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May 2, 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
Wild Cobra 1 State 002H
Incident Number NAPP2233946889
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 site assessment, excavation, and soil sampling activities performed at the Wild Cobra 1 State 002H (Site). The purpose of the site assessment, excavation, and soil sampling activities was to address impacts to soil resulting from a crude oil flare fire at the Site. Based on field observations, field screening activities, and laboratory analytical results from the soil sampling events, COG is submitting this *Closure Request*, describing remediation that has occurred and requesting closure for Incident Number NAPP2233946889.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit E, Section 01, Township 19 South, Range 34 East, in Lea County, New Mexico (32.69158°, -103.52103°) and is associated with oil and gas exploration and production operations on New Mexico State Land.

On November 30, 2022, excess pressure to a heater treater from a closed casing valve, resulted in crude oil being sent to the flare. The released crude oil ignited and extinguished itself after reaching the ground. The fire affected the well pad beneath the flare and the adjacent pasture. The released volume was estimated to be approximately 1.6 barrels (bbls) of crude oil. No released fluids were recovered. COG reported the release immediately to the New Mexico Oil Conservation Division (NMOCD) via email on November 30, 2022 and submitted a Release Notification Form C-141 (Form C-141) on December 5, 2022. The release was assigned Incident Number NAPP2233946889.

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, (19.15.29.12) 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 between 51 and 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater is New Mexico Office of the State Engineer (NMOSE) well L-10380, located approximately 0.6 miles south of the Site. The groundwater well has a reported depth to groundwater of 100 feet bgs

and a total depth of 153 feet bgs. Ground surface elevation at the groundwater well location is 3,250 feet above mean sea level (amsl), which is approximately 2 feet higher in elevation than the Site. All wells used for depth to groundwater determination are depicted on Figure 1 and the associated well records are included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is a stream, located approximately 1,048 feet south 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: 10,000 mg/kg

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

DELINEATION AND EXCAVATION ACTIVITIES

Between January 4, 2023 and March 6, 2023, Ensolum personnel were at the Site to oversee delineation and excavation activities based on visible staining in the release area and information provided on the C-141. Soil samples SS01 through SS04 were collected around the release extent at an approximate depth of 0.5 feet bgs to confirm the lateral extent of the release. Boreholes BH01 through BH05, were advanced via hand auger to a depth of 1-foot bgs within the release extent, to assess for the presence or absence of impacted soil resulting from the fire. Delineation soil samples were collected from each borehole at depths of 0.5 feet and 1-foot bgs. Soil from the delineation samples was field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. The release extent and soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are presented on Figure 2.

Upon completion of delineation activities, visibly stained soil from the fire was excavated to a depth of 0.5 feet bgs. Excavation activities were performed using a backhoe and transport vehicles. To direct excavation activities, soil was screened for VOCs and chloride. Photographic documentation of the excavation activities is included in Appendix C.

Following removal of the stained soil, 5-point composite soil samples were collected every 200 square feet from the floor of the excavations. 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 excavations, the sidewalls were incorporated into the floor samples. Composite soil samples FS01 through FS07 were collected from the floor of the excavations at a depth of 0.5 feet bgs. The excavation extent and excavation soil sample locations are presented on Figure 2.

The delineation and excavation 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 (COC): 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

Laboratory analytical results for soil samples SS01 through SS04 and delineation samples collected from boreholes BH01 through BH05 indicated all COC concentrations were compliant with the most stringent Table I Closure Criteria and successfully defined the lateral extents of the release. Laboratory analytical results for excavation floor samples FS01 through FS05 and FS07 indicated all COC concentrations were compliant with the most stringent Table 1 Closure Criteria. Laboratory analytical results for floor sample FS06 indicated the TPH concentration was compliant with the Site Closure Criteria, but exceeded the most stringent Table I Closure Criteria. Additional soil was removed from the area around floor sample FS06 and subsequent floor sample FS06A, collected at 0.75 feet bgs, was 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 D.

The excavation area measured approximately 1,195 square feet. A total of 31 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 November 30, 2022, crude oil flare fire. Laboratory analytical results for the excavation soil samples, collected from the final excavation extent, indicated all COC were compliant with the most stringent Table I Closure Criteria. Based on the soil sample analytical results, no further remediation was required.

Excavation of impacted soil has mitigated impacts at this Site. Depth to groundwater has been determined to be between 51 to 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 NAPP2233946889.

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

Sincerely,
Ensolum, LLC

Hadlie Green
Project Manager

Aimee Cole
Senior Managing Scientist

cc: Jacob Laird, COG Operating, LLC
New Mexico State Land Office

Appendices:

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

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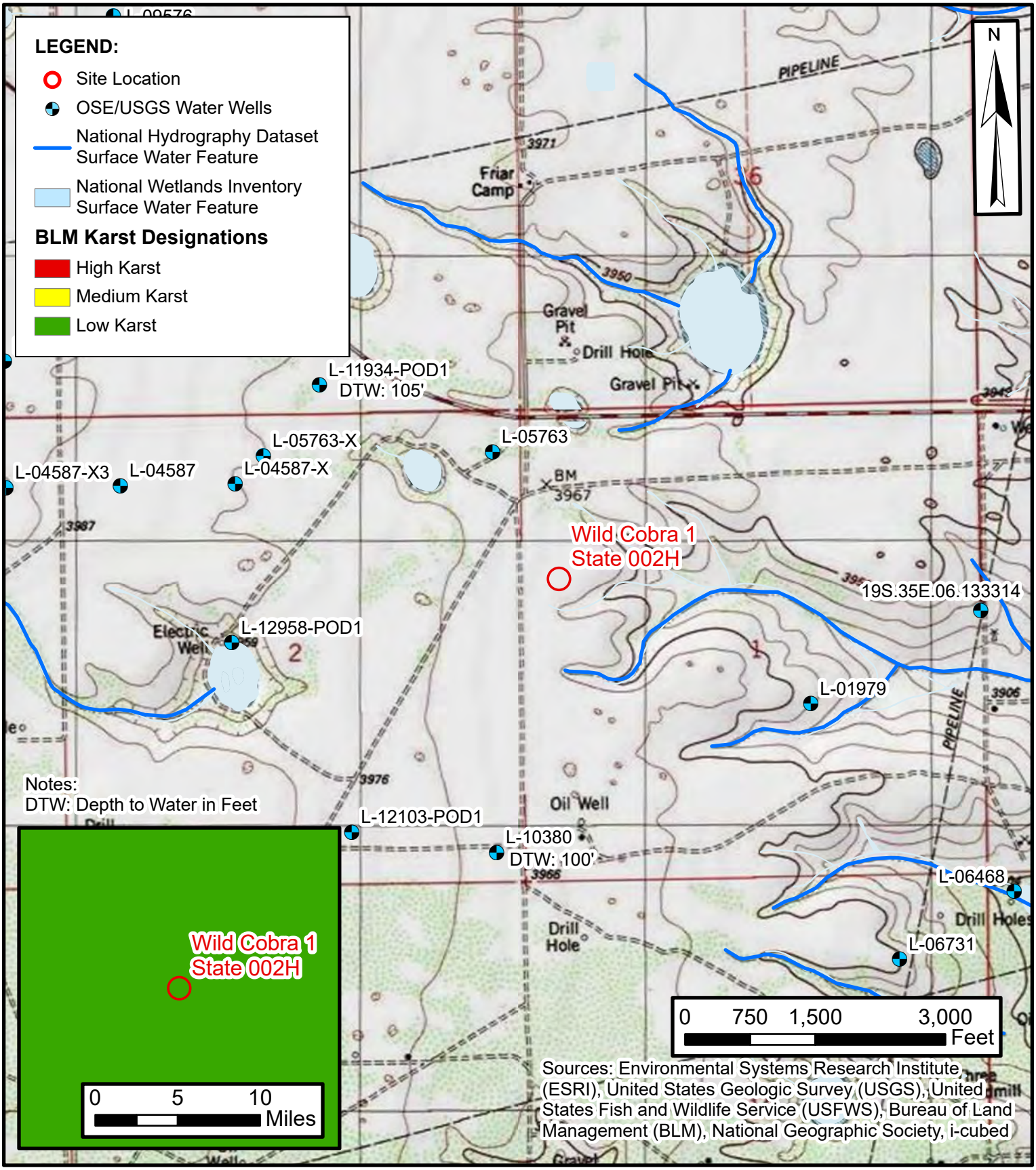
FIGURES



