	99	90-110	11	20	mg/kg	02.12.2021 19:40	X

Analytical Method: Chloride by EPA 300

Seq Number: 3151008

Parent Sample Id: 688219-011

Matrix: Soil

MS Sample Id: 688219-011 S

Prep Method: E300P

Date Prep: 02.12.2021

MSD Sample Id: 688219-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	545	2500	3120	103	3040	100	90-110	3	20	mg/kg	02.12.2021 20:55	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3151062

MB Sample Id: 7721494-1-BLK

Matrix: Solid

LCS Sample Id: 7721494-1-BKS

Prep Method: SW8015P

Date Prep: 02.12.2021

LCSD Sample Id: 7721494-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	997	100	1030	103	70-130	3	20	mg/kg	02.12.2021 11:44	
Diesel Range Organics (DRO)	<15.0	1000	1100	110	1110	111	70-130	1	20	mg/kg	02.12.2021 11:44	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	71		71		72		70-130	%	02.12.2021 11:44
o-Terphenyl	77		72		73		70-130	%	02.12.2021 11:44

Analytical Method: TPH by SW8015 Mod

Seq Number: 3151062

Matrix: Solid

MB Sample Id: 7721494-1-BLK

Prep Method: SW8015P

Date Prep: 02.12.2021

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<15.0	mg/kg	02.12.2021 11:23	

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * | (C - E) / (C + E) |$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Ensolum

Line 1002

Analytical Method: TPH by SW8015 Mod

Seq Number: 3151062

Parent Sample Id: 688218-001

Matrix: Soil

MS Sample Id: 688218-001 S

Prep Method: SW8015P

Date Prep: 02.12.2021

MSD Sample Id: 688218-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	998	1020	102	991	99	70-130	3	20	mg/kg	02.12.2021 12:48	
Diesel Range Organics (DRO)	17.1	998	1170	116	1120	111	70-130	4	20	mg/kg	02.12.2021 12:48	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	121		128		70-130	%	02.12.2021 12:48
o-Terphenyl	130		126		70-130	%	02.12.2021 12:48

Analytical Method: BTEX by EPA 8021B

Seq Number: 3151056

MB Sample Id: 7721525-1-BLK

Matrix: Solid

LCS Sample Id: 7721525-1-BKS

Prep Method: SW5035A

Date Prep: 02.17.2021

LCSD Sample Id: 7721525-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000385	0.100	0.106	106	0.0962	96	70-130	10	35	mg/kg	02.17.2021 15:33	
Toluene	<0.000456	0.100	0.110	110	0.0977	98	70-130	12	35	mg/kg	02.17.2021 15:33	
Ethylbenzene	<0.000565	0.100	0.116	116	0.103	103	70-130	12	35	mg/kg	02.17.2021 15:33	
m,p-Xylenes	<0.00101	0.200	0.227	114	0.201	101	70-130	12	35	mg/kg	02.17.2021 15:33	
o-Xylene	<0.000344	0.100	0.116	116	0.105	105	70-130	10	35	mg/kg	02.17.2021 15:33	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	80		118		113		70-130	%	02.17.2021 15:33
4-Bromofluorobenzene	84		112		108		70-130	%	02.17.2021 15:33

Analytical Method: BTEX by EPA 8021B

Seq Number: 3151056

Parent Sample Id: 688220-002

Matrix: Soil

MS Sample Id: 688220-002 S

Prep Method: SW5035A

Date Prep: 02.17.2021

MSD Sample Id: 688220-002 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000384	0.0998	0.0787	79	0.0846	85	70-130	7	35	mg/kg	02.17.2021 16:24	
Toluene	<0.000455	0.0998	0.0765	77	0.0834	84	70-130	9	35	mg/kg	02.17.2021 16:24	
Ethylbenzene	<0.000564	0.0998	0.0511	51	0.0516	52	70-130	1	35	mg/kg	02.17.2021 16:24	X
m,p-Xylenes	<0.00101	0.200	0.102	51	0.0986	49	70-130	3	35	mg/kg	02.17.2021 16:24	X
o-Xylene	<0.000344	0.0998	0.0490	49	0.0518	52	70-130	6	35	mg/kg	02.17.2021 16:24	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	85		83		70-130	%	02.17.2021 16:24
4-Bromofluorobenzene	154	**	183	**	70-130	%	02.17.2021 16:24

