ENSOLUM

May 30, 2023

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

Re: Closure Request
Jacinto Federal Com 040H
Incident Number NAPP2236140625
Lea County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of COG Operating, LLC (COG), has prepared this *Closure Request* to document assessment, excavation, and soil sampling activities performed at the Jacinto Federal Com 040H (Site). The purpose of the Site assessment, excavation, and soil sampling activities was to address impacts to soil following a release of produced water onto the surface of well pad. Based on field observations and soil sample laboratory analytical results, COG is submitting this *Closure Request,* describing Site assessment and excavation activities that have occurred and requesting closure for Incident Number NAPP2236140625.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit O, Section 25, Township 24 South, Range 34 East, in Lea County, New Mexico (32.181667°, -103.421389°) and is associated with oil and gas exploration and production operations on Private Land managed by Quail Ranch, LLC.

On December 14, 2022, overfilling of a temporary open-top tank resulted in the release of approximately 9.7 barrels (bbls) of produced water onto the surface of the well pad. No released fluids were recovered. COG reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification Form C-141 (Form C-141) on December 27, 2022. The release was assigned Incident Number NAPP2236140625.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized to assess the applicability of *Table I*, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29, (19.15.29) of the New Mexico Administrative Code (NMAC). Results from the characterization desktop review are presented on page 3 of the Form C-141, Site Assessment/Characterization. Potential site receptors are identified on Figure 1.

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on regional groundwater well data from five groundwater wells within 1.5 miles of the Site. New Mexico Office of the State Engineer (NMOSE) well CP-00839-POD1 is the closest well to the Site, located approximately 0.74 miles east with a recorded depth to water of 155 feet below ground surface (bgs). NMOSE well C-C03942-POD1, located 1.15 miles west of the Site, is the well with the most recent

recorded depth to groundwater data. The depth to groundwater was 198.85 feet bgs, last measured in July 2021. All associated well records are included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is a wetland, located approximately 5,596 feet northeast of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). Site receptors are identified on Figure 1.

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

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

SITE ASSESSMENT ACTIVITIES AND LABORATORY ANALYTICAL RESULTS

On December 28, 2022, Ensolum personnel were the Site to evaluate the release extent based on information provided on the Form C-141 and visual observations. Eight assessment soil samples (SS01 through SS08) were collected within and around the release extent at a depth of approximately 0.5 feet bgs to assess the lateral extent the release. The soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. The soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Photographic documentation was completed during the Site visit and a photographic log is included as Appendix B.

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

Laboratory analytical results for soil samples SS01 through SS04, collected within the release extent, indicated all COC concentrations were compliant with the Site Closure Criteria. Laboratory analytical results for soil samples SS05 through SS08, collected outside the release extent, indicated all COC concentrations were compliant with the most stringent Table I Closure Criteria and successfully defined the lateral extent of the release. However, vertical delineation activities within the release extent were warranted to further confirm the absence of impacted soil.

DELINEATION ACTIVITIES AND LABORATORY ANALYTICAL RESULTS

On March 6, 2023, Ensolum personnel were at the Site to perform vertical delineation activities within the release extent. Boreholes were advanced via hand-auger at the locations of assessment soil samples SS01 through SS04. One discrete delineation soil sample was collected at each location

(SS01A through SS04A) from a depth of 1-foot bgs. The delineation soil samples were collected, handled, and analyzed following the same procedures as described above. The boreholes were backfilled with soil removed. The delineation soil sample locations were mapped utilizing a handheld GPS unit and are depicted on Figure 2.

Laboratory analytical results for delineation soil samples SS01A through SS04A collected at 1-foot bgs, indicated all COC concentrations were compliant with the Site Closure Criteria and the most stringent Table I Closure Criteria. Laboratory analytical results are summarized in Table 1 and the complete analytical reports are included as Appendix C.

EXCAVATION ACTIVITIES AND LABORATORY ANALYTICAL RESULTS

On March 28, 2023, Ensolum personnel were at the Site to oversee excavation activities based on visible staining in the release extent around soil sample SS04. Excavation activities were performed using a backhoe and transport vehicles. To direct excavation activities, soil was screened for VOCs and chloride. The excavation was completed to a total depth of 1-foot bgs. Photographic documentation of the excavation activities is included in Appendix B.

Following removal of impacted soil, 5-point composite soil samples were collected every 200 square feet from the floor of the excavation extent. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Due to the shallow depth of the excavation, the sidewalls were incorporated into the floor samples. Composite soil samples FS01 through FS03 were collected from the floor of the excavation at a depth of 1-foot bgs. The soil samples were collected, handled, and analyzed following the same procedures as described above. The excavation extent and excavation soil sample locations are presented on Figure 3.

Laboratory analytical results for excavation soil samples FS01 through FS03 indicated all COC concentrations were compliant with the most stringent Table I Closure Criteria. Laboratory analytical results are summarized in Table 1 and laboratory analytical reports are included as Appendix C.

The excavation area measured approximately 308 square feet. A total of 12 cubic yards of impacted soil were removed during the excavation activities. The impacted soil was transported and properly disposed of at the R360 Facility in Hobbs, New Mexico

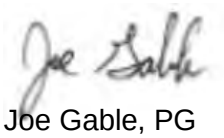
CLOSURE REQUEST

Site assessment and excavation activities were conducted at the Site to address the December 2022, release of produced water. Laboratory analytical results for the assessment soil samples indicated all COC concentrations were compliant with the Site Closure Criteria. Additionally, the release was laterally and vertically defined to the most stringent Table I Closure Criteria. Excavation activities were completed to remove visible surface staining from the release extent. Laboratory analytical results for the excavation soil samples were compliant with the most stringent Table I Closure Criteria. Based on soil sample analytical results, no further remediation is required.

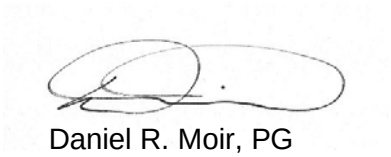
Depth to groundwater has been estimated to be greater than 100 feet bgs and no other sensitive receptors were identified near the release extent. COG believes these remedial actions are protective of human health, the environment, and groundwater. As such, COG respectfully requests closure for Incident Number NAPP2236140625. The C-141 is included in Appendix E.

If you have any questions or comments, please contact Ms. Kalei Jennings at (817) 683-2503 or kjennings@ensolum.com.

Sincerely,
Ensolum, LLC



Joe Gable, PG
Project Manager



Daniel R. Moir, PG
Senior Managing Geologist

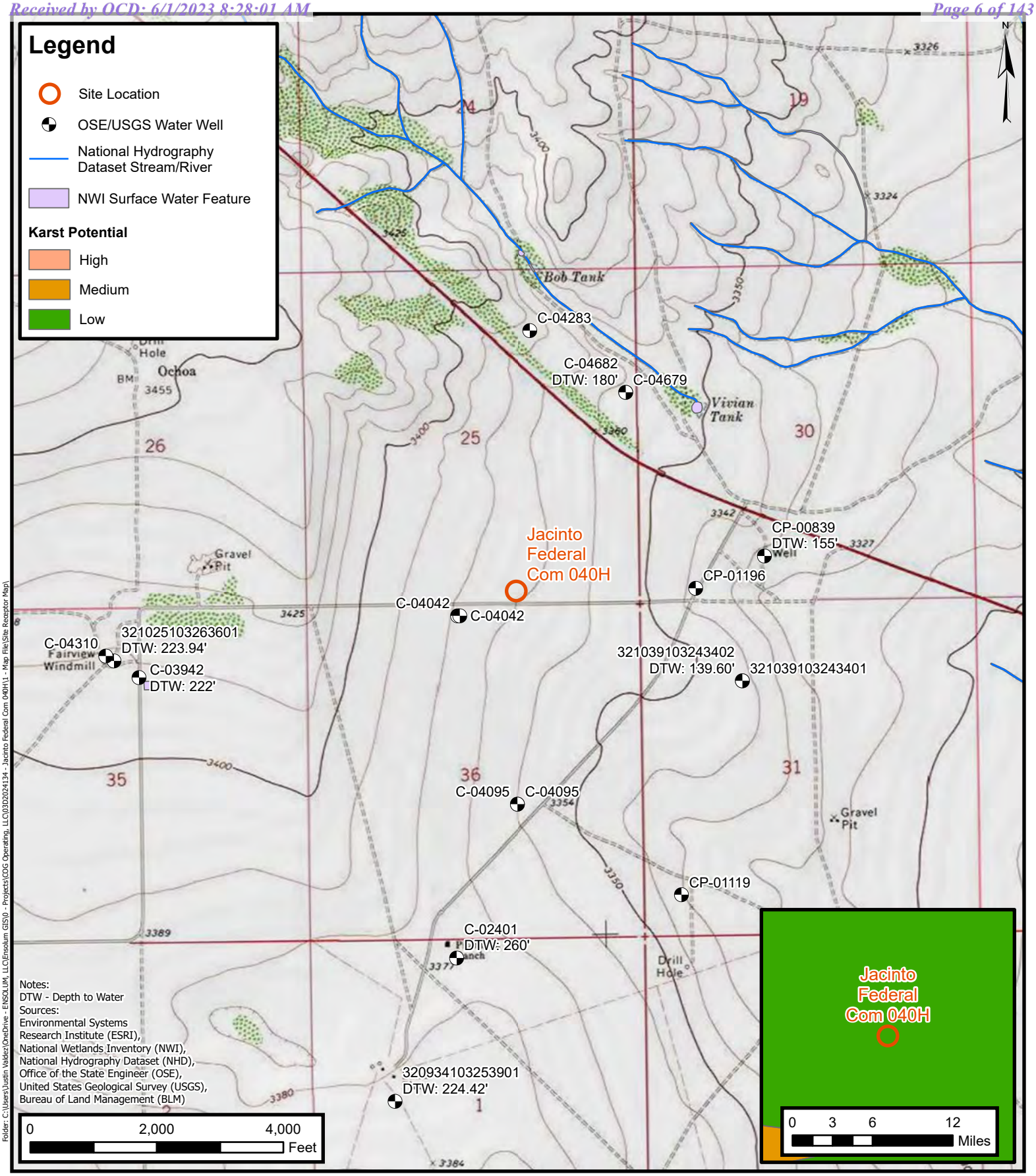
cc: Jacob Laird, ConocoPhillips Company
Bureau of Land Management

Appendices:

Figure 1	Site Receptor Map
Figure 2	Soil Sample Locations
Figure 3	Excavation Soil Sample Locations
Table 1	Soil Sample Analytical Results
Appendix A	Referenced Well Records
Appendix B	Photographic Log
Appendix C	Laboratory Analytical Reports & Chain-of-Custody Documentation
Appendix D	NMOCD Notifications
Appendix E	Final C-141

ENSOLUM

FIGURES



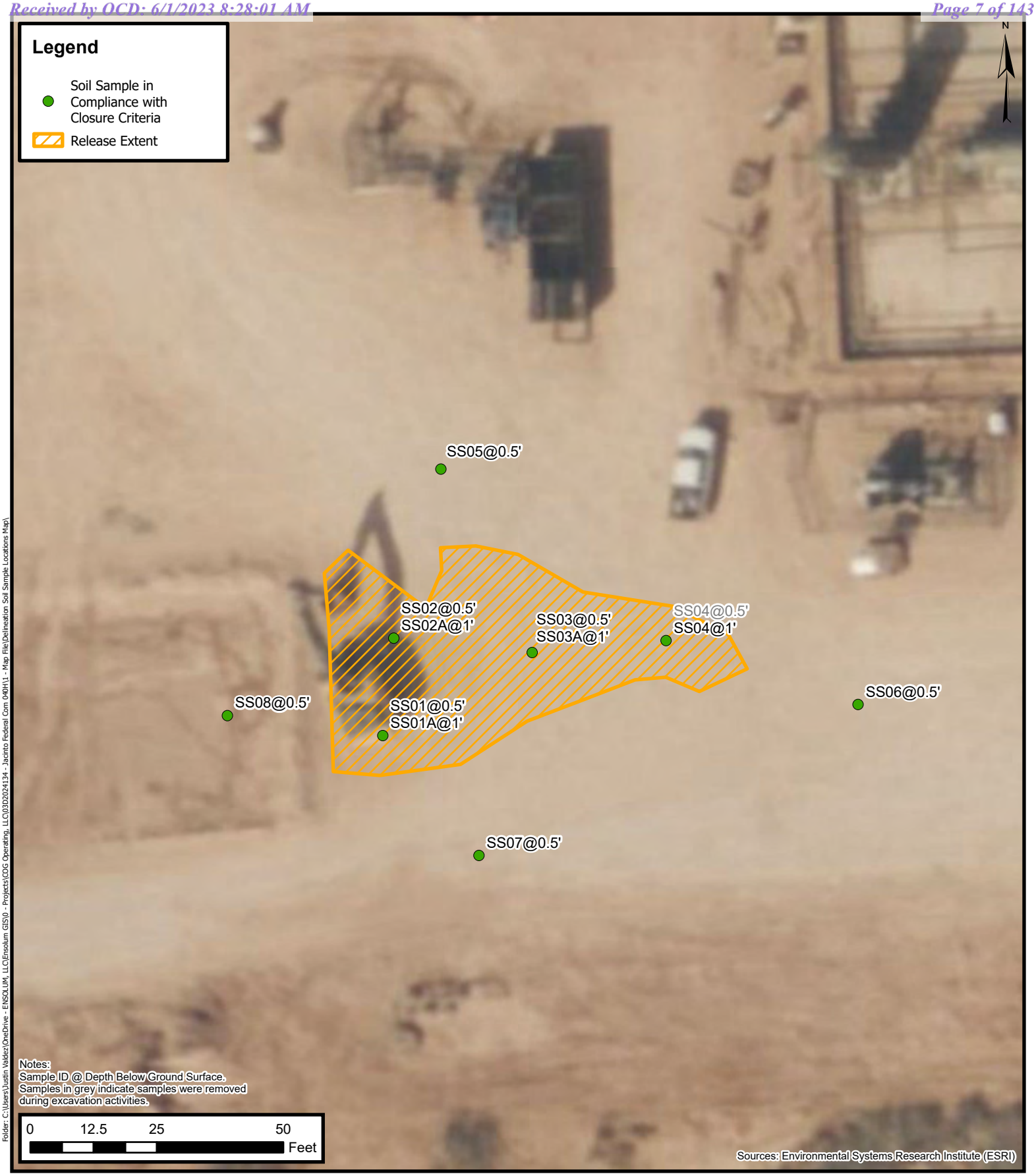
Folder: C:\Users\Justin Valdez\OneDrive - ENSOLUM, LLC\Ensolum GIS\0 - Projects\COG Operating, LLC\03202024134 - Jacinto Federal Com 040H\1 - Map File\Site Receptor Map\