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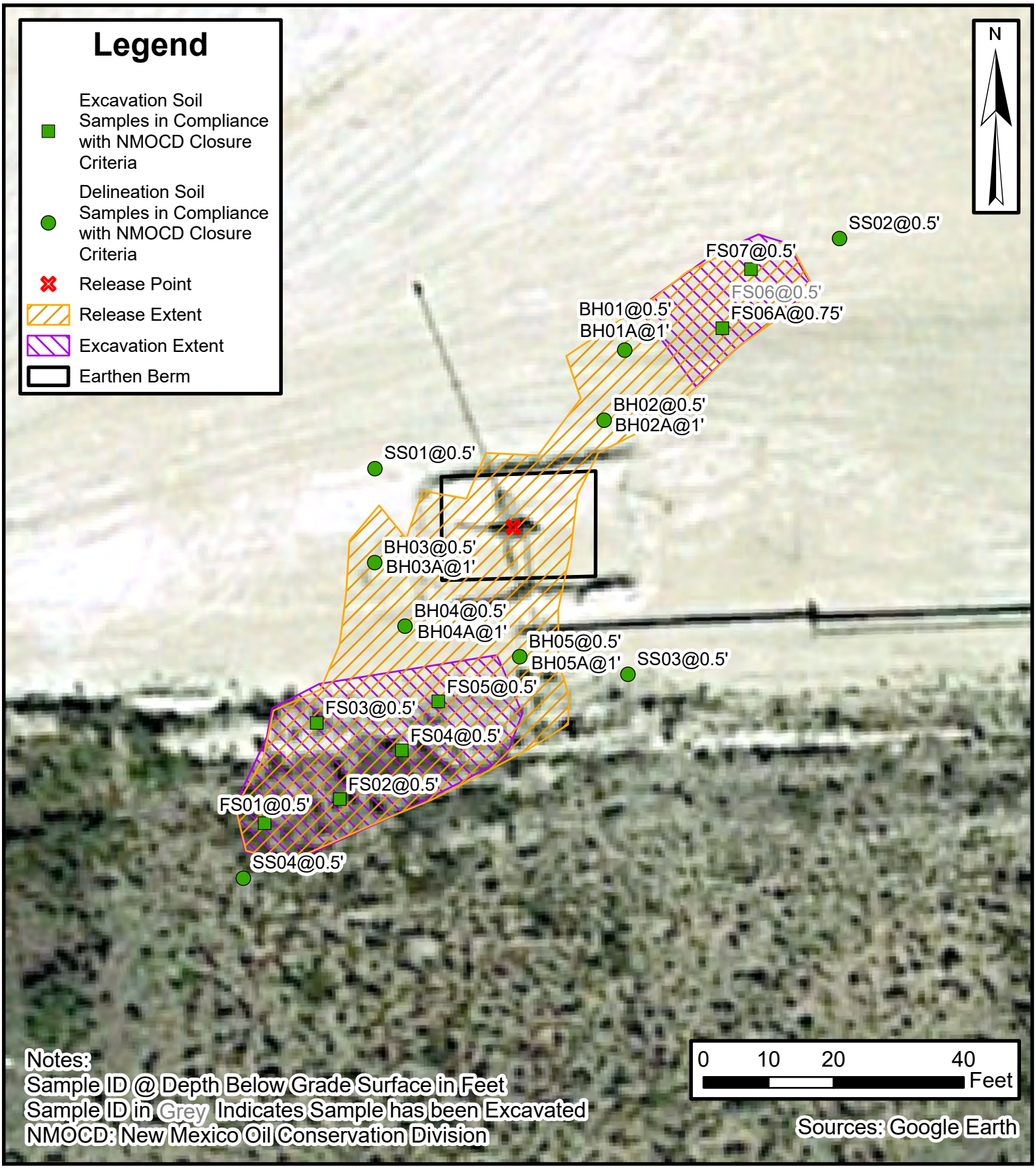
Environmental, Engineering and Hydrogeologic Consultants

SITE RECEPTOR MAP

COG Operating, LLC
Wild Cobra 1 State 002H
Incident Number: NAPP2233946889
Unit E, Sec 01, T19S, R34E
Lea County, New Mexico

FIGURE
1



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Soil Sample Locations

COG Operating, LLC
Wild Cobra 1 State 002H
Incident Number: NAPP2233946889
Unit E, Sec 01, T19S, R34E
Lea County, New Mexico

FIGURE
2

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TABLES

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Wild Cobra 1 State 002H
COG Operating, LLC
Lea County, New Mexico

Sample Designation	Sample Date	Sample 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**	**10,000**
Delineation Soil Samples										
SS01	03/06/2023	0.5	<0.00199	0.0241	<49.9	<49.9	<49.9	<49.9	<49.9	158
SS02	03/06/2023	0.5	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	155
SS03	03/06/2023	0.5	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	45.6
SS04*	03/06/2023	0.5	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	<49.9	53.2
BH01	03/06/2023	0.5	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	39.8
BH01A	03/06/2023	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	67.1
BH02	03/06/2023	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	36.7
BH02A	03/06/2023	1	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	66.6
BH03	03/06/2023	0.5	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	50.5
BH03A	03/06/2023	1	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	119
BH04	03/06/2023	0.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	147
BH04A	03/06/2023	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	103
BH05	03/06/2023	0.5	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	120
BH05A	03/06/2023	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	116
Excavation Soil Samples										
FS01*	01/04/2023	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	95.9
FS02*	01/04/2023	0.5	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	92.8
FS03*	01/04/2023	0.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	70.8
FS04*	01/04/2023	0.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	95.6
FS05	01/04/2023	0.5	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	96.3
FS06	01/04/2023	0.5	<0.00201	<0.00402	<50.0	419	330	419	**749**	91.4
FS06A	02/20/2023	0.75	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	11.4
FS07	01/04/2023	0.5	<0.00200	0.0121	<49.9	<49.9	<49.9	<49.9	<49.9	66.8

Notes:

bgs: below ground surface
mg/kg: milligrams per kilogram
NE: not established
NMAC: New Mexico Administrative Code
NMOCD: New Mexico Oil Conservation Division
BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes
GRO: Gasoline Range Organics
DRO: Diesel Range Organics
ORO: Oil Range Organics
TPH: Total Petroleum Hydrocarbon