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Environment Testing Xenco

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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:

1000218

www.xenco.com

Page 1 of 2

Project Manager:	Bruce Jennings	Bill to: (if different)	
Company Name:	Ensolium LLC	Company Name:	
Address:	705 W. Midway Ave	Address:	
City, State ZIP:	Midland TX 79705	City, State ZIP:	
Phone:	(810) 219-8858	Email:	bjennings@ensolium.com

Program: <input type="checkbox"/> UST/PT <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>	
State of Project:	
Reporting: Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:	

Project Name:	Lane 100a	Turn Around	<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Rush 24 hr	Pres. Code	
Project Number:	03B12A6048	Due Date:			
Project Location:	Crushed NM	TAT starts the day received by the lab, if received by 4:30pm			
Sampler's Name:	Kelly Lawson				
PO #:	03B12A6048				
SAMPLE RECEIPT					
Samples Received In tact:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Thermometer ID:	128		
Cooler Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Correction Factor:	0.5		
Sample Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Temperature Reading:	-0.3		
Total Containers:		Corrected Temperature:	-0.7		
ANALYSIS REQUEST					
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp
CS-2	S	04/12/21	1400	5'-10'	C
CS-2			1305	10'-15'	
CS-10			1320	15'	
CS-9			1330	15'	
CS-6			1340	10'-15'	
CS-6			1350	5'-10'	
CS-1			1415	10'-15'	
CS-1			1420	5'-10'	
CS-8			1425	15'	
CS-7			1435	15'	
Parameters					
8015 M					
Sample Comments					
24 hr					
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					

Total 200.7 / 6010 2008 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCEP / 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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>[Signature]</i>	<i>[Signature]</i>	2/13/21			
3 <i>[Signature]</i>		653			
5					



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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: 1000218www.xenco.com Page 2 of 2

Project Manager:	Bexco Inc	Bill to: (if different)	
Company Name:	Gensolm LLC	Company Name:	
Address:	705 W. Midland Ave	Address:	
City, State ZIP:	Midland TX 79705	City, State ZIP:	
Phone:	(810) 219-8858	Email:	bjennings@gensolm.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:		

Project Name:	Line 1002	Turn Around		Pres. Code		ANALYSIS REQUEST										Preservative Codes	
Project Number:	03B1326042	<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Rush 24hr														None: NO	DI Water: H ₂ O
Project Location:	Carlsbad, NM	Due Date:														Cool: Cool	MeOH: Me
Sampler's Name:	Kelly Lawrence	TAT starts the day received by the lab, if received by 4:30pm														HCL: HC	HNO ₃ : HN
P.O. #:	03B1326042	Wet Ice:														H ₂ SO ₄ : H ₂	NaOH: Na
SAMPLE RECEIPT	Temp Blank:	Yes No														H ₃ PO ₄ : HP	
Samples Received Intact:	Yes No	Thermometer ID:														NaHSO ₄ : NABIS	
Cooler Custody Seals:	Yes No N/A	Correction Factor:														Na ₂ S ₂ O ₃ : NaSO ₃	
Sample Custody Seals:	Yes No N/A	Temperature Reading:														Zn Acetate+NaOH: Zn	
Total Containers:		Corrected Temperature:														NaOH+Ascorbic Acid: SABC	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters											Sample Comments
CS-4	S	08/11/21	1440	10'-15'	C	1	BTEX 80213											24hr
CS-4	S	08/11/21	1450	5'-10'	C	1	TPH 8015 M											
STP-4	S	08/11/21	1510	-	C	1	Chlorides 300.0											
STP-5	S	08/11/21	1515	-	C	1												
NFE 02/11/2021 KL																		

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631 / 245.1 / 7470 / 7471

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	3/12/21			
		0853			

CUSTODY SEAL

ENVIRONMENTAL SAMPLING SUPPLY
www.essvial.com 800-233-8425

Date: 02/12/2021
Signature: [Signature]

Eurofins Xenco, LLC

Prelogin/Nonconformance Report- Sample Log-In

Client: Ensolum

Date/ Time Received: 02.12.2021 08.53.00 AM

Work Order #: 688218

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR8

Sample Receipt Checklist	Comments
#1 *Temperature of cooler(s)?	-.7
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	Yes
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	Yes
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	N/A
#18 Water VOC samples have zero headspace?	N/A

* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Analyst:

PH Device/Lot#:

Checklist completed by:



Brianna Teel

Date: 02.12.2021

Checklist reviewed by:



Jessica Kramer

Date: 02.12.2021



Environment Testing America

ANALYTICAL REPORT

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-316-1
Laboratory Sample Delivery Group: 03B1226042
Client Project/Site: Line 1002

For:
Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Beaux Jennings

A handwritten signature in black ink that reads "J. Kramer".