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Site Receptor Map

COG Operating, LLC
Jacinto Federal Com 040H
Incident Number: NAPP2236140625
Unit O, Sec 25, T24S, R34E
Lea County, New Mexico

FIGURE 1



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Soil Sample Locations

COG Operating, LLC
Jacinto Federal Com 040H
Incident Number: NAPP2236140625
Unit O, Sec 25, T24S, R34E
Lea County, New Mexico

FIGURE 2

Folder: C:\Users\Justin Valdez\OneDrive - ENSOLUM, LLC\Ensolum GIS\0 - Projects\COG Operating, LLC\03202024134 - Jacinto Federal Com 040H\1 - Map File\Excavation Soil Sample Locations Map\

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Environmental, Engineering and Hydrogeologic Consultants

Excavation Soil Sample Locations

COG Operating, LLC
Jacinto Federal Com 040H
Incident Number: NAPP2236140625
Unit O, Sec 25, T24S, R34E
Lea County, New Mexico

FIGURE 3

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TABLES

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Jacinto Federal Com 040H
COG Operating, LLC
Lea County, New Mexico

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			**10**	**50**	**NE**	**NE**	**NE**	**1,000**	**2,500**	**20,000**
Assessment Soil Samples										
SS01	12/28/2022	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	14.4
SS01A	03/06/2023	1	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	79.9
SS02	12/28/2022	0.5	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	317
SS02A	03/06/2023	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	91.6
SS03	12/28/2022	0.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	528
SS03A	03/06/2023	1	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	59.9
SS04	12/28/2022	0.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	2,270
SS04A	03/06/2023	1	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	48.9
SS05	12/28/2022	0.5	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	200
SS06	12/28/2022	0.5	<0.00198	<0.00397	<49.9	<49.9	<49.9	<49.9	<49.9	192
SS07	12/28/2022	0.5	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	<5.00
SS08	12/28/2022	0.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	<4.96
Excavation Soil Samples										
FS01	03/28/2023	1	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	60.5
FS02	03/28/2023	1	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	71.8
FS03	03/28/2023	1	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	69.0

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

NMAC: New Mexico Administrative Code

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

Gray text indicates sample was excavated.

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APPENDIX A

Referenced Well Records

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater | Geographic Area: United States | GO

Click to hideNews Bulletins

- Explore the *NEW* USGS National Water Dashboard interactive map to access real-time water data from over 13,500 stations nationwide.
- Full News

Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 321039103243401

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

USGS 321039103243401 24S.35E.30.34233

Lea County, New Mexico
Latitude 32°10'39", Longitude 103°24'34" NAD27
Land-surface elevation 3,343 feet above NAVD88
The depth of the well is 176 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Chinle Formation (231CHNL) local aquifer.

Output formats

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

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1953-11-27		D	62610		3201.89	NGVD29	1	Z			A
1953-11-27		D	62611		3203.44	NAVD88	1	Z			A
1953-11-27		D	72019	139.56			1	Z			A
1965-11-02		D	62610		3200.46	NGVD29	1	Z			A
1965-11-02		D	62611		3202.01	NAVD88	1	Z			A
1965-11-02		D	72019	140.99			1	Z			A
1968-06-12		D	62610		3200.93	NGVD29	1	Z			A
1968-06-12		D	62611		3202.48	NAVD88	1	Z			A
1968-06-12		D	72019	140.52			1	Z			A
1970-12-08		D	62610		3202.87	NGVD29	1	Z			A
1970-12-08		D	62611		3204.42	NAVD88	1	Z			A
1970-12-08		D	72019	138.58			1	Z			A

Explanation

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

Questions about sites/data?
Feedback on this web site

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	Tws	Rng	X	Y
	CP 00839 POD1		4	3	30	24S	35E	650017	3561833*

Driller License:	122	**Driller Company:**	UNKNOWN		
Driller Name:	OTIS PRUIT				
Drill Start Date:		**Drill Finish Date:**	01/01/1963	**Plug Date:**	
Log File Date:		**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	9 GPM
Casing Size:	6.00	**Depth Well:**	175 feet	**Depth Water:**	

***UTM location was derived from PLSS - see Help**

MISC 582 PAGE 679

51277

Revised May 1993

IMPORTANT — READ INSTRUCTIONS ON BACK BEFORE FILLING OUT THIS FORM.

Declaration of Owner of Underground Water Right

Capitan Water Basin
BASIN NAME

94 MAR 28 AM 10 35

Declaration No. CP-839 Date received March 21, 1994

STATEMENT

1. Name of Declarant Rubert Madera

Mailing Address Box 1224, Jal, N.M. 88252

County of Lea, State of New Mexico

2. Source of water supply shallow water aquifer
(artesian or shallow water aquifer)

3. Describe well location under one of the following subheadings:

a. ____ ¼ SE ¼ SW ¼ of Sec. 30 Twp. 24 S Rge. 35 E N.M.P.M., in Pecos

b. Tract No. ____ of Map No. ____ of the ____.

c. X = ____ fee, Y = ____ feet, N.M. Coordinate System ____ Zone

in the ____ Grant.

On land owned by Rubert Madera

4. Description of well: date drilled 1963 driller Otis Fruit depth 175 feet.

outside diameter of casing 6 inches; original capacity 9 gal. per min.; present capacity 9

gal. per min.; pumping lift 165 feet; static water level 155 feet (above) (below) land surface;

make and type of pump Electric under water pump

make, type, horsepower, etc., of power plant one third horsepower electric

Fractional or percentage interest claimed in well all

5. Quantity of water appropriated and beneficially used ____ (acre feet per acre) 3 (acre feet per annum)

for two houses and livestock watering purposes.

6. Acreage actually irrigated na acres, located and described as follows (describe only lands actually irrigated):

Subdivision	Sec.	Twp.	Range	Acres Irrigated	Owner

(Note: location of well and acreage actually irrigated must be shown on plat on reverse side.)

Water was first applied to beneficial use May (month) ____ (day) 1963 (year) and since that time has been used fully and continuously on all of the above described lands or for the above described purposes except as follows: ____

8. Additional statements or explanations The Cox place well is known as the Cox well

POD Renumbered From: CP-839 To: CP-839 pod1

I, Rubert Madera being first duly sworn upon my oath, depose and say that the above is a full and complete statement prepared in accordance with the instructions on the reverse side of this form and submitted in evidence of ownership of a valid underground water right, that I have carefully read each and all of the items contained therein and that the same are true to the best of my knowledge and belief.

Rubert Madera, declarant.

by: ____

Subscribed and sworn to before me this 22nd day of February, A.D. 19 94

My commission expires 7/25/94 Cruzita Aceves Notary Public

Cruzita Aceves

FILED

UNDER NEW MEXICO LAW A DECLARATION IS ONLY A STATEMENT OF DECLARANT'S CLAIM. ACCEPTANCE FOR FILING DOES NOT CONSTITUTE APPROVAL OR REJECTION OF THE CLAIM.

SJ 6681

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APPENDIX B

Photographic Log

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Photographic Log
COG Operating, LLC
Jacinto Federal Com 040H
Incident Number NAPP2236140625

Photograph: 1 Date: 12/21/2022
Description: Initial release extent
View: North

Photograph: 2 Date: 12/28/2022
Description: Initial assessment activities
View: Northwest

Photograph: 3 Date: 12/28/2022
Description: Initial assessment activities
View: Southeast

Photograph: 4 Date: 3/6/2023
Description: Delineation activities
View: Southwest

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APPENDIX C

Laboratory Analytical Reports & Chain of Custody Documentation

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Joe Gable
Ensolum
2351 W. Northwest Hwy
Suite 1203
Dallas, Texas 75220

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JOB DESCRIPTION

JACINTO FED COM 40H
SDG NUMBER 03D2024134

JOB NUMBER

890-3741-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

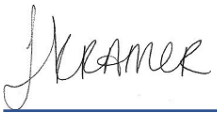
See page two for job notes and contact information.

Eurofins Carlsbad

Job Notes

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

Authorization



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1/6/2023 12:35:29 PM

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

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Laboratory Job ID: 890-3741-1
SDG: 03D2024134

Table of Contents

Definitions/Glossary

Client: Ensolum Job ID: 890-3741-1
Project/Site: JACINTO FED COM 40H SDG: 03D2024134

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3741-1
SDG: 03D2024134

Job ID: 890-3741-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3741-1

Receipt
The samples were received on 12/30/2022 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.0°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: SS01 (890-3741-1), SS02 (890-3741-2), SS03 (890-3741-3) and SS04 (890-3741-4).

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-43178 and analytical batch 880-43200 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: SS03 (890-3741-3) and SS04 (890-3741-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-43077 and 880-43077 and analytical batch 880-43285 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3741-1
SDG: 03D2024134

Client Sample ID: SS01

Lab Sample ID: 890-3741-1
Matrix: Solid
Date Collected: 12/28/22 12:15
Date Received: 12/30/22 09:30
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		01/04/23 15:26	01/05/23 13:18	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/04/23 15:26	01/05/23 13:18	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/04/23 15:26	01/05/23 13:18	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		01/04/23 15:26	01/05/23 13:18	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/04/23 15:26	01/05/23 13:18	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/04/23 15:26	01/05/23 13:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*01/04/23 15:26*	*01/05/23 13:18*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*01/04/23 15:26*	*01/05/23 13:18*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			01/05/23 15:18	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			01/06/23 13:03	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		01/04/23 09:23	01/05/23 17:41	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/04/23 09:23	01/05/23 17:41	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/04/23 09:23	01/05/23 17:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*126*		*70 - 130*	*01/04/23 09:23*	*01/05/23 17:41*	*1*
o-Terphenyl	*111*		*70 - 130*	*01/04/23 09:23*	*01/05/23 17:41*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**14.4**		4.96		mg/Kg			01/06/23 10:19	1

Client Sample ID: SS02

Lab Sample ID: 890-3741-2
Matrix: Solid
Date Collected: 12/28/22 12:20
Date Received: 12/30/22 09:30
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/04/23 15:26	01/05/23 13:39	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/04/23 15:26	01/05/23 13:39	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/04/23 15:26	01/05/23 13:39	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		01/04/23 15:26	01/05/23 13:39	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/04/23 15:26	01/05/23 13:39	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		01/04/23 15:26	01/05/23 13:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*01/04/23 15:26*	*01/05/23 13:39*	*1*

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Client Sample Results

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3741-1
SDG: 03D2024134

Client Sample ID: SS02

Date Collected: 12/28/22 12:20
Date Received: 12/30/22 09:30
Sample Depth: 0.5

Lab Sample ID: 890-3741-2
Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*01/04/23 15:26*	*01/05/23 13:39*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			01/05/23 15:18	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			01/06/23 13:03	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		01/04/23 09:23	01/05/23 18:02	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/04/23 09:23	01/05/23 18:02	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/04/23 09:23	01/05/23 18:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*114*		*70 - 130*	*01/04/23 09:23*	*01/05/23 18:02*	*1*
o-Terphenyl	*101*		*70 - 130*	*01/04/23 09:23*	*01/05/23 18:02*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**317**	**F1**	4.95	mg/Kg			01/06/23 10:25	1

Client Sample ID: SS03

Date Collected: 12/28/22 12:25
Date Received: 12/30/22 09:30
Sample Depth: 0.5

Lab Sample ID: 890-3741-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		01/04/23 15:26	01/05/23 13:59	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/04/23 15:26	01/05/23 13:59	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/04/23 15:26	01/05/23 13:59	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/04/23 15:26	01/05/23 13:59	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/04/23 15:26	01/05/23 13:59	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/04/23 15:26	01/05/23 13:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*01/04/23 15:26*	*01/05/23 13:59*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*01/04/23 15:26*	*01/05/23 13:59*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			01/05/23 15:18	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			01/06/23 13:03	1