*Concentrations in **bold** exceed the NMOCD Table I Closure Criteria or reclamation requirement where applicable.*

Grey text represents samples that have been excavated

** - indicates locations where the reclamation requirement was applied*

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APPENDIX A

Referenced Well Records

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	Twns	Rng	X	Y
	L 10380	4	4	4	02	19S	34E	638428	3617102*

Driller License:	46	**Driller Company:**	ABBOTT BROTHERS COMPANY		
Driller Name:	ABBOTT, MURREL				
Drill Start Date:	03/08/1994	**Drill Finish Date:**	03/11/1994	**Plug Date:**	
Log File Date:	03/16/1994	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:	5.50	**Depth Well:**	153 feet	**Depth Water:**	100 feet

Water Bearing Stratifications:	Top	Bottom	Description
	100	153	Other/Unknown

Casing Perforations:	Top	Bottom
	78	153

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

USGS 324107103301101 19S.35E.06.123314

Lea County, New Mexico
Latitude 32°41'25", Longitude 103°30'17" NAD27
Land-surface elevation 3,922.00 feet above NGVD29
The depth of the well is 130 feet below land surface.
This well is completed in the High Plains aquifer (N100HGHPLN) national aquifer.
This well is completed in the Ogallala Formation (121OGLL) 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
1961-03-09		D	62610		3860.19	NGVD29	1	Z			A
1961-03-09		D	62611		3861.82	NAVD88	1	Z			A
1961-03-09		D	72019	61.81			1	Z			A
1966-02-08		D	62610		3859.94	NGVD29	1	Z			A
1966-02-08		D	62611		3861.57	NAVD88	1	Z			A
1966-02-08		D	72019	62.06			1	Z			A
1971-01-26		D	62610		3860.28	NGVD29	P	Z			A
1971-01-26		D	62611		3861.91	NAVD88	P	Z			A
1971-01-26		D	72019	61.72			P	Z			A
1976-02-12		D	62610		3861.34	NGVD29	1	Z			A
1976-02-12		D	62611		3862.97	NAVD88	1	Z			A
1976-02-12		D	72019	60.66			1	Z			A
1981-01-28		D	62610		3860.73	NGVD29	1	Z			A
1981-01-28		D	62611		3862.36	NAVD88	1	Z			A
1981-01-28		D	72019	61.27			1	Z			A
1986-02-04		D	62610		3860.60	NGVD29	1	Z			A
1986-02-04		D	62611		3862.23	NAVD88	1	Z			A
1986-02-04		D	72019	61.40			1	Z			A
1991-04-16		D	62610		3860.46	NGVD29	1	Z			A
1991-04-16		D	62611		3862.09	NAVD88	1	Z			A
1991-04-16		D	72019	61.54			1	Z			A
1996-02-01		D	62610		3860.32	NGVD29	1	S			A
1996-02-01		D	62611		3861.95	NAVD88	1	S			A
1996-02-01		D	72019	61.68			1	S			A

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APPENDIX B

Lithologic Soil Sampling Logs

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	Sample Name: BH01	Date: 3/6/2023
	Site Name: Wild Cobra 1 State 002H	
	Incident Number: NAPP2233946889	
	Job Number: 03D2024126	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Peter Van Patten	Method: Hand Auger
Coordinates: 32.69158, -103.52103	Hole Diameter: 4"	Total Depth: 1'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
Dry	ND	1.6	N	BH01	0.5		CCHE	Caliche: off white, light pink, no stain, no odor
Dry	ND	2.6	N	BH01A	1	1	SP-SC	Sand: brown, light brown, medium to fine grain, poorly graded, non-plastic, non-cohesive, some small subround gravel, some caleche, no stain, no odor

TD @ 1 FOOT BGS

ENSOLUM

	Sample Name: BH02	Date: 3/6/2023
	Site Name: Wild Cobra 1 State 002H	
	Incident Number: NAPP2233946889	
	Job Number: 03D2024126	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Peter Van Patten	Method: Hand Auger
Coordinates: 32.69158, -103.52103	Hole Diameter: 4"	Total Depth: 1'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
Dry	ND	2.7	N	BH02	0.5		CCHE	Caliche: off white, light pink, no stain, no odor
Dry	ND	3.6	N	BH02A	1	1	SP-SC	Sand: brown, light brown, medium to fine grain, poorly graded, non-plastic, non-cohesive, some small subround gravel, some caleche, no stain, no odor

TD @ 1 FOOT BGS

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	Sample Name: BH03	Date: 3/6/2023
	Site Name: Wild Cobra 1 State 002H	
	Incident Number: NAPP2233946889	
	Job Number: 03D2024126	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Peter Van Patten	Method: Hand Auger
Coordinates: 32.69158, -103.52103	Hole Diameter: 4"	Total Depth: 1'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
Dry	ND	1.5	N	BH03	0.5		CCHE	Caliche: off white, light pink, no stain, no odor
Dry	ND	2.8	N	BH03A	1	1	SP-SC	Sand: brown, light brown, medium to fine grain, poorly graded, non-plastic, non-cohesive, some small subround gravel, some caleche, no stain, no odor

TD @ 1 FOOT BGS

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	Sample Name: BH04	Date: 3/6/2023
	Site Name: Wild Cobra 1 State 002H	
	Incident Number: NAPP2233946889	
	Job Number: 03D2024126	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Peter Van Patten	Method: Hand Auger
Coordinates: 32.69158, -103.52103	Hole Diameter: 4"	Total Depth: 1'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
Dry	ND	2.5	N	BH04	0.5		CCHE	Caliche: off white, light pink, no stain, no odor
Dry	ND	2.9	N	BH04A	1	1	SP-SC	Sand: brown, light brown, medium to fine grain, poorly graded, non-plastic, non-cohesive, some small subround gravel, some caleche, no stain, no odor

TD @ 1 FOOT BGS

ENSOLUM

	Sample Name: BH05	Date: 3/6/2023
	Site Name: Wild Cobra 1 State 002H	
	Incident Number: NAPP2233946889	
	Job Number: 03D2024126	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Peter Van Patten	Method: Hand Auger
Coordinates: 32.69158, -103.52103	Hole Diameter: 4"	Total Depth: 1'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. 40% correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
Dry	ND	2.5	N	BH05	0.5		CCHE	Caliche: off white, light pink, no stain, no odor
Dry	ND	2.4	N	BH05A	1	1	SP-SC	Sand: brown, light brown, medium to fine grain, poorly graded, non-plastic, non-cohesive, some small subround gravel, some caleche, no stain, no odor

TD @ 1 FOOT BGS

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APPENDIX C

Photographic Log

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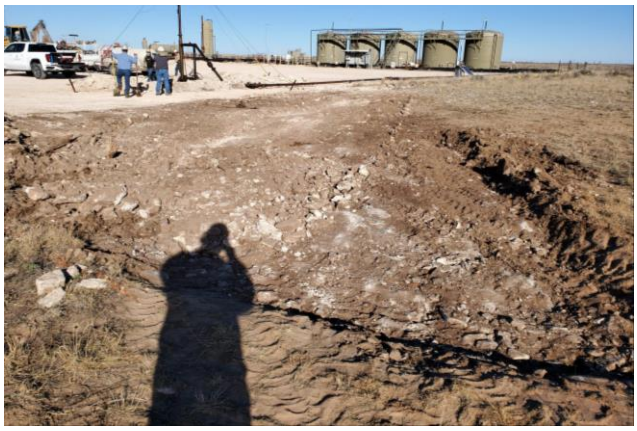
Photographic Log
COG Operating, LLC
Wild Cobra 1 State 002H
Incident Number NAPP2233946889

Photograph: 1 Date: 11/30/2022
Description: Soil staining in release footprint
View: South

Photograph: 2 Date: 12/20/2022
Description: Soil staining in pasture south of pad
View: Southeast

Photograph: 3 Date: 1/4/2023
Description: Excavation activities
View: South



Photograph: 4 Date: 1/4/2023
Description: Excavation activities
View: Northeast

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APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Josh Adams
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 1/13/2023 10:38:14 AM

JOB DESCRIPTION

Wild Cobra 1 State 2H
SDG NUMBER Lea

JOB NUMBER

890-3766-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

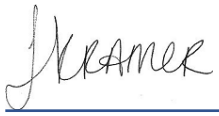
See page two for job notes and contact information.