Authorized for release by:
3/11/2021 5:56:42 PM

Jessica Kramer, Project Manager
(432)704-5440
jessica.kramer@eurofinset.com

LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Ensolum
Project/Site: Line 1002

Laboratory Job ID: 890-316-1
SDG: 03B1226042

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Definitions/Glossary

Client: Ensolum
Project/Site: Line 1002

Job ID: 890-316-1
SDG: 03B1226042

Qualifiers

Subcontract

Qualifier	Qualifier Description
U	Analyte was 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/Site: Line 1002

Job ID: 890-316-1
SDG: 03B1226042

Job ID: 890-316-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-316-1

Receipt

The sample was received on 3/9/2021 4:39 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 2.0°C

Subcontract Lab non-Sister Lab

See attached subcontract report.

- 1
- 2
- 3
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- 11
- 12
- 13
- 14

Client Sample Results

Client: Ensolum
Project/Site: Line 1002

Job ID: 890-316-1
SDG: 03B1226042

Client Sample ID: CS-4

Lab Sample ID: 890-316-1

Date Collected: 03/09/21 14:50

Matrix: Solid

Date Received: 03/09/21 16:39

Method: TPH SW8015_MOD_NM - SW846 8015B TPH ORO

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO)	78.8		50.0		mg/kg		03/10/21 17:00	03/11/21 03:30	1
Gasoline Range Hydrocarbons (GRO)	<50.0	U	50.0		mg/kg		03/10/21 17:00	03/11/21 03:30	1
Motor Oil Range Hydrocarbons (MRO)	<50.0	U	50.0		mg/kg		03/10/21 17:00	03/11/21 03:30	1
Total TPH	78.8		50.0		mg/kg		03/10/21 17:00	03/11/21 03:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 135	03/10/21 17:00	03/11/21 03:30	1
o-Terphenyl	90		70 - 135	03/10/21 17:00	03/11/21 03:30	1

Eurofins Carlsbad

Surrogate Summary

Client: Ensolum
Project/Site: Line 1002

Job ID: 890-316-1
SDG: 03B1226042

Method: TPH SW8015_MOD_NM - SW846 8015B TPH ORO

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	1CO (70-135)	OTPH (70-135)					
890-316-1	CS-4	105	90					
Surrogate Legend								
1CO = 1-Chlorooctane								
OTPH = o-Terphenyl								

QC Sample Results

Client: Ensolum
Project/Site: Line 1002

Job ID: 890-316-1
SDG: 03B1226042

Method: TPH SW8015_MOD_NM - SW846 8015B TPH ORO

Lab Sample ID: 7723045-1-BLK

Matrix: SOIL

Analysis Batch: 3153290

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 3153290_P

Analyte	BLANK Result	BLANK Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (DRO)	<50	U	50		mg/kg		03/10/21 17:00	03/10/21 21:38	1
Gasoline Range Hydrocarbons (GRO)	<50	U	50		mg/kg		03/10/21 17:00	03/10/21 21:38	1
Motor Oil Range Hydrocarbons (MRO)	<50	U	50		mg/kg		03/10/21 17:00	03/10/21 21:38	1

Lab Sample ID: 7723045-1-BKS

Matrix: SOIL

Analysis Batch: 3153290

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 3153290_P

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics (DRO)	1000	1000		mg/kg		100	70 - 135
Gasoline Range Hydrocarbons (GRO)	1000	1080		mg/kg		108	70 - 135

Lab Sample ID: 7723045-1-BSD

Matrix: SOIL

Analysis Batch: 3153290

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 3153290_P

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (DRO)	1000	1030		mg/kg		103	70 - 135	3	20
Gasoline Range Hydrocarbons (GRO)	1000	1090		mg/kg		109	70 - 135	1	20

Lab Sample ID: 691112-001 S

Matrix: SOIL

Analysis Batch: 3153290

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 3153290_P

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Diesel Range Organics (DRO)	<50		996	947		mg/kg		95	70 - 135
Gasoline Range Hydrocarbons (GRO)	<50		996	1020		mg/kg		102	70 - 135