Client Sample Results

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3741-1
SDG: 03D2024134

Client Sample ID: SS03

Lab Sample ID: 890-3741-3
Matrix: Solid

Date Collected: 12/28/22 12:25
Date Received: 12/30/22 09:30
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/04/23 09:23	01/05/23 18:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/04/23 09:23	01/05/23 18:23	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/04/23 09:23	01/05/23 18:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*135*	*S1+*	*70 - 130*	*01/04/23 09:23*	*01/05/23 18:23*	*1*
o-Terphenyl	*120*		*70 - 130*	*01/04/23 09:23*	*01/05/23 18:23*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**528**		5.05		mg/Kg			01/06/23 10:43	1

Client Sample ID: SS04

Lab Sample ID: 890-3741-4
Matrix: Solid

Date Collected: 12/28/22 12:30
Date Received: 12/30/22 09:30
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		01/04/23 15:26	01/05/23 14:19	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/04/23 15:26	01/05/23 14:19	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/04/23 15:26	01/05/23 14:19	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		01/04/23 15:26	01/05/23 14:19	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/04/23 15:26	01/05/23 14:19	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/04/23 15:26	01/05/23 14:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*01/04/23 15:26*	*01/05/23 14:19*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*01/04/23 15:26*	*01/05/23 14:19*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			01/05/23 15:18	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			01/06/23 13:03	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/04/23 09:23	01/05/23 18:44	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/04/23 09:23	01/05/23 18:44	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/04/23 09:23	01/05/23 18:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*135*	*S1+*	*70 - 130*	*01/04/23 09:23*	*01/05/23 18:44*	*1*
o-Terphenyl	*120*		*70 - 130*	*01/04/23 09:23*	*01/05/23 18:44*	*1*

Client Sample Results

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3741-1
SDG: 03D2024134

Client Sample ID: SS04
Date Collected: 12/28/22 12:30
Date Received: 12/30/22 09:30
Sample Depth: 0.5

Lab Sample ID: 890-3741-4
Matrix: Solid

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2270		25.2		mg/Kg			01/06/23 10:50	5

Surrogate Summary

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3741-1
SDG: 03D2024134

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-23188-A-1-E MS	Matrix Spike	101	109
880-23188-A-1-F MSD	Matrix Spike Duplicate	98	108
890-3741-1	SS01	111	105
890-3741-2	SS02	109	109
890-3741-3	SS03	109	110
890-3741-4	SS04	107	106
LCS 880-43178/1-A	Lab Control Sample	95	108
LCSD 880-43178/2-A	Lab Control Sample Dup	99	108
MB 880-43178/5-A	Method Blank	99	101

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-23216-A-1-D MS	Matrix Spike	88	81
880-23216-A-1-E MSD	Matrix Spike Duplicate	87	81
890-3741-1	SS01	126	111
890-3741-2	SS02	114	101
890-3741-3	SS03	135 S1+	120
890-3741-4	SS04	135 S1+	120
LCS 880-43130/2-A	Lab Control Sample	94	89
LCSD 880-43130/3-A	Lab Control Sample Dup	108	89
MB 880-43130/1-A	Method Blank	107	104

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3741-1
SDG: 03D2024134

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-43178/5-A
Matrix: Solid
Analysis Batch: 43200

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 43178

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/04/23 15:26	01/05/23 11:28	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/04/23 15:26	01/05/23 11:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/04/23 15:26	01/05/23 11:28	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/04/23 15:26	01/05/23 11:28	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/04/23 15:26	01/05/23 11:28	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/04/23 15:26	01/05/23 11:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*01/04/23 15:26*	*01/05/23 11:28*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*01/04/23 15:26*	*01/05/23 11:28*	*1*

Lab Sample ID: LCS 880-43178/1-A
Matrix: Solid
Analysis Batch: 43200

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 43178

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09959		mg/Kg		100	70 - 130		
Toluene			0.100	0.09381		mg/Kg		94	70 - 130		
Ethylbenzene			0.100	0.09104		mg/Kg		91	70 - 130		
m-Xylene & p-Xylene			0.200	0.1883		mg/Kg		94	70 - 130		
o-Xylene			0.100	0.08972		mg/Kg		90	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

Lab Sample ID: LCSD 880-43178/2-A
Matrix: Solid
Analysis Batch: 43200

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 43178

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1047		mg/Kg		105	70 - 130	5	35
Toluene			0.100	0.09721		mg/Kg		97	70 - 130	4	35
Ethylbenzene			0.100	0.09513		mg/Kg		95	70 - 130	4	35
m-Xylene & p-Xylene			0.200	0.1965		mg/Kg		98	70 - 130	4	35
o-Xylene			0.100	0.09321		mg/Kg		93	70 - 130	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

Lab Sample ID: 880-23188-A-1-E MS
Matrix: Solid
Analysis Batch: 43200

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 43178

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00201	U	0.101	0.07475		mg/Kg		74	70 - 130		
Toluene	<0.00201	U F1	0.101	0.05821	F1	mg/Kg		57	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3741-1
SDG: 03D2024134

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

Lab Sample ID: 880-23188-A-1-E MS
Matrix: Solid
Analysis Batch: 43200

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 43178

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U F1	0.101	0.04970	F1	mg/Kg		49	70 - 130
m-Xylene & p-Xylene	<0.00402	U F1	0.202	0.1017	F1	mg/Kg		50	70 - 130
o-Xylene	<0.00201	U F1	0.101	0.04826	F1	mg/Kg		48	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*

Lab Sample ID: 880-23188-A-1-F MSD
Matrix: Solid
Analysis Batch: 43200

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 43178

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.0990	0.07783		mg/Kg		79	70 - 130	4	35
Toluene	<0.00201	U F1	0.0990	0.06118	F1	mg/Kg		61	70 - 130	5	35
Ethylbenzene	<0.00201	U F1	0.0990	0.05304	F1	mg/Kg		54	70 - 130	7	35
m-Xylene & p-Xylene	<0.00402	U F1	0.198	0.1076	F1	mg/Kg		54	70 - 130	6	35
o-Xylene	<0.00201	U F1	0.0990	0.05062	F1	mg/Kg		51	70 - 130	5	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

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

Lab Sample ID: MB 880-43130/1-A
Matrix: Solid
Analysis Batch: 43191

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 43130

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/04/23 09:23	01/05/23 08:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/04/23 09:23	01/05/23 08:23	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/04/23 09:23	01/05/23 08:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*01/04/23 09:23*	*01/05/23 08:23*	*1*
o-Terphenyl	*104*		*70 - 130*	*01/04/23 09:23*	*01/05/23 08:23*	*1*

Lab Sample ID: LCS 880-43130/2-A
Matrix: Solid
Analysis Batch: 43191

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 43130

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10			1000	923.7		mg/Kg		92	70 - 130
Diesel Range Organics (Over C10-C28)			1000	854.4		mg/Kg		85	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3741-1
SDG: 03D2024134

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

Lab Sample ID: LCS 880-43130/2-A
Matrix: Solid
Analysis Batch: 43191

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 43130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	94		70 - 130
o-Terphenyl	89		70 - 130

Lab Sample ID: LCSD 880-43130/3-A
Matrix: Solid
Analysis Batch: 43191

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 43130

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	825.3		mg/Kg		83	70 - 130	11	20
Diesel Range Organics (Over C10-C28)			1000	783.0		mg/Kg		78	70 - 130	9	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	108		70 - 130
o-Terphenyl	89		70 - 130

Lab Sample ID: 880-23216-A-1-D MS
Matrix: Solid
Analysis Batch: 43191

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 43130

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	930.6		mg/Kg		93	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	999	924.9		mg/Kg		93	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	88		70 - 130
o-Terphenyl	81		70 - 130

Lab Sample ID: 880-23216-A-1-E MSD
Matrix: Solid
Analysis Batch: 43191

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 43130

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	933.2		mg/Kg		93	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	914.9		mg/Kg		92	70 - 130	1	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	87		70 - 130
o-Terphenyl	81		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3741-1
SDG: 03D2024134

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-43077/1-A
Matrix: Solid
Analysis Batch: 43285

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			01/06/23 08:28	1

Lab Sample ID: LCS 880-43077/2-A
Matrix: Solid
Analysis Batch: 43285

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	259.2		mg/Kg		104	90 - 110		

Lab Sample ID: LCSD 880-43077/3-A
Matrix: Solid
Analysis Batch: 43285

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	257.6		mg/Kg		103	90 - 110	1	20

Lab Sample ID: 890-3741-2 MS
Matrix: Solid
Analysis Batch: 43285

Client Sample ID: SS02
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	317	F1	248	618.8	F1	mg/Kg		122	90 - 110		

Lab Sample ID: 890-3741-2 MSD
Matrix: Solid
Analysis Batch: 43285

Client Sample ID: SS02
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	317	F1	248	605.5	F1	mg/Kg		116	90 - 110	2	20

QC Association Summary

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3741-1
SDG: 03D2024134

GC VOA

Prep Batch: 43178

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3741-1	SS01	Total/NA	Solid	5035	
890-3741-2	SS02	Total/NA	Solid	5035	
890-3741-3	SS03	Total/NA	Solid	5035	
890-3741-4	SS04	Total/NA	Solid	5035	
MB 880-43178/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-43178/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-43178/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-23188-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
880-23188-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 43200

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3741-1	SS01	Total/NA	Solid	8021B	43178
890-3741-2	SS02	Total/NA	Solid	8021B	43178
890-3741-3	SS03	Total/NA	Solid	8021B	43178
890-3741-4	SS04	Total/NA	Solid	8021B	43178
MB 880-43178/5-A	Method Blank	Total/NA	Solid	8021B	43178
LCS 880-43178/1-A	Lab Control Sample	Total/NA	Solid	8021B	43178
LCSD 880-43178/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	43178
880-23188-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	43178
880-23188-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	43178

Analysis Batch: 43293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3741-1	SS01	Total/NA	Solid	Total BTEX	
890-3741-2	SS02	Total/NA	Solid	Total BTEX	
890-3741-3	SS03	Total/NA	Solid	Total BTEX	
890-3741-4	SS04	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 43130

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3741-1	SS01	Total/NA	Solid	8015NM Prep	
890-3741-2	SS02	Total/NA	Solid	8015NM Prep	
890-3741-3	SS03	Total/NA	Solid	8015NM Prep	
890-3741-4	SS04	Total/NA	Solid	8015NM Prep	
MB 880-43130/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-43130/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-43130/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-23216-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-23216-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 43191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3741-1	SS01	Total/NA	Solid	8015B NM	43130
890-3741-2	SS02	Total/NA	Solid	8015B NM	43130
890-3741-3	SS03	Total/NA	Solid	8015B NM	43130
890-3741-4	SS04	Total/NA	Solid	8015B NM	43130
MB 880-43130/1-A	Method Blank	Total/NA	Solid	8015B NM	43130
LCS 880-43130/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	43130

QC Association Summary

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3741-1
SDG: 03D2024134

GC Semi VOA (Continued)

Analysis Batch: 43191 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-43130/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	43130
880-23216-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	43130
880-23216-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	43130

Analysis Batch: 43387

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3741-1	SS01	Total/NA	Solid	8015 NM	
890-3741-2	SS02	Total/NA	Solid	8015 NM	
890-3741-3	SS03	Total/NA	Solid	8015 NM	
890-3741-4	SS04	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 43077

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3741-1	SS01	Soluble	Solid	DI Leach	
890-3741-2	SS02	Soluble	Solid	DI Leach	
890-3741-3	SS03	Soluble	Solid	DI Leach	
890-3741-4	SS04	Soluble	Solid	DI Leach	
MB 880-43077/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-43077/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-43077/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3741-2 MS	SS02	Soluble	Solid	DI Leach	
890-3741-2 MSD	SS02	Soluble	Solid	DI Leach	

Analysis Batch: 43285

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3741-1	SS01	Soluble	Solid	300.0	43077
890-3741-2	SS02	Soluble	Solid	300.0	43077
890-3741-3	SS03	Soluble	Solid	300.0	43077
890-3741-4	SS04	Soluble	Solid	300.0	43077
MB 880-43077/1-A	Method Blank	Soluble	Solid	300.0	43077
LCS 880-43077/2-A	Lab Control Sample	Soluble	Solid	300.0	43077
LCSD 880-43077/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	43077
890-3741-2 MS	SS02	Soluble	Solid	300.0	43077
890-3741-2 MSD	SS02	Soluble	Solid	300.0	43077

Lab Chronicle

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3741-1
SDG: 03D2024134

Client Sample ID: SS01
Date Collected: 12/28/22 12:15
Date Received: 12/30/22 09:30

Lab Sample ID: 890-3741-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	43178	01/04/23 15:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43200	01/05/23 13:18	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			43293	01/05/23 15:18	SM	EET MID
Total/NA	Analysis	8015 NM		1			43387	01/06/23 13:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	43130	01/04/23 09:23	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43191	01/05/23 17:41	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	43077	01/03/23 12:07	KS	EET MID
Soluble	Analysis	300.0		1			43285	01/06/23 10:19	CH	EET MID