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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1/13/2023 10:38:14 AM

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

Client: Ensolum
Project/Site: Wild Cobra 1 State 2H

Laboratory Job ID: 890-3766-1
SDG: Lea

Table of Contents

Definitions/Glossary

Client: Ensolum Job ID: 890-3766-1
Project/Site: Wild Cobra 1 State 2H SDG: Lea

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
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: Wild Cobra 1 State 2H

Job ID: 890-3766-1
SDG: Lea

Job ID: 890-3766-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3766-1

Receipt
The samples were received on 1/5/2023 10:30 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 5.0°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: FS01 (890-3766-1), FS02 (890-3766-2), FS03 (890-3766-3), FS04 (890-3766-4), FS05 (890-3766-5), FS06 (890-3766-6) and FS07 (890-3766-7).

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

GC Semi VOA
Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-43382 and analytical batch 880-43449 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-43411 and analytical batch 880-43621 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: Wild Cobra 1 State 2H

Job ID: 890-3766-1
SDG: Lea

Client Sample ID: FS01

Lab Sample ID: 890-3766-1
Matrix: Solid
Date Collected: 01/04/23 09:00
Date Received: 01/05/23 10:30
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		01/06/23 16:33	01/09/23 15:59	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/06/23 16:33	01/09/23 15:59	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/06/23 16:33	01/09/23 15:59	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		01/06/23 16:33	01/09/23 15:59	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/06/23 16:33	01/09/23 15:59	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/06/23 16:33	01/09/23 15:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*81*		*70 - 130*	*01/06/23 16:33*	*01/09/23 15:59*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*01/06/23 16:33*	*01/09/23 15:59*	*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			01/10/23 13:56	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			01/09/23 09:38	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		01/06/23 12:59	01/07/23 17:22	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/06/23 12:59	01/07/23 17:22	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/06/23 12:59	01/07/23 17:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*81*		*70 - 130*	*01/06/23 12:59*	*01/07/23 17:22*	*1*
o-Terphenyl	*83*		*70 - 130*	*01/06/23 12:59*	*01/07/23 17:22*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**95.9**		4.99		mg/Kg			01/12/23 22:52	1

Client Sample ID: FS02

Lab Sample ID: 890-3766-2
Matrix: Solid
Date Collected: 01/04/23 14:00
Date Received: 01/05/23 10:30
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		01/06/23 16:33	01/09/23 16:20	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/06/23 16:33	01/09/23 16:20	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/06/23 16:33	01/09/23 16:20	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		01/06/23 16:33	01/09/23 16:20	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/06/23 16:33	01/09/23 16:20	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		01/06/23 16:33	01/09/23 16:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*	*01/06/23 16:33*	*01/09/23 16:20*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Wild Cobra 1 State 2H

Job ID: 890-3766-1
SDG: Lea

Client Sample ID: FS02

Lab Sample ID: 890-3766-2
Matrix: Solid
Date Collected: 01/04/23 14:00
Date Received: 01/05/23 10:30
Sample Depth: 0.5'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*01/06/23 16:33*	*01/09/23 16:20*	*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			01/10/23 13:56	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			01/09/23 09:38	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		01/06/23 12:59	01/07/23 17:43	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/06/23 12:59	01/07/23 17:43	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/06/23 12:59	01/07/23 17:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*79*		*70 - 130*	*01/06/23 12:59*	*01/07/23 17:43*	*1*
o-Terphenyl	*80*		*70 - 130*	*01/06/23 12:59*	*01/07/23 17:43*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**92.8**		5.00	mg/Kg			01/12/23 22:58	1

Client Sample ID: FS03

Lab Sample ID: 890-3766-3
Matrix: Solid
Date Collected: 01/04/23 14:05
Date Received: 01/05/23 10:30
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		01/06/23 16:33	01/09/23 16:41	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/06/23 16:33	01/09/23 16:41	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/06/23 16:33	01/09/23 16:41	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/06/23 16:33	01/09/23 16:41	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/06/23 16:33	01/09/23 16:41	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/06/23 16:33	01/09/23 16:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*01/06/23 16:33*	*01/09/23 16:41*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*01/06/23 16:33*	*01/09/23 16:41*	*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			01/10/23 13:56	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			01/09/23 09:38	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: Wild Cobra 1 State 2H

Job ID: 890-3766-1
SDG: Lea

Client Sample ID: FS03

Lab Sample ID: 890-3766-3
Matrix: Solid
Date Collected: 01/04/23 14:05
Date Received: 01/05/23 10:30
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		01/06/23 12:59	01/07/23 18:04	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/06/23 12:59	01/07/23 18:04	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/06/23 12:59	01/07/23 18:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*80*		*70 - 130*	*01/06/23 12:59*	*01/07/23 18:04*	*1*
o-Terphenyl	*82*		*70 - 130*	*01/06/23 12:59*	*01/07/23 18:04*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**70.8**		5.04		mg/Kg			01/12/23 23:04	1

Client Sample ID: FS04

Lab Sample ID: 890-3766-4
Matrix: Solid
Date Collected: 01/04/23 14:10
Date Received: 01/05/23 10:30
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		01/06/23 16:33	01/09/23 17:01	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/06/23 16:33	01/09/23 17:01	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/06/23 16:33	01/09/23 17:01	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		01/06/23 16:33	01/09/23 17:01	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/06/23 16:33	01/09/23 17:01	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/06/23 16:33	01/09/23 17:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*01/06/23 16:33*	*01/09/23 17:01*	*1*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*	*01/06/23 16:33*	*01/09/23 17:01*	*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			01/10/23 13:56	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			01/09/23 09:38	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		01/06/23 12:59	01/07/23 18:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/06/23 12:59	01/07/23 18:24	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/06/23 12:59	01/07/23 18:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*78*		*70 - 130*	*01/06/23 12:59*	*01/07/23 18:24*	*1*
o-Terphenyl	*79*		*70 - 130*	*01/06/23 12:59*	*01/07/23 18:24*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Wild Cobra 1 State 2H

Job ID: 890-3766-1
SDG: Lea

Client Sample ID: FS04

Lab Sample ID: 890-3766-4
Matrix: Solid
Date Collected: 01/04/23 14:10
Date Received: 01/05/23 10:30
Sample Depth: 0.5'

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	95.6	F1	5.05		mg/Kg			01/12/23 09:58	1