Lab Sample ID: 691112-001 SD

Matrix: SOIL

Analysis Batch: 3153290

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 3153290_P

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Diesel Range Organics (DRO)	<50		999	970		mg/kg		97	70 - 135	2	20
Gasoline Range Hydrocarbons (GRO)	<50		999	1040		mg/kg		104	70 - 135	2	20

Eurofins Carlsbad

QC Association Summary

Client: Ensolum
Project/Site: Line 1002

Job ID: 890-316-1
SDG: 03B1226042

Subcontract

Analysis Batch: 3153290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-316-1	CS-4	Total/NA	Solid	TPH SW8015_MOD_ NM	3153290_P
7723045-1-BLK	Method Blank	Total/NA	SOIL	TPH SW8015_MOD_ NM	3153290_P
7723045-1-BKS	Lab Control Sample	Total/NA	SOIL	TPH SW8015_MOD_ NM	3153290_P
7723045-1-BSD	Lab Control Sample Dup	Total/NA	SOIL	TPH SW8015_MOD_ NM	3153290_P
691112-001 S	Matrix Spike	Total/NA	SOIL	TPH SW8015_MOD_ NM	3153290_P
691112-001 SD	Matrix Spike Duplicate	Total/NA	SOIL	TPH SW8015_MOD_ NM	3153290_P

Prep Batch: 3153290_P

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-316-1	CS-4	Total/NA	Solid	SW8015P	
7723045-1-BLK	Method Blank	Total/NA	SOIL	***DEFAULT PREP***	
7723045-1-BKS	Lab Control Sample	Total/NA	SOIL	***DEFAULT PREP***	
7723045-1-BSD	Lab Control Sample Dup	Total/NA	SOIL	***DEFAULT PREP***	
691112-001 S	Matrix Spike	Total/NA	SOIL	***DEFAULT PREP***	
691112-001 SD	Matrix Spike Duplicate	Total/NA	SOIL	***DEFAULT PREP***	

Lab Chronicle

Client: Ensolum
Project/Site: Line 1002

Job ID: 890-316-1
SDG: 03B1226042

Client Sample ID: CS-4
Date Collected: 03/09/21 14:50
Date Received: 03/09/21 16:39

Lab Sample ID: 890-316-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	SW8015P		1	3153290_P	03/10/21 17:00		XM
Total/NA	Analysis	TPH		1	3153290	03/11/21 03:30	ARM	XM
		SW8015_MOD_NM						

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

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Accreditation/Certification Summary

Client: Ensolum
Project/Site: Line 1002

Job ID: 890-316-1
SDG: 03B1226042

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-20-21	06-30-21

- 1
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Method Summary

Client: Ensolum
Project/Site: Line 1002

Job ID: 890-316-1
SDG: 03B1226042

Method	Method Description	Protocol	Laboratory
8015B	SW846 8015B TPH ORO	SW846	XM

Protocol References:

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

Laboratory References:

XM = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Ensolum
Project/Site: Line 1002

Job ID: 890-316-1
SDG: 03B1226042

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
890-316-1	CS-4	Solid	03/09/21 14:50	03/09/21 16:39	

- 1
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eurofins

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
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:	Brynn Jennings	Bill to: (if different)	
Company Name:	Ensolium LLC	Company Name:	
Address:	705 W. Haddley Ave	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	810 219 8858	Email:	BrynnJ@ensolium.com

Work Order Comments

Program: UST/PST ☐ PBP ☐ Brownfields ☐ RRC ☐ Superfund ☐

State of Project:

Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐



Deliverables: EDD ☐ ADAPT ☐ Other:

Project Name:		Bmc 1002		Turn Around	
Project Number:		03B1226042		<input type="checkbox"/> Routine <input checked="" type="checkbox"/> Plus 24 hr	
Project Location:		Gully Camty Alm		Due Date:	
Sampler's Name:		Kelly Lowry		TAT starts the day received by the lab, if received by 4:30pm	
P.O. #:		03B1226042			
SAMPLE RECEIPT		Temp Blank:		Wet Ice:	
Samples Received Intact:		<input checked="" type="radio"/> Yes <input type="radio"/> No		<input checked="" type="radio"/> Yes <input type="radio"/> No	
Cooler Custody Seals:		<input checked="" type="radio"/> Yes <input type="radio"/> No		Thermometer ID: 7 NM-807	
Sample Custody Seals:		<input checked="" type="radio"/> Yes <input type="radio"/> No		Correction Factor: -0.2	
Total Containers:				Temperature Heading: 2.2/	
				Corrected Temperature: 2.0	
Parameters					
H 8015M					
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 Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Sample Comments
05-4	S	03/03/21	14:50	5-10'	C	1	24 hr
<div style="display: flex; justify-content: space-around;"> <div>NEC</div> <div>03/09/2021 KL</div> </div>							