Client Sample ID: SS02
Date Collected: 12/28/22 12:20
Date Received: 12/30/22 09:30

Lab Sample ID: 890-3741-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	43178	01/04/23 15:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43200	01/05/23 13:39	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			43293	01/05/23 15:18	SM	EET MID
Total/NA	Analysis	8015 NM		1			43387	01/06/23 13:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	43130	01/04/23 09:23	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43191	01/05/23 18:02	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	43077	01/03/23 12:07	KS	EET MID
Soluble	Analysis	300.0		1			43285	01/06/23 10:25	CH	EET MID

Client Sample ID: SS03
Date Collected: 12/28/22 12:25
Date Received: 12/30/22 09:30

Lab Sample ID: 890-3741-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	43178	01/04/23 15:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43200	01/05/23 13:59	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			43293	01/05/23 15:18	SM	EET MID
Total/NA	Analysis	8015 NM		1			43387	01/06/23 13:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	43130	01/04/23 09:23	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43191	01/05/23 18:23	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	43077	01/03/23 12:07	KS	EET MID
Soluble	Analysis	300.0		1			43285	01/06/23 10:43	CH	EET MID

Client Sample ID: SS04
Date Collected: 12/28/22 12:30
Date Received: 12/30/22 09:30

Lab Sample ID: 890-3741-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	43178	01/04/23 15:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43200	01/05/23 14:19	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			43293	01/05/23 15:18	SM	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3741-1
SDG: 03D2024134

Client Sample ID: SS04

Date Collected: 12/28/22 12:30
Date Received: 12/30/22 09:30

Lab Sample ID: 890-3741-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			43387	01/06/23 13:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	43130	01/04/23 09:23	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43191	01/05/23 18:44	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	43077	01/03/23 12:07	KS	EET MID
Soluble	Analysis	300.0		5			43285	01/06/23 10:50	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3741-1
SDG: 03D2024134

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-25	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3741-1
SDG: 03D2024134

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3741-1
SDG: 03D2024134

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3741-1	SS01	Solid	12/28/22 12:15	12/30/22 09:30	0.5
890-3741-2	SS02	Solid	12/28/22 12:20	12/30/22 09:30	0.5
890-3741-3	SS03	Solid	12/28/22 12:25	12/30/22 09:30	0.5
890-3741-4	SS04	Solid	12/28/22 12:30	12/30/22 09:30	0.5

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Chain of Custody

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

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Joe Gable	Bill to: (if different)	Kalei Jennings
Company Name:	Ensolum, LLC	Company Name:	Ensolum, LLC
Address:	601 N Marienfeld St Suite 400	Address:	601 N Marienfeld St Suite 400
City, State ZIP:	Midland, TX 79701	City, State ZIP:	Midland, TX 79701
Phone:	903-386-8073	Email:	kjennings@ensolum.com, jgable@ensolum.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Jacinto Fed Com 40H	Turn Around	☑ Routine ☐ Rush
Project Number:	03D2024134	Due Date:	
Project Location:	32.181667, -103.421389	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Kase Parker		
PO #:			

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Samples Received Intact:	Yes No	Thermometer ID:	TWM007	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No N/A	Temperature Reading:	1.2	
Total Containers:		Corrected Temperature:	1.0	

Preservative Codes

None: NO | DI Water: H_2O
Cool: Cool | MeOH: Me
HCL: HC | HNO_3: HN
H_2S0_4: H_2 | NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)	Sample Comments
SS01	S	12/28/2022	1215	0.5'	Grab/	1		X	X	X	
SS02	S	12/28/2022	1220	0.5'	Grab/	1		X	X	X	
SS03	S	12/28/2022	1225	0.5'	Grab/	1		X	X	X	
SS04	S	12/28/2022	1230	0.5'	Grab/	1		X	X	X	

890-3741 Chain of Custody

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl 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 Tl U Hg: 1631 / 245.1 / 7470 / 7471

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		12/30/22 9:30	2		12-30-22 930
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3741-1
SDG Number: 03D2024134

Login Number: 3741
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.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3741-1
SDG Number: 03D2024134

Login Number: 3741
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 01/03/23 09:51 AM

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

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ANALYTICAL REPORT

PREPARED FOR

Attn: Joe Gable
Ensolum
2351 W. Northwest Hwy
Suite 1203
Dallas, Texas 75220

Generated 1/6/2023 2:42:41 PM

JOB DESCRIPTION

JACINTO FED COM 40H
SDG NUMBER 03D2024134

JOB NUMBER

890-3738-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

my EOL

Eurofins Carlsbad

Job Notes

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

Authorization

Generated
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Authorized for release by
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Client: Ensolum
Project/Site: JACINTO FED COM 40H

Laboratory Job ID: 890-3738-1
SDG: 03D2024134

Table of Contents

Definitions/Glossary

Client: Ensolum Job ID: 890-3738-1
Project/Site: JACINTO FED COM 40H SDG: 03D2024134

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3738-1
SDG: 03D2024134

Job ID: 890-3738-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3738-1

Receipt
The sample was received on 12/30/2022 9:30 AM. 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 1.0°C

Receipt Exceptions
The following sample was received and analyzed from an unpreserved bulk soil jar: SS05 (890-3738-1).

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

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

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-43077 and analytical batch 880-43285 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3738-1
SDG: 03D2024134

Client Sample ID: SS05

Date Collected: 12/28/22 12:35
Date Received: 12/30/22 09:30
Sample Depth: 0.5

Lab Sample ID: 890-3738-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		01/04/23 14:24	01/06/23 12:19	1
Toluene	<0.00201	U	0.00201		mg/Kg		01/04/23 14:24	01/06/23 12:19	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		01/04/23 14:24	01/06/23 12:19	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		01/04/23 14:24	01/06/23 12:19	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		01/04/23 14:24	01/06/23 12:19	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		01/04/23 14:24	01/06/23 12:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*01/04/23 14:24*	*01/06/23 12:19*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*01/04/23 14:24*	*01/06/23 12:19*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			01/06/23 15:28	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			01/06/23 13:03	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/04/23 09:23	01/05/23 16:35	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/04/23 09:23	01/05/23 16:35	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/04/23 09:23	01/05/23 16:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*111*		*70 - 130*	*01/04/23 09:23*	*01/05/23 16:35*	*1*
o-Terphenyl	*102*		*70 - 130*	*01/04/23 09:23*	*01/05/23 16:35*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**200**		5.01		mg/Kg			01/06/23 10:00	1

Surrogate Summary

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3738-1
SDG: 03D2024134

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-3738-1	SS05	107	109
890-3738-1 MS	SS05	99	105
890-3738-1 MSD	SS05	105	109
LCS 880-43171/1-A	Lab Control Sample	104	106
LCSD 880-43171/2-A	Lab Control Sample Dup	102	107
MB 880-43171/5-A	Method Blank	99	105

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-23216-A-1-D MS	Matrix Spike	88	81
880-23216-A-1-E MSD	Matrix Spike Duplicate	87	81
890-3738-1	SS05	111	102
LCS 880-43130/2-A	Lab Control Sample	94	89
LCSD 880-43130/3-A	Lab Control Sample Dup	108	89
MB 880-43130/1-A	Method Blank	107	104

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3738-1
SDG: 03D2024134

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-43171/5-A
Matrix: Solid
Analysis Batch: 43326

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 43171

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/04/23 14:24	01/06/23 11:51	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/04/23 14:24	01/06/23 11:51	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/04/23 14:24	01/06/23 11:51	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/04/23 14:24	01/06/23 11:51	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/04/23 14:24	01/06/23 11:51	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/04/23 14:24	01/06/23 11:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*01/04/23 14:24*	*01/06/23 11:51*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*01/04/23 14:24*	*01/06/23 11:51*	*1*

Lab Sample ID: LCS 880-43171/1-A
Matrix: Solid
Analysis Batch: 43326

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 43171

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.07559		mg/Kg		76	70 - 130		
Toluene			0.100	0.07256		mg/Kg		73	70 - 130		
Ethylbenzene			0.100	0.07155		mg/Kg		72	70 - 130		
m-Xylene & p-Xylene			0.200	0.1466		mg/Kg		73	70 - 130		
o-Xylene			0.100	0.07250		mg/Kg		73	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

Lab Sample ID: LCSD 880-43171/2-A
Matrix: Solid
Analysis Batch: 43326

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 43171

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.07746		mg/Kg		77	70 - 130	2	35
Toluene			0.100	0.07295		mg/Kg		73	70 - 130	1	35
Ethylbenzene			0.100	0.07137		mg/Kg		71	70 - 130	0	35
m-Xylene & p-Xylene			0.200	0.1500		mg/Kg		75	70 - 130	2	35
o-Xylene			0.100	0.07359		mg/Kg		74	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*

Lab Sample ID: 890-3738-1 MS
Matrix: Solid
Analysis Batch: 43326

Client Sample ID: SS05
Prep Type: Total/NA
Prep Batch: 43171

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00201	U	0.100	0.09220		mg/Kg		92	70 - 130		
Toluene	<0.00201	U	0.100	0.08852		mg/Kg		88	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3738-1
SDG: 03D2024134

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

Lab Sample ID: 890-3738-1 MS
Matrix: Solid
Analysis Batch: 43326

Client Sample ID: SS05
Prep Type: Total/NA
Prep Batch: 43171

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U	0.100	0.08473		mg/Kg		85	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1759		mg/Kg		88	70 - 130
o-Xylene	<0.00201	U	0.100	0.08390		mg/Kg		84	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: 890-3738-1 MSD
Matrix: Solid
Analysis Batch: 43326

Client Sample ID: SS05
Prep Type: Total/NA
Prep Batch: 43171

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.0990	0.1018		mg/Kg		103	70 - 130	10	35
Toluene	<0.00201	U	0.0990	0.09453		mg/Kg		95	70 - 130	7	35
Ethylbenzene	<0.00201	U	0.0990	0.09255		mg/Kg		93	70 - 130	9	35
m-Xylene & p-Xylene	<0.00402	U	0.198	0.1923		mg/Kg		97	70 - 130	9	35
o-Xylene	<0.00201	U	0.0990	0.09249		mg/Kg		93	70 - 130	10	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*

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

Lab Sample ID: MB 880-43130/1-A
Matrix: Solid
Analysis Batch: 43191

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 43130

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/04/23 09:23	01/05/23 08:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/04/23 09:23	01/05/23 08:23	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/04/23 09:23	01/05/23 08:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*01/04/23 09:23*	*01/05/23 08:23*	*1*
o-Terphenyl	*104*		*70 - 130*	*01/04/23 09:23*	*01/05/23 08:23*	*1*

Lab Sample ID: LCS 880-43130/2-A
Matrix: Solid
Analysis Batch: 43191

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 43130

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10			1000	923.7		mg/Kg		92	70 - 130
Diesel Range Organics (Over C10-C28)			1000	854.4		mg/Kg		85	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3738-1
SDG: 03D2024134

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

Lab Sample ID: LCS 880-43130/2-A
Matrix: Solid
Analysis Batch: 43191

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 43130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	94		70 - 130
o-Terphenyl	89		70 - 130

Lab Sample ID: LCSD 880-43130/3-A
Matrix: Solid
Analysis Batch: 43191

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 43130

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	825.3		mg/Kg		83	70 - 130	11	20
Diesel Range Organics (Over C10-C28)			1000	783.0		mg/Kg		78	70 - 130	9	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	108		70 - 130
o-Terphenyl	89		70 - 130

Lab Sample ID: 880-23216-A-1-D MS
Matrix: Solid
Analysis Batch: 43191

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 43130

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	930.6		mg/Kg		93	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	999	924.9		mg/Kg		93	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	88		70 - 130
o-Terphenyl	81		70 - 130

Lab Sample ID: 880-23216-A-1-E MSD
Matrix: Solid
Analysis Batch: 43191

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 43130

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	933.2		mg/Kg		93	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	914.9		mg/Kg		92	70 - 130	1	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	87		70 - 130
o-Terphenyl	81		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3738-1
SDG: 03D2024134

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-43077/1-A
Matrix: Solid
Analysis Batch: 43285

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			01/06/23 08:28	1

Lab Sample ID: LCS 880-43077/2-A
Matrix: Solid
Analysis Batch: 43285

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	259.2		mg/Kg		104	90 - 110		

Lab Sample ID: LCSD 880-43077/3-A
Matrix: Solid
Analysis Batch: 43285

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	257.6		mg/Kg		103	90 - 110	1	20

Lab Sample ID: 890-3732-A-1-E MS
Matrix: Solid
Analysis Batch: 43285

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	55.1	F1	250	361.5	F1	mg/Kg		123	90 - 110		

Lab Sample ID: 890-3732-A-1-F MSD
Matrix: Solid
Analysis Batch: 43285

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	55.1	F1	250	345.7	F1	mg/Kg		116	90 - 110	4	20

QC Association Summary

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3738-1
SDG: 03D2024134

GC VOA

Prep Batch: 43171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3738-1	SS05	Total/NA	Solid	5035	
MB 880-43171/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-43171/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-43171/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3738-1 MS	SS05	Total/NA	Solid	5035	
890-3738-1 MSD	SS05	Total/NA	Solid	5035	