Client Sample ID: FS05

Lab Sample ID: 890-3766-5
Matrix: Solid
Date Collected: 01/04/23 14:15
Date Received: 01/05/23 10:30
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		01/06/23 16:33	01/09/23 17:22	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/06/23 16:33	01/09/23 17:22	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/06/23 16:33	01/09/23 17:22	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		01/06/23 16:33	01/09/23 17:22	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/06/23 16:33	01/09/23 17:22	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		01/06/23 16:33	01/09/23 17:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*01/06/23 16:33*	*01/09/23 17:22*	*1*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*01/06/23 16:33*	*01/09/23 17:22*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			01/10/23 13:56	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			01/09/23 09:38	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		01/06/23 12:59	01/07/23 18:46	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/06/23 12:59	01/07/23 18:46	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/06/23 12:59	01/07/23 18:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*80*		*70 - 130*	*01/06/23 12:59*	*01/07/23 18:46*	*1*
o-Terphenyl	*81*		*70 - 130*	*01/06/23 12:59*	*01/07/23 18:46*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	96.3		4.97		mg/Kg			01/12/23 10:17	1

Client Sample Results

Client: Ensolum
Project/Site: Wild Cobra 1 State 2H

Job ID: 890-3766-1
SDG: Lea

Client Sample ID: FS06

Lab Sample ID: 890-3766-6
Matrix: Solid
Date Collected: 01/04/23 14:20
Date Received: 01/05/23 10:30
Sample Depth: 0.5'

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		01/06/23 16:33	01/09/23 17:42	1
Toluene	<0.00201	U	0.00201		mg/Kg		01/06/23 16:33	01/09/23 17:42	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		01/06/23 16:33	01/09/23 17:42	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		01/06/23 16:33	01/09/23 17:42	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		01/06/23 16:33	01/09/23 17:42	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		01/06/23 16:33	01/09/23 17:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*01/06/23 16:33*	*01/09/23 17:42*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*01/06/23 16:33*	*01/09/23 17:42*	*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			01/10/23 13:56	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**749**		50.0		mg/Kg			01/09/23 09:38	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		01/06/23 12:59	01/07/23 19:07	1
Diesel Range Organics (Over C10-C28)	**419**		50.0		mg/Kg		01/06/23 12:59	01/07/23 19:07	1
Oil Range Organics (Over C28-C36)	**330**		50.0		mg/Kg		01/06/23 12:59	01/07/23 19:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*78*		*70 - 130*	*01/06/23 12:59*	*01/07/23 19:07*	*1*
o-Terphenyl	*77*		*70 - 130*	*01/06/23 12:59*	*01/07/23 19:07*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**91.4**		5.00		mg/Kg			01/12/23 10:23	1

Client Sample ID: FS07

Lab Sample ID: 890-3766-7
Matrix: Solid
Date Collected: 01/04/23 14:25
Date Received: 01/05/23 10:30
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		01/06/23 16:33	01/09/23 18:03	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/06/23 16:33	01/09/23 18:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/06/23 16:33	01/09/23 18:03	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		01/06/23 16:33	01/09/23 18:03	1
o-Xylene	**0.0121**		0.00200		mg/Kg		01/06/23 16:33	01/09/23 18:03	1
Xylenes, Total	**0.0121**		0.00399		mg/Kg		01/06/23 16:33	01/09/23 18:03	1

Client Sample Results

Client: Ensolum
Project/Site: Wild Cobra 1 State 2H

Job ID: 890-3766-1
SDG: Lea

Client Sample ID: FS07

Date Collected: 01/04/23 14:25
Date Received: 01/05/23 10:30
Sample Depth: 0.5'

Lab Sample ID: 890-3766-7

Matrix: Solid

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*01/06/23 16:33*	*01/09/23 18:03*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*01/06/23 16:33*	*01/09/23 18:03*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0121**		0.00399	mg/Kg			01/10/23 13:56	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			01/09/23 09:38	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		01/06/23 12:59	01/07/23 19:27	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		01/06/23 12:59	01/07/23 19:27	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		01/06/23 12:59	01/07/23 19:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*90*		*70 - 130*	*01/06/23 12:59*	*01/07/23 19:27*	*1*
o-Terphenyl	*92*		*70 - 130*	*01/06/23 12:59*	*01/07/23 19:27*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**66.8**		4.98	mg/Kg			01/12/23 10:29	1

Surrogate Summary

Client: Ensolum
Project/Site: Wild Cobra 1 State 2H

Job ID: 890-3766-1
SDG: Lea

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)
820-7012-A-1-E MS	Matrix Spike	85	105
820-7012-A-1-F MSD	Matrix Spike Duplicate	97	98
890-3766-1	FS01	81	90
890-3766-2	FS02	91	96
890-3766-3	FS03	100	93
890-3766-4	FS04	108	84
890-3766-5	FS05	115	85
890-3766-6	FS06	102	100
890-3766-7	FS07	88	92
LCS 880-43439/1-A	Lab Control Sample	89	99
LCSD 880-43439/2-A	Lab Control Sample Dup	106	102
MB 880-43439/5-A	Method Blank	80	89

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)
820-7013-A-1-C MS	Matrix Spike	89	80
820-7013-A-1-D MSD	Matrix Spike Duplicate	89	81
890-3766-1	FS01	81	83
890-3766-2	FS02	79	80
890-3766-3	FS03	80	82
890-3766-4	FS04	78	79
890-3766-5	FS05	80	81
890-3766-6	FS06	78	77
890-3766-7	FS07	90	92
LCS 880-43382/2-A	Lab Control Sample	123	110
LCSD 880-43382/3-A	Lab Control Sample Dup	117	104
MB 880-43382/1-A	Method Blank	124	121

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Wild Cobra 1 State 2H

Job ID: 890-3766-1
SDG: Lea

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-43439/5-A
Matrix: Solid
Analysis Batch: 43469

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 43439

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/06/23 16:33	01/09/23 11:10	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/06/23 16:33	01/09/23 11:10	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/06/23 16:33	01/09/23 11:10	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/06/23 16:33	01/09/23 11:10	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/06/23 16:33	01/09/23 11:10	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/06/23 16:33	01/09/23 11:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*80*		*70 - 130*	*01/06/23 16:33*	*01/09/23 11:10*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*01/06/23 16:33*	*01/09/23 11:10*	*1*

Lab Sample ID: LCS 880-43439/1-A
Matrix: Solid
Analysis Batch: 43469

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 43439

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1002		mg/Kg		100	70 - 130		
Toluene			0.100	0.1030		mg/Kg		103	70 - 130		
Ethylbenzene			0.100	0.08917		mg/Kg		89	70 - 130		
m-Xylene & p-Xylene			0.200	0.1878		mg/Kg		94	70 - 130		
o-Xylene			0.100	0.1033		mg/Kg		103	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: LCSD 880-43439/2-A
Matrix: Solid
Analysis Batch: 43469

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 43439

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09637		mg/Kg		96	70 - 130	4	35
Toluene			0.100	0.1021		mg/Kg		102	70 - 130	1	35
Ethylbenzene			0.100	0.09727		mg/Kg		97	70 - 130	9	35
m-Xylene & p-Xylene			0.200	0.2121		mg/Kg		106	70 - 130	12	35
o-Xylene			0.100	0.1167		mg/Kg		117	70 - 130	12	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 820-7012-A-1-E MS
Matrix: Solid
Analysis Batch: 43469