Total 2007 / 6010	2008 / 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	Tl	Sn	U	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	Tl	U				Hg	1631 / 245.	17470 / 7471						

The signature of this document by the client constitutes acceptance of the terms and conditions of service. The client acknowledges that it has received and understood the 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 rejected.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		3-9-21 1635			

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-316-1

SDG Number: 03B1226042

Login Number: 316

List Number: 1

Creator: Clifton, Cloe

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.	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	

Certificate of Analysis Summary 691359

Ensolum, Dallas, TX

Project Name: Line 1002

Project Id: 03B1226042
 Contact: Beaux Jennings
 Project Location: Eddy County, NM

Date Received in Lab: Thu 03.11.2021 08:43
 Report Date: 03.19.2021 18:30
 Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	691359-001					
	Field Id:	CS-6					
	Depth:	5-10 ft					
	Matrix:	SOIL					
	Sampled:	03.10.2021 11:14					
TPH by SW8015 Mod	Extracted:	03.15.2021 17:00					
	Analyzed:	03.16.2021 05:50					
	Units/RL:	mg/kg RL					
Gasoline Range Hydrocarbons (GRO)		38.4 BJ 49.9					
Diesel Range Organics (DRO)		<15.0 49.9					
Motor Oil Range Hydrocarbons (MRO)		<15.0 49.9					
Total TPH		75.4 49.9					

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



Analytical Report 691359

for

Ensolum

Project Manager: Beaux Jennings

Line 1002

03B1226042

03.19.2021

Collected By: Client



**1211 W. Florida Ave
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-24)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-20-21)
Xenco-Carlsbad (LELAP): Louisiana (05092)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)
Xenco-Tampa: Florida (E87429), North Carolina (483)



03.19.2021

Project Manager: **Beaux Jennings**

Ensolum

2351 W Northwest Highway

Suite 1203

Dallas, TX 75220

Reference: Eurofins Xenco, LLC Report No(s): **691359**

Line 1002

Project Address: Eddy County, NM

Beaux Jennings:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 691359. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 691359 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

Jessica Kramer

Project Manager

A Small Business and Minority Company

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



Sample Cross Reference 691359

Ensolum, Dallas, TX

Line 1002

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
CS-6	S	03.10.2021 11:14	5 - 10 ft	691359-001

**CASE NARRATIVE****Client Name: Ensolum****Project Name: Line 1002**Project ID: 03B1226042
Work Order Number(s): 691359Report Date: 03.19.2021
Date Received: 03.11.2021

This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory.

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3153795 TPH by SW8015 Mod

Detection in the gasoline range was less than <.5RL data deemed acceptable.



Certificate of Analytical Results 691359

Ensolum, Dallas, TX

Line 1002

Sample Id: **CS-6**
Lab Sample Id: 691359-001

Matrix: Soil
Date Collected: 03.10.2021 11:14

Date Received: 03.11.2021 08:43
Sample Depth: 5 - 10 ft

Analytical Method: TPH by SW8015 Mod

Prep Method: SW8015P

Tech: ALJ

Analyst: ARM

Date Prep: 03.15.2021 17:00

% Moisture:
Basis: Wet Weight

Seq Number: 3153795

Parameter	Cas Number	Result	RL	MDL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	38.4	49.9	15.0	mg/kg	03.16.2021 05:50	BJ	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	49.9	15.0	mg/kg	03.16.2021 05:50	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	49.9	15.0	mg/kg	03.16.2021 05:50	U	1
Total TPH	PHC635	75.4	49.9	15.0	mg/kg	03.16.2021 05:50		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag		
1-Chlorooctane	111-85-3	90	%	70-130	03.16.2021 05:50			
o-Terphenyl	84-15-1	94	%	70-130	03.16.2021 05:50			

Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit. **ND** Not Detected.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation



Ensolum

Line 1002

Analytical Method: TPH by SW8015 Mod

Seq Number: 3153795

MB Sample Id: 7723406-1-BLK

Matrix: Solid

LCS Sample Id: 7723406-1-BKS

Prep Method: SW8015P

Date Prep: 03.15.2021

LCSD Sample Id: 7723406-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	1000	1030	103	1110	111	70-130	7	20	mg/kg	03.15.2021 21:28	
Diesel Range Organics (DRO)	<15.0	1000	1080	108	1090	109	70-130	1	20	mg/kg	03.15.2021 21:28	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	88		107		115		70-130	%	03.15.2021 21:28
o-Terphenyl	93		103		112		70-130	%	03.15.2021 21:28

Analytical Method: TPH by SW8015 Mod

Seq Number: 3153795

Matrix: Solid

MB Sample Id: 7723406-1-BLK

Prep Method: SW8015P

Date Prep: 03.15.2021

Parameter	MB Result	Units	Analysis Date	Flag
Motor Oil Range Hydrocarbons (MRO)	<15.0	mg/kg	03.15.2021 21:07	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3153795

Matrix: Soil

Parent Sample Id: 691851-001

MS Sample Id: 691851-001 S

Prep Method: SW8015P

Date Prep: 03.15.2021

MSD Sample Id: 691851-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<15.0	999	930	93	840	84	70-130	10	20	mg/kg	03.15.2021 22:30	
Diesel Range Organics (DRO)	<15.0	999	893	89	896	90	70-130	0	20	mg/kg	03.15.2021 22:30	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	92		84		70-130	%	03.15.2021 22:30
o-Terphenyl	85		77		70-130	%	03.15.2021 22:30

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



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

Chain of Custody

Work Order No: 691359

Page 1 of 1
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Project Manager:	Bever Jennings	Bill to: (if different)	
Company Name:	Emulsion LLC	Company Name:	
Address:	705 Midley Ave	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	810 219 8858	Email:	Bjennings@emulsion.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 I <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][illegible]

Total 2002/7 / 60/10	2002/8 / 60/20:	Circle Method(s) and Metal(s) to be analyzed
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 60/10	8RCRA 5b	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, relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenico, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenico 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 Xenico. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenico, 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
		3/11/21 8:43			



APPENDIX F

C-141

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural
Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	Enterprise Field Services LLC	OGRID	241602
Contact Name	Maria Lerma	Contact Telephone	432-686-5404
Contact email	mmlerma@eprod.com	Incident #	(assigned by OCD)
Contact mailing address	PO Box 4324, Houston, TX 77210		

Location of Release Source

Latitude 32.1086 Longitude -104.0443
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Line 1002 6"	Site Type	Gathering Pipeline
Date Release Discovered	January 12, 2021	API#	(if applicable)

Unit Letter	Section	Township	Range	County
N	24	25S	28E	Eddy

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (Name: Henry McDonald)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Natural Gas	Volume Released (Mcf) 57.33	Volume Recovered (Mcf) - 0
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

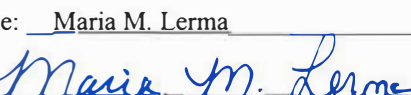
Found a leak on 6" pipeline, cause is to be determined.

Incident ID	
District RP	
Facility ID	
Application ID	

<p>Was this a major release as defined by 19.15.29.7(A) NMAC?</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>If YES, for what reason(s) does the responsible party consider this a major release?</p>
<p>If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?</p>	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

<p><input checked="" type="checkbox"/> The source of the release has been stopped.</p> <p><input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment.</p> <p><input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.</p> <p><input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.</p>	
<p>If all the actions described above have <u>not</u> been undertaken, explain why:</p> 	
<p>Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.</p>	
<p>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.</p>	
<p>Printed Name: <u>Maria M. Lerma</u></p>	<p>Title: <u>Sr. Field Environmental Scientist</u></p>
<p>Signature: <u></u></p>	<p>Date: <u>March 24, 2021</u></p>
<p>email: <u>mmlerma@eprod.com</u></p>	<p>Telephone: <u>432-686-5404</u></p>
<p><u>OCD Only</u></p>	
<p>Received by: _____</p>	<p>Date: _____</p>

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 23680

CONDITIONS

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 23680
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
chensley	None	6/7/2021