Analysis Batch: 43326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3738-1	SS05	Total/NA	Solid	8021B	43171
MB 880-43171/5-A	Method Blank	Total/NA	Solid	8021B	43171
LCS 880-43171/1-A	Lab Control Sample	Total/NA	Solid	8021B	43171
LCSD 880-43171/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	43171
890-3738-1 MS	SS05	Total/NA	Solid	8021B	43171
890-3738-1 MSD	SS05	Total/NA	Solid	8021B	43171

Analysis Batch: 43420

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3738-1	SS05	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 43130

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3738-1	SS05	Total/NA	Solid	8015NM Prep	
MB 880-43130/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-43130/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-43130/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-23216-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-23216-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 43191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3738-1	SS05	Total/NA	Solid	8015B NM	43130
MB 880-43130/1-A	Method Blank	Total/NA	Solid	8015B NM	43130
LCS 880-43130/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	43130
LCSD 880-43130/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	43130
880-23216-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	43130
880-23216-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	43130

Analysis Batch: 43384

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3738-1	SS05	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 43077

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3738-1	SS05	Soluble	Solid	DI Leach	
MB 880-43077/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-43077/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-43077/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3738-1
SDG: 03D2024134

HPLC/IC (Continued)

Leach Batch: 43077 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3732-A-1-E MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3732-A-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 43285

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3738-1	SS05	Soluble	Solid	300.0	43077
MB 880-43077/1-A	Method Blank	Soluble	Solid	300.0	43077
LCS 880-43077/2-A	Lab Control Sample	Soluble	Solid	300.0	43077
LCSD 880-43077/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	43077
890-3732-A-1-E MS	Matrix Spike	Soluble	Solid	300.0	43077
890-3732-A-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	43077

Lab Chronicle

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3738-1
SDG: 03D2024134

Client Sample ID: SS05

Date Collected: 12/28/22 12:35
Date Received: 12/30/22 09:30

Lab Sample ID: 890-3738-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	43171	01/04/23 14:24	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43326	01/06/23 12:19	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			43420	01/06/23 15:28	SM	EET MID
Total/NA	Analysis	8015 NM		1			43384	01/06/23 13:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	43130	01/04/23 09:23	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43191	01/05/23 16:35	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	43077	01/03/23 12:07	KS	EET MID
Soluble	Analysis	300.0		1			43285	01/06/23 10:00	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3738-1
SDG: 03D2024134

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-25	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3738-1
SDG: 03D2024134

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3738-1
SDG: 03D2024134

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3738-1	SS05	Solid	12/28/22 12:35	12/30/22 09:30	0.5

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Chain of Custody

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

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Joe Gable	Bill to: (if different)	Kalei Jennings
Company Name:	Ensolum, LLC	Company Name:	Ensolum, LLC
Address:	601 N Marienfeld St Suite 400	Address:	601 N Marienfeld St Suite 400
City, State ZIP:	Midland, TX 79701	City, State ZIP:	Midland, TX 79701
Phone:	903-386-8073	Email:	kjennings@ensolum.com, jgable@ensolum.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Jacinto Fed Com 40H	Turn Around	☑ Routine ☐ Rush
Project Number:	03D2024134	Due Date:	
Project Location:	32.181667, -103.421389	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Kase Parker		
PO #:			

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Samples Received Intact:	Yes No	Thermometer ID:	IR#007	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No N/A	Temperature Reading:	1.2	
Total Containers:		Corrected Temperature:	1.0	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)
SS05	S	12/28/2022	1235	0.5'	Grab/	1	X	X	X

890-3738 Chain of Custody

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2S0_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl 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 Tl U Hg: 1631 / 245.1 / 7470 / 7471

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			12/30/22 9:00am	2	12-30-2293	
3				4		
5				6		

Revised Date: 08/25/2020 Rev. 2020.2

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Chain of Custody

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

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Joe Gable	Bill to: (if different)	Kalei Jennings
Company Name:	Ensolum, LLC	Company Name:	Ensolum, LLC
Address:	601 N Marienfeld St Suite 400	Address:	601 N Marienfeld St Suite 400
City, State ZIP:	Midland, TX 79701	City, State ZIP:	Midland, TX 79701
Phone:	903-386-8073	Email:	kjennings@ensolum.com, jgable@ensolum.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Jacinto Fed Com 40H	Turn Around	☑ Routine ☐ Rush
Project Number:	03D2024134	Due Date:	
Project Location:	32.181667, -103.421389	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Kase Parker		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	IR#007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	1.2
Total Containers:		Corrected Temperature:	1.0

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021
SS05	S	12/28/2022	1235	0.5'	Grab/	1		X	X	X

Parameters

890-3738 Chain of Custody

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2S0_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl 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 Tl U Hg: 1631 / 245.1 / 7470 / 7471

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		12/30/22 9:00am	2	12-30-22930	
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3738-1
SDG Number: 03D2024134

Login Number: 3738
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.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3738-1
SDG Number: 03D2024134

Login Number: 3738
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 01/03/23 09:51 AM

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

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ANALYTICAL REPORT

PREPARED FOR

Attn: Joe Gable
Ensolum
2351 W. Northwest Hwy
Suite 1203
Dallas, Texas 75220

Generated 1/9/2023 10:32:27 AM Revision 1

JOB DESCRIPTION

JACINTO FED COM 40H
SDG NUMBER 03D2024134

JOB NUMBER

890-3737-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

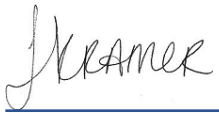
my EOL

Eurofins Carlsbad

Job Notes

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

Authorization



Generated
1/9/2023 10:32:27 AM
Revision 1

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

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Laboratory Job ID: 890-3737-1
SDG: 03D2024134

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3737-1
SDG: 03D2024134

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3737-1
SDG: 03D2024134

Job ID: 890-3737-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3737-1

Comments
No additional comments.

Revision
The report being provided is a revision of the original report sent on 1/6/2023. The report (revision 1) is being revised due to: Per client email, requesting sample ID correction.

Receipt
The sample was received on 12/30/2022 9:30 AM. 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 was 1.0º C.

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: SS06 (890-3737-1).

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

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
Method 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-43077 and analytical batch 880-43285 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

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

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

Client Sample Results

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3737-1
SDG: 03D2024134

Client Sample ID: SS06

Date Collected: 12/28/22 12:40
Date Received: 12/30/22 09:30
Sample Depth: 0.5

Lab Sample ID: 890-3737-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		01/04/23 08:41	01/04/23 21:06	1
Toluene	<0.00198	U	0.00198		mg/Kg		01/04/23 08:41	01/04/23 21:06	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		01/04/23 08:41	01/04/23 21:06	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		01/04/23 08:41	01/04/23 21:06	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		01/04/23 08:41	01/04/23 21:06	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		01/04/23 08:41	01/04/23 21:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*01/04/23 08:41*	*01/04/23 21:06*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*01/04/23 08:41*	*01/04/23 21:06*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			01/05/23 10:15	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			01/06/23 11:39	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		01/04/23 09:27	01/05/23 19:05	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/04/23 09:27	01/05/23 19:05	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/04/23 09:27	01/05/23 19:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*115*		*70 - 130*	*01/04/23 09:27*	*01/05/23 19:05*	*1*
o-Terphenyl	*136*	*S1+*	*70 - 130*	*01/04/23 09:27*	*01/05/23 19:05*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**192**		5.03		mg/Kg			01/06/23 09:54	1

Surrogate Summary

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3737-1
SDG: 03D2024134

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-23150-A-21-G MS	Matrix Spike	100	109
880-23150-A-21-H MSD	Matrix Spike Duplicate	99	107
890-3737-1	SS06	112	109
LCS 880-43114/1-A	Lab Control Sample	103	110
LCSD 880-43114/2-A	Lab Control Sample Dup	96	105
MB 880-43114/5-A	Method Blank	97	107

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-3737-1	SS06	115	136 S1+
890-3746-A-1-B MS	Matrix Spike	116	120
890-3746-A-1-C MSD	Matrix Spike Duplicate	117	124
LCS 880-43132/2-A	Lab Control Sample	106	112
LCSD 880-43132/3-A	Lab Control Sample Dup	95	104
MB 880-43132/1-A	Method Blank	116	141 S1+

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3737-1
SDG: 03D2024134

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-43114/5-A
Matrix: Solid
Analysis Batch: 43117

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 43114

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/04/23 08:41	01/04/23 12:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/04/23 08:41	01/04/23 12:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/04/23 08:41	01/04/23 12:40	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/04/23 08:41	01/04/23 12:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/04/23 08:41	01/04/23 12:40	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/04/23 08:41	01/04/23 12:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*01/04/23 08:41*	*01/04/23 12:40*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*01/04/23 08:41*	*01/04/23 12:40*	*1*

Lab Sample ID: LCS 880-43114/1-A
Matrix: Solid
Analysis Batch: 43117

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 43114

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1023		mg/Kg		102	70 - 130		
Toluene			0.100	0.09910		mg/Kg		99	70 - 130		
Ethylbenzene			0.100	0.09831		mg/Kg		98	70 - 130		
m-Xylene & p-Xylene			0.200	0.2028		mg/Kg		101	70 - 130		
o-Xylene			0.100	0.09740		mg/Kg		97	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*

Lab Sample ID: LCSD 880-43114/2-A
Matrix: Solid
Analysis Batch: 43117

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 43114

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.08858		mg/Kg		89	70 - 130	14	35
Toluene			0.100	0.08677		mg/Kg		87	70 - 130	13	35
Ethylbenzene			0.100	0.08671		mg/Kg		87	70 - 130	13	35
m-Xylene & p-Xylene			0.200	0.1795		mg/Kg		90	70 - 130	12	35
o-Xylene			0.100	0.08715		mg/Kg		87	70 - 130	11	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: 880-23150-A-21-G MS
Matrix: Solid
Analysis Batch: 43117

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 43114

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00201	U	0.101	0.09062		mg/Kg		90	70 - 130		
Toluene	<0.00201	U	0.101	0.08564		mg/Kg		85	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3737-1
SDG: 03D2024134

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

Lab Sample ID: 880-23150-A-21-G MS
Matrix: Solid
Analysis Batch: 43117

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 43114

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U	0.101	0.08624		mg/Kg		86	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.202	0.1768		mg/Kg		88	70 - 130
o-Xylene	<0.00201	U	0.101	0.08556		mg/Kg		85	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*

Lab Sample ID: 880-23150-A-21-H MSD
Matrix: Solid
Analysis Batch: 43117

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 43114

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.0996	0.08738		mg/Kg		88	70 - 130	4	35
Toluene	<0.00201	U	0.0996	0.08362		mg/Kg		84	70 - 130	2	35
Ethylbenzene	<0.00201	U	0.0996	0.08437		mg/Kg		85	70 - 130	2	35
m-Xylene & p-Xylene	<0.00402	U	0.199	0.1737		mg/Kg		87	70 - 130	2	35
o-Xylene	<0.00201	U	0.0996	0.08400		mg/Kg		84	70 - 130	2	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*

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

Lab Sample ID: MB 880-43132/1-A
Matrix: Solid
Analysis Batch: 43193

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 43132

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/04/23 09:27	01/05/23 08:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/04/23 09:27	01/05/23 08:23	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/04/23 09:27	01/05/23 08:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*116*		*70 - 130*	*01/04/23 09:27*	*01/05/23 08:23*	*1*
o-Terphenyl	*141*	*S1+*	*70 - 130*	*01/04/23 09:27*	*01/05/23 08:23*	*1*

Lab Sample ID: LCS 880-43132/2-A
Matrix: Solid
Analysis Batch: 43193

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 43132

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10			1000	973.0		mg/Kg		97	70 - 130
Diesel Range Organics (Over C10-C28)			1000	1092		mg/Kg		109	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3737-1
SDG: 03D2024134

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

Lab Sample ID: LCS 880-43132/2-A
Matrix: Solid
Analysis Batch: 43193

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 43132

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	106		70 - 130
o-Terphenyl	112		70 - 130

Lab Sample ID: LCSD 880-43132/3-A
Matrix: Solid
Analysis Batch: 43193

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 43132

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1093		mg/Kg		109	70 - 130	12	20
Diesel Range Organics (Over C10-C28)			1000	953.9		mg/Kg		95	70 - 130	14	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	95		70 - 130
o-Terphenyl	104		70 - 130

Lab Sample ID: 890-3746-A-1-B MS
Matrix: Solid
Analysis Batch: 43193

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 43132

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1302		mg/Kg		130	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	999	1249		mg/Kg		123	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	116		70 - 130
o-Terphenyl	120		70 - 130

Lab Sample ID: 890-3746-A-1-C MSD
Matrix: Solid
Analysis Batch: 43193

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 43132

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1285		mg/Kg		129	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	1262		mg/Kg		125	70 - 130	1	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	117		70 - 130
o-Terphenyl	124		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3737-1
SDG: 03D2024134

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-43077/1-A
Matrix: Solid
Analysis Batch: 43285

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			01/06/23 08:28	1

Lab Sample ID: LCS 880-43077/2-A
Matrix: Solid
Analysis Batch: 43285

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	259.2		mg/Kg		104	90 - 110		

Lab Sample ID: LCSD 880-43077/3-A
Matrix: Solid
Analysis Batch: 43285

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	257.6		mg/Kg		103	90 - 110	1	20