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 43439

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00201	U	0.100	0.08667		mg/Kg		87	70 - 130		
Toluene	<0.00201	U	0.100	0.08297		mg/Kg		83	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: Wild Cobra 1 State 2H

Job ID: 890-3766-1
SDG: Lea

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

Lab Sample ID: 820-7012-A-1-E MS
Matrix: Solid
Analysis Batch: 43469

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 43439

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U	0.100	0.07032		mg/Kg		70	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1435		mg/Kg		72	70 - 130
o-Xylene	<0.00201	U	0.100	0.07855		mg/Kg		78	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: 820-7012-A-1-F MSD
Matrix: Solid
Analysis Batch: 43469

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 43439

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.0998	0.08281		mg/Kg		83	70 - 130	5	35
Toluene	<0.00201	U	0.0998	0.08463		mg/Kg		85	70 - 130	2	35
Ethylbenzene	<0.00201	U	0.0998	0.07402		mg/Kg		74	70 - 130	5	35
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1517		mg/Kg		76	70 - 130	6	35
o-Xylene	<0.00201	U	0.0998	0.08272		mg/Kg		83	70 - 130	5	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

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

Lab Sample ID: MB 880-43382/1-A
Matrix: Solid
Analysis Batch: 43449

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 43382

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		01/06/23 12:59	01/07/23 09:18	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/06/23 12:59	01/07/23 09:18	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/06/23 12:59	01/07/23 09:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*124*		*70 - 130*	*01/06/23 12:59*	*01/07/23 09:18*	*1*
o-Terphenyl	*121*		*70 - 130*	*01/06/23 12:59*	*01/07/23 09:18*	*1*

Lab Sample ID: LCS 880-43382/2-A
Matrix: Solid
Analysis Batch: 43449

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 43382

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10			1000	1076		mg/Kg		108	70 - 130
Diesel Range Organics (Over C10-C28)			1000	975.0		mg/Kg		98	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Wild Cobra 1 State 2H

Job ID: 890-3766-1
SDG: Lea

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

Lab Sample ID: LCS 880-43382/2-A
Matrix: Solid
Analysis Batch: 43449

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 43382

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	123		70 - 130
o-Terphenyl	110		70 - 130

Lab Sample ID: LCSD 880-43382/3-A
Matrix: Solid
Analysis Batch: 43449

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 43382

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	993.4		mg/Kg		99	70 - 130	8	20
Diesel Range Organics (Over C10-C28)			1000	910.2		mg/Kg		91	70 - 130	7	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	117		70 - 130
o-Terphenyl	104		70 - 130

Lab Sample ID: 820-7013-A-1-C MS
Matrix: Solid
Analysis Batch: 43449

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 43382

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	998	843.8		mg/Kg		82	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U F1	998	690.3	F1	mg/Kg		67	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	89		70 - 130
o-Terphenyl	80		70 - 130

Lab Sample ID: 820-7013-A-1-D MSD
Matrix: Solid
Analysis Batch: 43449

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 43382

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	997	845.6		mg/Kg		82	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<49.9	U F1	997	681.4	F1	mg/Kg		66	70 - 130	1	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	89		70 - 130
o-Terphenyl	81		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Wild Cobra 1 State 2H

Job ID: 890-3766-1
SDG: Lea

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-43411/1-A
Matrix: Solid
Analysis Batch: 43621

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			01/12/23 09:40	1

Lab Sample ID: LCS 880-43411/2-A
Matrix: Solid
Analysis Batch: 43621

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	273.9		mg/Kg		110	90 - 110		

Lab Sample ID: LCSD 880-43411/3-A
Matrix: Solid
Analysis Batch: 43621

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	273.8		mg/Kg		110	90 - 110	0	20

Lab Sample ID: 890-3766-4 MS
Matrix: Solid
Analysis Batch: 43621

Client Sample ID: FS04
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	95.6	F1	253	391.8	F1	mg/Kg		117	90 - 110		

Lab Sample ID: 890-3766-4 MSD
Matrix: Solid
Analysis Batch: 43621

Client Sample ID: FS04
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	95.6	F1	253	392.8	F1	mg/Kg		118	90 - 110	0	20

Lab Sample ID: MB 880-43412/1-A
Matrix: Solid
Analysis Batch: 43622

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			01/12/23 20:00	1

Lab Sample ID: LCS 880-43412/2-A
Matrix: Solid
Analysis Batch: 43622

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	269.5		mg/Kg		108	90 - 110		

Lab Sample ID: LCSD 880-43412/3-A
Matrix: Solid
Analysis Batch: 43622

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	271.4		mg/Kg		109	90 - 110	1	20

QC Sample Results

Client: Ensolum
Project/Site: Wild Cobra 1 State 2H

Job ID: 890-3766-1
SDG: Lea

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-3763-A-4-G MS
Matrix: Solid
Analysis Batch: 43622

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	4940		1240	6303		mg/Kg		110	90 - 110		

Lab Sample ID: 890-3763-A-4-H MSD
Matrix: Solid
Analysis Batch: 43622

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	4940		1240	6228		mg/Kg		104	90 - 110	1	20

QC Association Summary

Client: Ensolum
Project/Site: Wild Cobra 1 State 2H

Job ID: 890-3766-1
SDG: Lea

GC VOA

Prep Batch: 43439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3766-1	FS01	Total/NA	Solid	5035	
890-3766-2	FS02	Total/NA	Solid	5035	
890-3766-3	FS03	Total/NA	Solid	5035	
890-3766-4	FS04	Total/NA	Solid	5035	
890-3766-5	FS05	Total/NA	Solid	5035	
890-3766-6	FS06	Total/NA	Solid	5035	
890-3766-7	FS07	Total/NA	Solid	5035	
MB 880-43439/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-43439/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-43439/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
820-7012-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
820-7012-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 43469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3766-1	FS01	Total/NA	Solid	8021B	43439
890-3766-2	FS02	Total/NA	Solid	8021B	43439
890-3766-3	FS03	Total/NA	Solid	8021B	43439
890-3766-4	FS04	Total/NA	Solid	8021B	43439
890-3766-5	FS05	Total/NA	Solid	8021B	43439
890-3766-6	FS06	Total/NA	Solid	8021B	43439
890-3766-7	FS07	Total/NA	Solid	8021B	43439
MB 880-43439/5-A	Method Blank	Total/NA	Solid	8021B	43439
LCS 880-43439/1-A	Lab Control Sample	Total/NA	Solid	8021B	43439
LCSD 880-43439/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	43439
820-7012-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	43439
820-7012-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	43439

Analysis Batch: 43666

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3766-1	FS01	Total/NA	Solid	Total BTEX	
890-3766-2	FS02	Total/NA	Solid	Total BTEX	
890-3766-3	FS03	Total/NA	Solid	Total BTEX	
890-3766-4	FS04	Total/NA	Solid	Total BTEX	
890-3766-5	FS05	Total/NA	Solid	Total BTEX	
890-3766-6	FS06	Total/NA	Solid	Total BTEX	
890-3766-7	FS07	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 43382

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3766-1	FS01	Total/NA	Solid	8015NM Prep	
890-3766-2	FS02	Total/NA	Solid	8015NM Prep	
890-3766-3	FS03	Total/NA	Solid	8015NM Prep	
890-3766-4	FS04	Total/NA	Solid	8015NM Prep	
890-3766-5	FS05	Total/NA	Solid	8015NM Prep	
890-3766-6	FS06	Total/NA	Solid	8015NM Prep	
890-3766-7	FS07	Total/NA	Solid	8015NM Prep	
MB 880-43382/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-43382/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Ensolum
Project/Site: Wild Cobra 1 State 2H

Job ID: 890-3766-1
SDG: Lea

GC Semi VOA (Continued)

Prep Batch: 43382 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-43382/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
820-7013-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
820-7013-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 43449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3766-1	FS01	Total/NA	Solid	8015B NM	43382
890-3766-2	FS02	Total/NA	Solid	8015B NM	43382
890-3766-3	FS03	Total/NA	Solid	8015B NM	43382
890-3766-4	FS04	Total/NA	Solid	8015B NM	43382
890-3766-5	FS05	Total/NA	Solid	8015B NM	43382
890-3766-6	FS06	Total/NA	Solid	8015B NM	43382
890-3766-7	FS07	Total/NA	Solid	8015B NM	43382
MB 880-43382/1-A	Method Blank	Total/NA	Solid	8015B NM	43382
LCS 880-43382/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	43382
LCSD 880-43382/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	43382
820-7013-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	43382
820-7013-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	43382

Analysis Batch: 43490

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3766-1	FS01	Total/NA	Solid	8015 NM	
890-3766-2	FS02	Total/NA	Solid	8015 NM	
890-3766-3	FS03	Total/NA	Solid	8015 NM	
890-3766-4	FS04	Total/NA	Solid	8015 NM	
890-3766-5	FS05	Total/NA	Solid	8015 NM	
890-3766-6	FS06	Total/NA	Solid	8015 NM	
890-3766-7	FS07	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 43411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3766-4	FS04	Soluble	Solid	DI Leach	
890-3766-5	FS05	Soluble	Solid	DI Leach	
890-3766-6	FS06	Soluble	Solid	DI Leach	
890-3766-7	FS07	Soluble	Solid	DI Leach	
MB 880-43411/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-43411/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-43411/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3766-4 MS	FS04	Soluble	Solid	DI Leach	
890-3766-4 MSD	FS04	Soluble	Solid	DI Leach	

Leach Batch: 43412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3766-1	FS01	Soluble	Solid	DI Leach	
890-3766-2	FS02	Soluble	Solid	DI Leach	
890-3766-3	FS03	Soluble	Solid	DI Leach	
MB 880-43412/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-43412/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-43412/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: Ensolum
Project/Site: Wild Cobra 1 State 2H

Job ID: 890-3766-1
SDG: Lea

HPLC/IC (Continued)

Leach Batch: 43412 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3763-A-4-G MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3763-A-4-H MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 43621

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3766-4	FS04	Soluble	Solid	300.0	43411
890-3766-5	FS05	Soluble	Solid	300.0	43411
890-3766-6	FS06	Soluble	Solid	300.0	43411
890-3766-7	FS07	Soluble	Solid	300.0	43411
MB 880-43411/1-A	Method Blank	Soluble	Solid	300.0	43411
LCS 880-43411/2-A	Lab Control Sample	Soluble	Solid	300.0	43411
LCSD 880-43411/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	43411
890-3766-4 MS	FS04	Soluble	Solid	300.0	43411
890-3766-4 MSD	FS04	Soluble	Solid	300.0	43411

Analysis Batch: 43622

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3766-1	FS01	Soluble	Solid	300.0	43412
890-3766-2	FS02	Soluble	Solid	300.0	43412
890-3766-3	FS03	Soluble	Solid	300.0	43412
MB 880-43412/1-A	Method Blank	Soluble	Solid	300.0	43412
LCS 880-43412/2-A	Lab Control Sample	Soluble	Solid	300.0	43412
LCSD 880-43412/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	43412
890-3763-A-4-G MS	Matrix Spike	Soluble	Solid	300.0	43412
890-3763-A-4-H MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	43412

Lab Chronicle

Client: Ensolum
Job ID: 890-3766-1
Project/Site: Wild Cobra 1 State 2H
SDG: Lea

Client Sample ID: FS01
Lab Sample ID: 890-3766-1
Date Collected: 01/04/23 09:00
Matrix: Solid
Date Received: 01/05/23 10:30

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	43439	01/06/23 16:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43469	01/09/23 15:59	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			43666	01/10/23 13:56	AJ	EET MID
Total/NA	Analysis	8015 NM		1			43490	01/09/23 09:38	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	43382	01/06/23 12:59	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43449	01/07/23 17:22	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	43412	01/06/23 14:48	KS	EET MID
Soluble	Analysis	300.0		1			43622	01/12/23 22:52	CH	EET MID

Client Sample ID: FS02
Lab Sample ID: 890-3766-2
Date Collected: 01/04/23 14:00
Matrix: Solid
Date Received: 01/05/23 10:30

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	43439	01/06/23 16:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43469	01/09/23 16:20	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			43666	01/10/23 13:56	AJ	EET MID
Total/NA	Analysis	8015 NM		1			43490	01/09/23 09:38	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	43382	01/06/23 12:59	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43449	01/07/23 17:43	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	43412	01/06/23 14:48	KS	EET MID
Soluble	Analysis	300.0		1			43622	01/12/23 22:58	CH	EET MID

Client Sample ID: FS03
Lab Sample ID: 890-3766-3
Date Collected: 01/04/23 14:05
Matrix: Solid
Date Received: 01/05/23 10:30

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	43439	01/06/23 16:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43469	01/09/23 16:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			43666	01/10/23 13:56	AJ	EET MID
Total/NA	Analysis	8015 NM		1			43490	01/09/23 09:38	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	43382	01/06/23 12:59	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43449	01/07/23 18:04	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	43412	01/06/23 14:48	KS	EET MID
Soluble	Analysis	300.0		1			43622	01/12/23 23:04	CH	EET MID

Client Sample ID: FS04
Lab Sample ID: 890-3766-4
Date Collected: 01/04/23 14:10
Matrix: Solid
Date Received: 01/05/23 10:30

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	43439	01/06/23 16:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43469	01/09/23 17:01	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			43666	01/10/23 13:56	AJ	EET MID

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Lab Chronicle

Client: Ensolum
Job ID: 890-3766-1
Project/Site: Wild Cobra 1 State 2H
SDG: Lea

Client Sample ID: FS04
Lab Sample ID: 890-3766-4
Date Collected: 01/04/23 14:10
Matrix: Solid
Date Received: 01/05/23 10:30

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			43490	01/09/23 09:38	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	43382	01/06/23 12:59	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43449	01/07/23 18:24	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	43411	01/06/23 14:47	KS	EET MID
Soluble	Analysis	300.0		1			43621	01/12/23 09:58	CH	EET MID

Client Sample ID: FS05
Lab Sample ID: 890-3766-5
Date Collected: 01/04/23 14:15
Matrix: Solid
Date Received: 01/05/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	43439	01/06/23 16:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43469	01/09/23 17:22	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			43666	01/10/23 13:56	AJ	EET MID
Total/NA	Analysis	8015 NM		1			43490	01/09/23 09:38	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	43382	01/06/23 12:59	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43449	01/07/23 18:46	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	43411	01/06/23 14:47	KS	EET MID
Soluble	Analysis	300.0		1			43621	01/12/23 10:17	CH	EET MID