Lab Sample ID: 890-3732-A-1-E MS
Matrix: Solid
Analysis Batch: 43285

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	55.1	F1	250	361.5	F1	mg/Kg		123	90 - 110		

Lab Sample ID: 890-3732-A-1-F MSD
Matrix: Solid
Analysis Batch: 43285

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	55.1	F1	250	345.7	F1	mg/Kg		116	90 - 110	4	20

QC Association Summary

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3737-1
SDG: 03D2024134

GC VOA

Prep Batch: 43114

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3737-1	SS06	Total/NA	Solid	5035	
MB 880-43114/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-43114/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-43114/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-23150-A-21-G MS	Matrix Spike	Total/NA	Solid	5035	
880-23150-A-21-H MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 43117

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3737-1	SS06	Total/NA	Solid	8021B	43114
MB 880-43114/5-A	Method Blank	Total/NA	Solid	8021B	43114
LCS 880-43114/1-A	Lab Control Sample	Total/NA	Solid	8021B	43114
LCSD 880-43114/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	43114
880-23150-A-21-G MS	Matrix Spike	Total/NA	Solid	8021B	43114
880-23150-A-21-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	43114

Analysis Batch: 43222

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3737-1	SS06	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 43132

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3737-1	SS06	Total/NA	Solid	8015NM Prep	
MB 880-43132/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-43132/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-43132/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3746-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3746-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 43193

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3737-1	SS06	Total/NA	Solid	8015B NM	43132
MB 880-43132/1-A	Method Blank	Total/NA	Solid	8015B NM	43132
LCS 880-43132/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	43132
LCSD 880-43132/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	43132
890-3746-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	43132
890-3746-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	43132

Analysis Batch: 43374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3737-1	SS06	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 43077

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3737-1	SS06	Soluble	Solid	DI Leach	
MB 880-43077/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-43077/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-43077/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3737-1
SDG: 03D2024134

HPLC/IC (Continued)

Leach Batch: 43077 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3732-A-1-E MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3732-A-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 43285

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3737-1	SS06	Soluble	Solid	300.0	43077
MB 880-43077/1-A	Method Blank	Soluble	Solid	300.0	43077
LCS 880-43077/2-A	Lab Control Sample	Soluble	Solid	300.0	43077
LCSD 880-43077/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	43077
890-3732-A-1-E MS	Matrix Spike	Soluble	Solid	300.0	43077
890-3732-A-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	43077

Lab Chronicle

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3737-1
SDG: 03D2024134

Client Sample ID: SS06
Date Collected: 12/28/22 12:40
Date Received: 12/30/22 09:30

Lab Sample ID: 890-3737-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	43114	01/04/23 08:41	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43117	01/04/23 21:06	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			43222	01/05/23 10:15	AJ	EET MID
Total/NA	Analysis	8015 NM		1			43374	01/06/23 11:39	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	43132	01/04/23 09:27	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43193	01/05/23 19:05	AJ	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	43077	01/03/23 12:07	KS	EET MID
Soluble	Analysis	300.0		1			43285	01/06/23 09:54	CH	EET MID

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3737-1
SDG: 03D2024134

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-25	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3737-1
SDG: 03D2024134

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International
MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3737-1
SDG: 03D2024134

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3737-1	SS06	Solid	12/28/22 12:40	12/30/22 09:30	0.5

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Chain of Custody

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

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Joe Gable	Bill to: (if different)	Kalei Jennings
Company Name:	Ensolum, LLC	Company Name:	Ensolum, LLC
Address:	601 N Marienfeld St Suite 400	Address:	601 N Marienfeld St Suite 400
City, State ZIP:	Midland, TX 79701	City, State ZIP:	Midland, TX 79701
Phone:	903-386-8073	Email:	kjennings@ensolum.com, jgable@ensolum.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Jacinto Fed Com 40H	Turn Around	☑ Routine ☐ Rush
Project Number:	03D2024134	Due Date:	
Project Location:	32.181667, -103.421389	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Kase Parker		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	~~Yes~~ No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	IR#007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	1.2
Total Containers:		Corrected Temperature:	1.0

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)
SS05	S	12/28/2022	1240	0.5'	Grab/	1	X	X	X

890-3737 Chain of Custody

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2SO_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl 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 Tl U Hg: 1631 / 245.1 / 7470 / 7471

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		12/30/22 9:00 am	2		12.30.2290
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

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Chain of Custody

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

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Joe Gable	Bill to: (if different)	Kalei Jennings
Company Name:	Ensolum, LLC	Company Name:	Ensolum, LLC
Address:	601 N Marienfeld St Suite 400	Address:	601 N Marienfeld St Suite 400
City, State ZIP:	Midland, TX 79701	City, State ZIP:	Midland, TX 79701
Phone:	903-386-8073	Email:	kjennings@ensolum.com, jgable@ensolum.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Jacinto Fed Com 40H	Turn Around	
Project Number:	03D2024134	☑ Routine ☐ Rush	
Project Location:	32.181667, -103.421389	Due Date:	
Sampler's Name:	Kase Parker	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Samples Received Intact:	Yes No	Thermometer ID:	IR007	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No N/A	Temperature Reading:	1.2	
Total Containers:		Corrected Temperature:	1.0	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)
SS05	S	12/28/2022	1240	0.5'	Grab/	1		X	X	X

890-3737 Chain of Custody

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2S0_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl 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 Tl U Hg: 1631 / 245.1 / 7470 / 7471

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		12/30/22 9:20 am	2		12.30.2230
3			4		
5			6		

Revised Date 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3737-1
SDG Number: 03D2024134

Login Number: 3737
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.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3737-1
SDG Number: 03D2024134

Login Number: 3737
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 01/03/23 09:51 AM

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

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Joe Gable
Ensolum
2351 W. Northwest Hwy
Suite 1203
Dallas, Texas 75220

Generated 1/9/2023 10:30:56 AM Revision 1

JOB DESCRIPTION

JACINTO FED COM 40H
SDG NUMBER 03D2024134

JOB NUMBER

890-3739-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

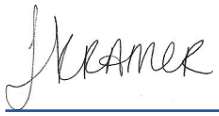
my EOL

Eurofins Carlsbad

Job Notes

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

Authorization



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1/9/2023 10:30:56 AM
Revision 1

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

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Laboratory Job ID: 890-3739-1
SDG: 03D2024134

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3739-1
SDG: 03D2024134

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3739-1
SDG: 03D2024134

Job ID: 890-3739-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3739-1

Comments
No additional comments.

Revision
The report being provided is a revision of the original report sent on 1/6/2023. The report (revision 1) is being revised due to: Per client email, requesting sample ID correction.

Receipt
The sample was received on 12/30/2022 9:30 AM. 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 was 1.0º C.

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: SS07 (890-3739-1).

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-43178 and analytical batch 880-43200 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
Method 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-43077 and analytical batch 880-43285 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

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

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

Client Sample Results

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3739-1
SDG: 03D2024134

Client Sample ID: SS07
Date Collected: 12/28/22 12:45
Date Received: 12/30/22 09:30
Sample Depth: 0.5

Lab Sample ID: 890-3739-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/04/23 15:26	01/05/23 12:37	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/04/23 15:26	01/05/23 12:37	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/04/23 15:26	01/05/23 12:37	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		01/04/23 15:26	01/05/23 12:37	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/04/23 15:26	01/05/23 12:37	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		01/04/23 15:26	01/05/23 12:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*01/04/23 15:26*	*01/05/23 12:37*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*01/04/23 15:26*	*01/05/23 12:37*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			01/05/23 15:18	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			01/06/23 13:03	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		01/04/23 09:23	01/05/23 16:56	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/04/23 09:23	01/05/23 16:56	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/04/23 09:23	01/05/23 16:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*112*		*70 - 130*	*01/04/23 09:23*	*01/05/23 16:56*	*1*
o-Terphenyl	*101*		*70 - 130*	*01/04/23 09:23*	*01/05/23 16:56*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			01/06/23 10:06	1

Surrogate Summary

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3739-1
SDG: 03D2024134

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-23188-A-1-E MS	Matrix Spike	101	109
880-23188-A-1-F MSD	Matrix Spike Duplicate	98	108
890-3739-1	SS07	109	108
LCS 880-43178/1-A	Lab Control Sample	95	108
LCSD 880-43178/2-A	Lab Control Sample Dup	99	108
MB 880-43178/5-A	Method Blank	99	101

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-23216-A-1-D MS	Matrix Spike	88	81
880-23216-A-1-E MSD	Matrix Spike Duplicate	87	81
890-3739-1	SS07	112	101
LCS 880-43130/2-A	Lab Control Sample	94	89
LCSD 880-43130/3-A	Lab Control Sample Dup	108	89
MB 880-43130/1-A	Method Blank	107	104

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3739-1
SDG: 03D2024134

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-43178/5-A
Matrix: Solid
Analysis Batch: 43200

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 43178

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/04/23 15:26	01/05/23 11:28	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/04/23 15:26	01/05/23 11:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/04/23 15:26	01/05/23 11:28	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/04/23 15:26	01/05/23 11:28	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/04/23 15:26	01/05/23 11:28	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/04/23 15:26	01/05/23 11:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*01/04/23 15:26*	*01/05/23 11:28*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*01/04/23 15:26*	*01/05/23 11:28*	*1*

Lab Sample ID: LCS 880-43178/1-A
Matrix: Solid
Analysis Batch: 43200

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 43178

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09959		mg/Kg		100	70 - 130		
Toluene			0.100	0.09381		mg/Kg		94	70 - 130		
Ethylbenzene			0.100	0.09104		mg/Kg		91	70 - 130		
m-Xylene & p-Xylene			0.200	0.1883		mg/Kg		94	70 - 130		
o-Xylene			0.100	0.08972		mg/Kg		90	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

Lab Sample ID: LCSD 880-43178/2-A
Matrix: Solid
Analysis Batch: 43200

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 43178

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1047		mg/Kg		105	70 - 130	5	35
Toluene			0.100	0.09721		mg/Kg		97	70 - 130	4	35
Ethylbenzene			0.100	0.09513		mg/Kg		95	70 - 130	4	35
m-Xylene & p-Xylene			0.200	0.1965		mg/Kg		98	70 - 130	4	35
o-Xylene			0.100	0.09321		mg/Kg		93	70 - 130	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

Lab Sample ID: 880-23188-A-1-E MS
Matrix: Solid
Analysis Batch: 43200

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 43178

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00201	U	0.101	0.07475		mg/Kg		74	70 - 130		
Toluene	<0.00201	U F1	0.101	0.05821	F1	mg/Kg		57	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3739-1
SDG: 03D2024134

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

Lab Sample ID: 880-23188-A-1-E MS
Matrix: Solid
Analysis Batch: 43200

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 43178

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U F1	0.101	0.04970	F1	mg/Kg		49	70 - 130
m-Xylene & p-Xylene	<0.00402	U F1	0.202	0.1017	F1	mg/Kg		50	70 - 130
o-Xylene	<0.00201	U F1	0.101	0.04826	F1	mg/Kg		48	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*

Lab Sample ID: 880-23188-A-1-F MSD
Matrix: Solid
Analysis Batch: 43200

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 43178

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.0990	0.07783		mg/Kg		79	70 - 130	4	35
Toluene	<0.00201	U F1	0.0990	0.06118	F1	mg/Kg		61	70 - 130	5	35
Ethylbenzene	<0.00201	U F1	0.0990	0.05304	F1	mg/Kg		54	70 - 130	7	35
m-Xylene & p-Xylene	<0.00402	U F1	0.198	0.1076	F1	mg/Kg		54	70 - 130	6	35
o-Xylene	<0.00201	U F1	0.0990	0.05062	F1	mg/Kg		51	70 - 130	5	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

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

Lab Sample ID: MB 880-43130/1-A
Matrix: Solid
Analysis Batch: 43191

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 43130

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/04/23 09:23	01/05/23 08:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/04/23 09:23	01/05/23 08:23	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/04/23 09:23	01/05/23 08:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*01/04/23 09:23*	*01/05/23 08:23*	*1*
o-Terphenyl	*104*		*70 - 130*	*01/04/23 09:23*	*01/05/23 08:23*	*1*

Lab Sample ID: LCS 880-43130/2-A
Matrix: Solid
Analysis Batch: 43191

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 43130

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10			1000	923.7		mg/Kg		92	70 - 130
Diesel Range Organics (Over C10-C28)			1000	854.4		mg/Kg		85	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3739-1
SDG: 03D2024134

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

Lab Sample ID: LCS 880-43130/2-A
Matrix: Solid
Analysis Batch: 43191

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 43130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	94		70 - 130
o-Terphenyl	89		70 - 130

Lab Sample ID: LCSD 880-43130/3-A
Matrix: Solid
Analysis Batch: 43191

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 43130

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	825.3		mg/Kg		83	70 - 130	11	20
Diesel Range Organics (Over C10-C28)			1000	783.0		mg/Kg		78	70 - 130	9	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	108		70 - 130
o-Terphenyl	89		70 - 130

Lab Sample ID: 880-23216-A-1-D MS
Matrix: Solid
Analysis Batch: 43191

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 43130

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	930.6		mg/Kg		93	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	999	924.9		mg/Kg		93	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	88		70 - 130
o-Terphenyl	81		70 - 130

Lab Sample ID: 880-23216-A-1-E MSD
Matrix: Solid
Analysis Batch: 43191

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 43130

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	933.2		mg/Kg		93	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	914.9		mg/Kg		92	70 - 130	1	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	87		70 - 130
o-Terphenyl	81		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3739-1
SDG: 03D2024134

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-43077/1-A
Matrix: Solid
Analysis Batch: 43285

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			01/06/23 08:28	1

Lab Sample ID: LCS 880-43077/2-A
Matrix: Solid
Analysis Batch: 43285

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	259.2		mg/Kg		104	90 - 110		

Lab Sample ID: LCSD 880-43077/3-A
Matrix: Solid
Analysis Batch: 43285

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	257.6		mg/Kg		103	90 - 110	1	20

Lab Sample ID: 890-3732-A-1-E MS
Matrix: Solid
Analysis Batch: 43285

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	55.1	F1	250	361.5	F1	mg/Kg		123	90 - 110		

Lab Sample ID: 890-3732-A-1-F MSD
Matrix: Solid
Analysis Batch: 43285

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	55.1	F1	250	345.7	F1	mg/Kg		116	90 - 110	4	20

QC Association Summary

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3739-1
SDG: 03D2024134

GC VOA

Prep Batch: 43178

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3739-1	SS07	Total/NA	Solid	5035	
MB 880-43178/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-43178/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-43178/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-23188-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
880-23188-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 43200

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3739-1	SS07	Total/NA	Solid	8021B	43178
MB 880-43178/5-A	Method Blank	Total/NA	Solid	8021B	43178
LCS 880-43178/1-A	Lab Control Sample	Total/NA	Solid	8021B	43178
LCSD 880-43178/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	43178
880-23188-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	43178
880-23188-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	43178

Analysis Batch: 43291

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3739-1	SS07	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 43130

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3739-1	SS07	Total/NA	Solid	8015NM Prep	
MB 880-43130/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-43130/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-43130/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-23216-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-23216-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 43191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3739-1	SS07	Total/NA	Solid	8015B NM	43130
MB 880-43130/1-A	Method Blank	Total/NA	Solid	8015B NM	43130
LCS 880-43130/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	43130
LCSD 880-43130/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	43130
880-23216-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	43130
880-23216-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	43130

Analysis Batch: 43385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3739-1	SS07	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 43077

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3739-1	SS07	Soluble	Solid	DI Leach	
MB 880-43077/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-43077/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-43077/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3739-1
SDG: 03D2024134

HPLC/IC (Continued)

Leach Batch: 43077 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3732-A-1-E MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3732-A-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 43285

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3739-1	SS07	Soluble	Solid	300.0	43077
MB 880-43077/1-A	Method Blank	Soluble	Solid	300.0	43077
LCS 880-43077/2-A	Lab Control Sample	Soluble	Solid	300.0	43077
LCSD 880-43077/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	43077
890-3732-A-1-E MS	Matrix Spike	Soluble	Solid	300.0	43077
890-3732-A-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	43077

Lab Chronicle

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3739-1
SDG: 03D2024134

Client Sample ID: SS07
Date Collected: 12/28/22 12:45
Date Received: 12/30/22 09:30

Lab Sample ID: 890-3739-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	43178	01/04/23 15:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43200	01/05/23 12:37	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			43291	01/05/23 15:18	SM	EET MID
Total/NA	Analysis	8015 NM		1			43385	01/06/23 13:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	43130	01/04/23 09:23	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43191	01/05/23 16:56	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	43077	01/03/23 12:07	KS	EET MID
Soluble	Analysis	300.0		1			43285	01/06/23 10:06	CH	EET MID

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3739-1
SDG: 03D2024134

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-25	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3739-1
SDG: 03D2024134

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3739-1
SDG: 03D2024134

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3739-1	SS07	Solid	12/28/22 12:45	12/30/22 09:30	0.5

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Chain of Custody

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

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Joe Gable	Bill to: (if different)	Kalei Jennings
Company Name:	Ensolum, LLC	Company Name:	Ensolum, LLC
Address:	601 N Marienfeld St Suite 400	Address:	601 N Marienfeld St Suite 400
City, State ZIP:	Midland, TX 79701	City, State ZIP:	Midland, TX 79701
Phone:	903-386-8073	Email:	kjennings@ensolum.com, jgable@ensolum.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Jacinto Fed Com 40H	Turn Around	☑ Routine ☐ Rush
Project Number:	03D2024134	Due Date:	
Project Location:	32.181667, -103.421389	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Kase Parker		
PO #:			

SAMPLE RECEIPT				
Temp Blank:	Yes / No	Wet Ice:	Yes / No	
Samples Received Intact:	Yes / No	Thermometer ID:	TM007	
Cooler Custody Seals:	Yes / No / N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes / No / N/A	Temperature Reading:	1.2	
Total Containers:		Corrected Temperature:	1.0	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)
SS05	S	12/28/2022	1245	0.5'	Grab/	1		X	X	X

Parameters

ANALYSIS REQUEST

890-3739 Chain of Custody

Preservative Codes

None: NO; DI Water: H_2O
Cool: Cool; MeOH: Me
HCL: HC; HNO_3: HN
H_2SO_4: H_2; NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl 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 Tl U Hg: 1631 / 245.1 / 7470 / 7471

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		12/30/22 9:00am	2		12-30-22 930
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

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Chain of Custody

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

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Joe Gable	Bill to: (if different)	Kalei Jennings
Company Name:	Ensolum, LLC	Company Name:	Ensolum, LLC
Address:	601 N Marienfeld St Suite 400	Address:	601 N Marienfeld St Suite 400
City, State ZIP:	Midland, TX 79701	City, State ZIP:	Midland, TX 79701
Phone:	903-386-8073	Email:	kjennings@ensolum.com, jgable@ensolum.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Jacinto Fed Com 40H	Turn Around	☑ Routine ☐ Rush
Project Number:	03D2024134	Due Date:	
Project Location:	32.181667, -103.421389	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Kase Parker		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	TM007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	1.2
Total Containers:		Corrected Temperature:	1.0

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)
SS05	S	12/28/2022	1245	0.5'	Grab/	1		X	X	X

890-3739 Chain of Custody

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2S0_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Comments

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl 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 Tl 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
1		12/30/22 9:00 am	2		12.30.22 930
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3739-1
SDG Number: 03D2024134

Login Number: 3739
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.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3739-1
SDG Number: 03D2024134

Login Number: 3739
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 01/03/23 09:51 AM

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

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ANALYTICAL REPORT

PREPARED FOR

Attn: Joe Gable
Ensolum
2351 W. Northwest Hwy
Suite 1203
Dallas, Texas 75220

Generated 1/9/2023 10:32:19 AM Revision 1

JOB DESCRIPTION

JACINTO FED COM 40H
SDG NUMBER 03D2024134

JOB NUMBER

890-3740-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

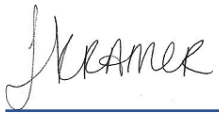
my EOL

Eurofins Carlsbad

Job Notes

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

Authorization



Generated
1/9/2023 10:32:19 AM
Revision 1

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

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Laboratory Job ID: 890-3740-1
SDG: 03D2024134

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3740-1
SDG: 03D2024134

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3740-1
SDG: 03D2024134

Job ID: 890-3740-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3740-1

Comments
No additional comments.

Receipt
The sample was received on 12/30/2022 9:30 AM. 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 was 1.0º C.

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: SS05 (890-3740-1).

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-43178 and analytical batch 880-43200 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

GC Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry
Method 300.0: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-43077 and analytical batch 880-43285 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

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

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

Client Sample Results

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3740-1
SDG: 03D2024134

Client Sample ID: SS08
Date Collected: 12/28/22 12:50
Date Received: 12/30/22 09:30
Sample Depth: 0.5

Lab Sample ID: 890-3740-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		01/04/23 15:26	01/05/23 12:58	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/04/23 15:26	01/05/23 12:58	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/04/23 15:26	01/05/23 12:58	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		01/04/23 15:26	01/05/23 12:58	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/04/23 15:26	01/05/23 12:58	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/04/23 15:26	01/05/23 12:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*01/04/23 15:26*	*01/05/23 12:58*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*01/04/23 15:26*	*01/05/23 12:58*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			01/05/23 15:18	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			01/06/23 13:03	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/04/23 09:23	01/05/23 17:18	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/04/23 09:23	01/05/23 17:18	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/04/23 09:23	01/05/23 17:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*01/04/23 09:23*	*01/05/23 17:18*	*1*
o-Terphenyl	*93*		*70 - 130*	*01/04/23 09:23*	*01/05/23 17:18*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.96	U	4.96		mg/Kg			01/06/23 10:13	1

Surrogate Summary

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3740-1
SDG: 03D2024134

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-23188-A-1-E MS	Matrix Spike	101	109
880-23188-A-1-F MSD	Matrix Spike Duplicate	98	108
890-3740-1	SS08	110	109
LCS 880-43178/1-A	Lab Control Sample	95	108
LCSD 880-43178/2-A	Lab Control Sample Dup	99	108
MB 880-43178/5-A	Method Blank	99	101

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-23216-A-1-D MS	Matrix Spike	88	81
880-23216-A-1-E MSD	Matrix Spike Duplicate	87	81
890-3740-1	SS08	102	93
LCS 880-43130/2-A	Lab Control Sample	94	89
LCSD 880-43130/3-A	Lab Control Sample Dup	108	89
MB 880-43130/1-A	Method Blank	107	104

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3740-1
SDG: 03D2024134

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-43178/5-A
Matrix: Solid
Analysis Batch: 43200

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 43178

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/04/23 15:26	01/05/23 11:28	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/04/23 15:26	01/05/23 11:28	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/04/23 15:26	01/05/23 11:28	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/04/23 15:26	01/05/23 11:28	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/04/23 15:26	01/05/23 11:28	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/04/23 15:26	01/05/23 11:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*01/04/23 15:26*	*01/05/23 11:28*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*01/04/23 15:26*	*01/05/23 11:28*	*1*

Lab Sample ID: LCS 880-43178/1-A
Matrix: Solid
Analysis Batch: 43200

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 43178

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09959		mg/Kg		100	70 - 130		
Toluene			0.100	0.09381		mg/Kg		94	70 - 130		
Ethylbenzene			0.100	0.09104		mg/Kg		91	70 - 130		
m-Xylene & p-Xylene			0.200	0.1883		mg/Kg		94	70 - 130		
o-Xylene			0.100	0.08972		mg/Kg		90	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

Lab Sample ID: LCSD 880-43178/2-A
Matrix: Solid
Analysis Batch: 43200

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 43178

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1047		mg/Kg		105	70 - 130	5	35
Toluene			0.100	0.09721		mg/Kg		97	70 - 130	4	35
Ethylbenzene			0.100	0.09513		mg/Kg		95	70 - 130	4	35
m-Xylene & p-Xylene			0.200	0.1965		mg/Kg		98	70 - 130	4	35
o-Xylene			0.100	0.09321		mg/Kg		93	70 - 130	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

Lab Sample ID: 880-23188-A-1-E MS
Matrix: Solid
Analysis Batch: 43200

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 43178

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00201	U	0.101	0.07475		mg/Kg		74	70 - 130		
Toluene	<0.00201	U F1	0.101	0.05821	F1	mg/Kg		57	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3740-1
SDG: 03D2024134

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

Lab Sample ID: 880-23188-A-1-E MS
Matrix: Solid
Analysis Batch: 43200

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 43178

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U F1	0.101	0.04970	F1	mg/Kg		49	70 - 130
m-Xylene & p-Xylene	<0.00402	U F1	0.202	0.1017	F1	mg/Kg		50	70 - 130
o-Xylene	<0.00201	U F1	0.101	0.04826	F1	mg/Kg		48	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*

Lab Sample ID: 880-23188-A-1-F MSD
Matrix: Solid
Analysis Batch: 43200

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 43178

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.0990	0.07783		mg/Kg		79	70 - 130	4	35
Toluene	<0.00201	U F1	0.0990	0.06118	F1	mg/Kg		61	70 - 130	5	35
Ethylbenzene	<0.00201	U F1	0.0990	0.05304	F1	mg/Kg		54	70 - 130	7	35
m-Xylene & p-Xylene	<0.00402	U F1	0.198	0.1076	F1	mg/Kg		54	70 - 130	6	35
o-Xylene	<0.00201	U F1	0.0990	0.05062	F1	mg/Kg		51	70 - 130	5	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

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

Lab Sample ID: MB 880-43130/1-A
Matrix: Solid
Analysis Batch: 43191

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 43130

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/04/23 09:23	01/05/23 08:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/04/23 09:23	01/05/23 08:23	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/04/23 09:23	01/05/23 08:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*01/04/23 09:23*	*01/05/23 08:23*	*1*
o-Terphenyl	*104*		*70 - 130*	*01/04/23 09:23*	*01/05/23 08:23*	*1*

Lab Sample ID: LCS 880-43130/2-A
Matrix: Solid
Analysis Batch: 43191

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 43130

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10			1000	923.7		mg/Kg		92	70 - 130
Diesel Range Organics (Over C10-C28)			1000	854.4		mg/Kg		85	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3740-1
SDG: 03D2024134

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

Lab Sample ID: LCS 880-43130/2-A
Matrix: Solid
Analysis Batch: 43191

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 43130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	94		70 - 130
o-Terphenyl	89		70 - 130

Lab Sample ID: LCSD 880-43130/3-A
Matrix: Solid
Analysis Batch: 43191

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 43130

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	825.3		mg/Kg		83	70 - 130	11	20
Diesel Range Organics (Over C10-C28)			1000	783.0		mg/Kg		78	70 - 130	9	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	108		70 - 130
o-Terphenyl	89		70 - 130

Lab Sample ID: 880-23216-A-1-D MS
Matrix: Solid
Analysis Batch: 43191

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 43130

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	930.6		mg/Kg		93	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	999	924.9		mg/Kg		93	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	88		70 - 130
o-Terphenyl	81		70 - 130

Lab Sample ID: 880-23216-A-1-E MSD
Matrix: Solid
Analysis Batch: 43191

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 43130

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	933.2		mg/Kg		93	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	914.9		mg/Kg		92	70 - 130	1	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	87		70 - 130
o-Terphenyl	81		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3740-1
SDG: 03D2024134

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-43077/1-A
Matrix: Solid
Analysis Batch: 43285

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			01/06/23 08:28	1

Lab Sample ID: LCS 880-43077/2-A
Matrix: Solid
Analysis Batch: 43285

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	259.2		mg/Kg		104	90 - 110		

Lab Sample ID: LCSD 880-43077/3-A
Matrix: Solid
Analysis Batch: 43285

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	257.6		mg/Kg		103	90 - 110	1	20

Lab Sample ID: 890-3732-A-1-E MS
Matrix: Solid
Analysis Batch: 43285

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	55.1	F1	250	361.5	F1	mg/Kg		123	90 - 110		

Lab Sample ID: 890-3732-A-1-F MSD
Matrix: Solid
Analysis Batch: 43285

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	55.1	F1	250	345.7	F1	mg/Kg		116	90 - 110	4	20

QC Association Summary

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3740-1
SDG: 03D2024134

GC VOA

Prep Batch: 43178

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3740-1	SS08	Total/NA	Solid	5035	
MB 880-43178/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-43178/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-43178/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-23188-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
880-23188-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 43200

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3740-1	SS08	Total/NA	Solid	8021B	43178
MB 880-43178/5-A	Method Blank	Total/NA	Solid	8021B	43178
LCS 880-43178/1-A	Lab Control Sample	Total/NA	Solid	8021B	43178
LCSD 880-43178/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	43178
880-23188-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	43178
880-23188-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	43178

Analysis Batch: 43292

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3740-1	SS08	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 43130

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3740-1	SS08	Total/NA	Solid	8015NM Prep	
MB 880-43130/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-43130/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-43130/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-23216-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-23216-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 43191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3740-1	SS08	Total/NA	Solid	8015B NM	43130
MB 880-43130/1-A	Method Blank	Total/NA	Solid	8015B NM	43130
LCS 880-43130/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	43130
LCSD 880-43130/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	43130
880-23216-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	43130
880-23216-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	43130

Analysis Batch: 43386

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3740-1	SS08	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 43077

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3740-1	SS08	Soluble	Solid	DI Leach	
MB 880-43077/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-43077/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-43077/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3740-1
SDG: 03D2024134

HPLC/IC (Continued)

Leach Batch: 43077 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3732-A-1-E MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3732-A-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 43285

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3740-1	SS08	Soluble	Solid	300.0	43077
MB 880-43077/1-A	Method Blank	Soluble	Solid	300.0	43077
LCS 880-43077/2-A	Lab Control Sample	Soluble	Solid	300.0	43077
LCSD 880-43077/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	43077
890-3732-A-1-E MS	Matrix Spike	Soluble	Solid	300.0	43077
890-3732-A-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	43077

Lab Chronicle

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3740-1
SDG: 03D2024134

Client Sample ID: SS08
Date Collected: 12/28/22 12:50
Date Received: 12/30/22 09:30

Lab Sample ID: 890-3740-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	43178	01/04/23 15:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43200	01/05/23 12:58	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			43292	01/05/23 15:18	SM	EET MID
Total/NA	Analysis	8015 NM		1			43386	01/06/23 13:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	43130	01/04/23 09:23	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43191	01/05/23 17:18	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	43077	01/03/23 12:07	KS	EET MID
Soluble	Analysis	300.0		1			43285	01/06/23 10:13	CH	EET MID

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3740-1
SDG: 03D2024134

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-25	06-30-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3740-1
SDG: 03D2024134

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International
MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: JACINTO FED COM 40H

Job ID: 890-3740-1
SDG: 03D2024134

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3740-1	SS08	Solid	12/28/22 12:50	12/30/22 09:30	0.5

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Chain of Custody

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

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Joe Gable	Bill to: (if different)	Kalei Jennings
Company Name:	Ensolum, LLC	Company Name:	Ensolum, LLC
Address:	601 N Marienfeld St Suite 400	Address:	601 N Marienfeld St Suite 400
City, State ZIP:	Midland, TX 79701	City, State ZIP:	Midland, TX 79701
Phone:	903-386-8073	Email:	kjennings@ensolum.com, jgable@ensolum.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Jacinto Fed Com 40H	Turn Around	☑ Routine ☐ Rush
Project Number:	03D2024134	Due Date:	
Project Location:	32.181667, -103.421389	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Kase Parker		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	TM002
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	1.2
Total Containers:		Corrected Temperature:	1.0

ANALYSIS REQUEST

Preservative Codes

None: NO | DI Water: H_2O
Cool: Cool | MeOH: Me
HCL: HC | HNO_3: HN
H_2S0_4: H_2 | NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)	Sample Comments
SS05	S	12/28/2022	1250	0.5'	Grab/	1		X	X	X	

890-3740 Chain of Custody

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl 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 Tl U Hg: 1631 / 245.1 / 7470 / 7471

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			12/30/22 9:00am	2		12.30.2298
3				4		
5				6		

Revised Date: 08/25/2020 Rev. 2020.2

eurofins | Environment Testing Xenco

Chain of Custody

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

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Joe Gable	Bill to: (if different)	Kalei Jennings
Company Name:	Ensolum, LLC	Company Name:	Ensolum, LLC
Address:	601 N Marienfeld St Suite 400	Address:	601 N Marienfeld St Suite 400
City, State ZIP:	Midland, TX 79701	City, State ZIP:	Midland, TX 79701
Phone:	903-386-8073	Email:	kjennings@ensolum.com, jgable@ensolum.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Jacinto Fed Com 40H	Turn Around	☑ Routine ☐ Rush
Project Number:	03D2024134	Due Date:	
Project Location:	32.181667, -103.421389	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Kase Parker		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	TM002
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	1.2
Total Containers:		Corrected Temperature:	1.0

Preservative Codes

None: NO; DI Water: H_2O; Cool: Cool; MeOH: Me; HCL: HC; HNO_3: HN; H_2SO_4: H_2; NaOH: Na; H_3PO_4: HP; $NaHSO_4$: NABIS; $Na_2S_2O_3$: $NaSO_3$; Zn Acetate+NaOH: Zn; NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021	Sample Comments
SS05	S	12/28/2022	1250	0.5'	Grab/	1		X	X	X	

ANALYSIS REQUEST / Parameters

890-3740 Chain of Custody

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl 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 Tl 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
1		12/29/22 9:00am	2		12.30.2230
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3740-1
SDG Number: 03D2024134

Login Number: 3740
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.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3740-1
SDG Number: 03D2024134

Login Number: 3740
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 01/03/23 09:51 AM

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

ENSOLUM

APPENDIX D

NMOCD Notifications

From: Enviro, OCD, EMNRD
To: Hadlie Green
Cc: Bratcher, Michael, EMNRD; Nobui, Jennifer, EMNRD
Subject: RE: [EXTERNAL] COP Sampling Notification (Week of 3/6/2023)
Date: Wednesday, March 1, 2023 5:21:46 PM
Attachments: image006.png
image007.png
image008.png
image009.png

[**EXTERNAL EMAIL**]

Hadlile,

Thank you for the notification. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

JH

Jocelyn Harimon ● Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
1220 South St. Francis Drive | Santa Fe, NM 87505
(505)469-2821 | Jocelyn.Harimon@emnrd.nm.gov
http:// **www.emnrd.nm.gov**

From: Hadlie Green <hgreen@ensolum.com>
Sent: Wednesday, March 1, 2023 12:55 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Kalei Jennings <kjennings@ensolum.com>
Subject: [EXTERNAL] COP Sampling Notification (Week of 3/6/2023)

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

All,

ConocoPhillips Company (COP) plans to complete sampling activities at the following site the week of March 6, 2023.

- Jacinto Federal Com 040H / NAPP2236140625

Thank you,

Hadlie Green
Staff Geologist
432-557-8895
hgreen@ensolum.com
Ensolum, LLC

ENSOLUM

APPENDIX E

Final 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	NAPP2236140625
District RP	
Facility ID	fAPP2204045537
Application ID	

Release Notification

Responsible Party

Responsible Party	COG Operating, LLC.	OGRID	229137
Contact Name	Charles Beauvais	Contact Telephone	(575) 988-2043
Contact email	Charles.R.Beauvais@ConocoPhillips.com	Incident # *(assigned by OCD)*	NAPP2236140625
Contact mailing address	600 W. Illinois Ave. Midland, Texas 79701		

Location of Release Source

Latitude 32.1816 Longitude -103.4213

(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Jacinto Federal Com 040H	Site Type	Tank Battery
Date Release Discovered	December 14, 2022	API# *(if applicable)*	30-025-44152

Unit Letter	Section	Township	Range	County
O	25	24S	34E	Lea

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (*Name:* Quail Ranch, LLC.)

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) 9.7	Volume Recovered (bbls) 0
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☒ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

This release was caused by an overfilled tank.
This release was on pad. Evaluation will be made of the site to determine if we may commence remediation immediately or delineate any possible impact from the release and we will present a remediation work plan to the NMOCD for approval prior to any significant remediation activities.

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2236140625
District RP	
Facility ID	fAPP2204045537
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ■ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

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

- ■ The source of the release has been stopped.
- ■ The impacted area has been secured to protect human health and the environment.
- ■ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
- ■ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

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.

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.

Printed Name: Brittany N. Esparza Title: Environmental Technician

Signature: Brittany Esparza Date: 12/27/2022

email: Brittany.Esparza@ConocoPhillips.com Telephone: (432) 221-0398

OCD Only

Received by: Jocelyn Harimon Date: 12/27/2022

L48 Spill Volume Estimate Form

NAPP2236140625

Facility Name & Number:	Jacinto Fed 40H
Asset Area:	Delaware East
Release Discovery Date & Time:	12/14/2022
Release Type:	Produced Water
Provide any known details about the event:	kill truck was loading into frac tank but was pulling off frac tank and overloaded tank on kill truck.

Spill Calculation - Subsurface Spill - Rectangle

Was the release on pad or off-pad?	See reference table below
Has it rained at least a half inch in the last 24 hours?	See reference table below

Convert Irregular shape into a series of rectangles	Length (ft.)	Width (ft.)	Depth (in.)	Soil Spilled-Fluid Saturation	Estimated volume of each area (bbl.)	Total Estimated Volume of Spill (bbl.)
Rectangle A	31.0	34.0	0.50	100.00%	7.817	7.817
Rectangle B	15.0	17.0	0.50	100.00%	1.891	1.891
Rectangle C					0.000	0.000
Rectangle D					0.000	0.000
Rectangle E					0.000	0.000
Rectangle F					0.000	0.000
Rectangle G					0.000	0.000
Rectangle H					0.000	0.000
Rectangle I					0.000	0.000
Rectangle J					0.000	0.000
					Total Volume Release:	9.708

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 170162

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 170162
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	None	12/27/2022

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2236140625
District RP	
Facility ID	fAPP2204045537
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	>100 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☐ Yes ☒ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: ***Each of the following items must be included in the report.***

☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
☒ Field data
☒ Data table of soil contaminant concentration data
☒ Depth to water determination
☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
☒ Boring or excavation logs
☒ Photographs including date and GIS information
☒ Topographic/Aerial maps
☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2236140625
District RP	
Facility ID	fAPP2204045537
Application ID	

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.

Printed Name: ___Jacob Laird_____ Title: _Environmental Engineer_____

Signature: Jacob Laird Date: __6/1/2022_____

email: __Jacob.Laird@Conocophillips.com_____ Telephone: ___575-703-5482_____

OCD Only

Received by: _____ Date: _____

Form C-141
Page 6

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2236140625
District RP	
Facility ID	fAPP2204045537
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: Jacob Laird Title: Environmental Engineer

Signature: Jacob Laird Date: 6/1/2023

email: Jacob.Laird@Conocophillips.com Telephone: 575-703-5482

OCD Only

Received by: _____ Date: _____

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: Nelson Velez Date: 08/18/2023

Printed Name: Nelson Velez Title: Environmental Specialist - Adv

District I
1625 N. French Dr., Hobbs, NM 88240
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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 222592

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 222592
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	8/18/2023