Client Sample ID: FS06
Lab Sample ID: 890-3766-6
Date Collected: 01/04/23 14:20
Matrix: Solid
Date Received: 01/05/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	43439	01/06/23 16:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43469	01/09/23 17:42	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			43666	01/10/23 13:56	AJ	EET MID
Total/NA	Analysis	8015 NM		1			43490	01/09/23 09:38	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	43382	01/06/23 12:59	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43449	01/07/23 19:07	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	43411	01/06/23 14:47	KS	EET MID
Soluble	Analysis	300.0		1			43621	01/12/23 10:23	CH	EET MID

Client Sample ID: FS07
Lab Sample ID: 890-3766-7
Date Collected: 01/04/23 14:25
Matrix: Solid
Date Received: 01/05/23 10:30

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	43439	01/06/23 16:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43469	01/09/23 18:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			43666	01/10/23 13:56	AJ	EET MID
Total/NA	Analysis	8015 NM		1			43490	01/09/23 09:38	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	43382	01/06/23 12:59	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43449	01/07/23 19:27	SM	EET MID

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Lab Chronicle

Client: Ensolum
Job ID: 890-3766-1
Project/Site: Wild Cobra 1 State 2H
SDG: Lea

Client Sample ID: FS07
Lab Sample ID: 890-3766-7
Date Collected: 01/04/23 14:25
Matrix: Solid
Date Received: 01/05/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	43411	01/06/23 14:47	KS	EET MID
Soluble	Analysis	300.0		1			43621	01/12/23 10:29	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
Job ID: 890-3766-1
Project/Site: Wild Cobra 1 State 2H
SDG: Lea

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 Job ID: 890-3766-1
Project/Site: Wild Cobra 1 State 2H SDG: Lea

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: Wild Cobra 1 State 2H

Job ID: 890-3766-1
SDG: Lea

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3766-1	FS01	Solid	01/04/23 09:00	01/05/23 10:30	0.5'
890-3766-2	FS02	Solid	01/04/23 14:00	01/05/23 10:30	0.5'
890-3766-3	FS03	Solid	01/04/23 14:05	01/05/23 10:30	0.5'
890-3766-4	FS04	Solid	01/04/23 14:10	01/05/23 10:30	0.5'
890-3766-5	FS05	Solid	01/04/23 14:15	01/05/23 10:30	0.5'
890-3766-6	FS06	Solid	01/04/23 14:20	01/05/23 10:30	0.5'
890-3766-7	FS07	Solid	01/04/23 14:25	01/05/23 10:30	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: _____

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Project Manager:	Josh Adams	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:	303-517-8437	Email:	kjennings@ensolum.com, jadams@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:	Wild Cobra 1 State 2H	Turn Around	
Project Number:	03D2024126	☑ Routine ☐ Rush	
Project Location:	Lea	Due Date:	
Sampler's Name:	Peter Van Patten	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:	TAM-007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	5.2
Total Containers:		Corrected Temperature:	5.0

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

890-3766 Chain of Custody

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)	Sample Comments
FS01	Soil	1/4/2023	900	0.5'	Comp	1	x	x	x	
FS02	Soil	1/4/2023	1400	0.5'	Comp	1	x	x	x	
FS03	Soil	1/4/2023	1405	0.5'	Comp	1	x	x	x	
FS04	Soil	1/4/2023	1410	0.5'	Comp	1	x	x	x	
FS05	Soil	1/4/2023	1415	0.5'	Comp	1	x	x	x	
FS06	Soil	1/4/2023	1420	0.5'	Comp	1	x	x	x	
FS07	Soil	1/4/2023	1425	0.5'	Comp	1	x	x	x	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr 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 Peter Van Patten	Angela Sluty	1-5-23 1030	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3766-1
SDG Number: Lea

Login Number: 3766
List Number: 1
Creator: Stutzman, Amanda

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: 890-3766-1
SDG Number: Lea

Login Number: 3766
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 01/06/23 11:27 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: Josh Adams
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 2/9/2023 9:08:25 AM

JOB DESCRIPTION

Wild Cobra 1 State 002H
SDG NUMBER 03D2057048

JOB NUMBER

890-4011-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

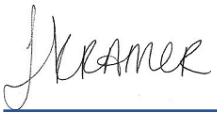
See page two for job notes and contact information.

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

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Laboratory Job ID: 890-4011-1
SDG: 03D2057048

Table of Contents

Definitions/Glossary

Client: Ensolum Job ID: 890-4011-1
Project/Site: Wild Cobra 1 State 002H SDG: 03D2057048

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4011-1
SDG: 03D2057048

Job ID: 890-4011-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-4011-1

Receipt
The sample was received on 2/2/2023 4:28 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.0°C

Receipt Exceptions
The following sample was received and analyzed from an unpreserved bulk soil jar: FS06A (890-4011-1).

The following sample was received and analyzed from an unpreserved bulk soil jar: FS06A (890-4011-1).

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-45694 and analytical batch 880-45648 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: FS06A (890-4011-1). 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.

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

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

Client Sample Results

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4011-1
SDG: 03D2057048

Client Sample ID: FS06A

Date Collected: 02/01/23 08:50
Date Received: 02/02/23 16:28
Sample Depth: 0.5

Lab Sample ID: 890-4011-1

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		02/07/23 12:47	02/08/23 04:33	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/07/23 12:47	02/08/23 04:33	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/07/23 12:47	02/08/23 04:33	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/07/23 12:47	02/08/23 04:33	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/07/23 12:47	02/08/23 04:33	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/07/23 12:47	02/08/23 04:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*81*		*70 - 130*	*02/07/23 12:47*	*02/08/23 04:33*	*1*
1,4-Difluorobenzene (Surr)	*68*	*S1-*	*70 - 130*	*02/07/23 12:47*	*02/08/23 04:33*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			02/08/23 11:08	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**187**		49.9		mg/Kg			02/09/23 09:48	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/07/23 15:44	02/08/23 18:45	1
Diesel Range Organics (Over C10-C28)	**187**		49.9		mg/Kg		02/07/23 15:44	02/08/23 18:45	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/07/23 15:44	02/08/23 18:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*02/07/23 15:44*	*02/08/23 18:45*	*1*
o-Terphenyl	*95*		*70 - 130*	*02/07/23 15:44*	*02/08/23 18:45*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**277**		5.03		mg/Kg			02/06/23 13:51	1

Surrogate Summary

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4011-1
SDG: 03D2057048

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)
880-24368-A-1-G MS	Matrix Spike	62 S1-	99
880-24368-A-1-H MSD	Matrix Spike Duplicate	68 S1-	81
890-4011-1	FS06A	81	68 S1-
LCS 880-45694/1-A	Lab Control Sample	113	87
LCSD 880-45694/2-A	Lab Control Sample Dup	85	108
MB 880-45604/5-A	Method Blank	74	93
MB 880-45694/5-A	Method Blank	76	94

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)
890-3997-A-1-E MS	Matrix Spike	98	99
890-3997-A-1-F MSD	Matrix Spike Duplicate	97	97
890-4011-1	FS06A	91	95
LCS 880-45707/2-A	Lab Control Sample	100	108
LCSD 880-45707/3-A	Lab Control Sample Dup	101	109
MB 880-45707/1-A	Method Blank	113	126

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4011-1
SDG: 03D2057048

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-45604/5-A
Matrix: Solid
Analysis Batch: 45648

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 45604

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/06/23 13:13	02/07/23 10:58	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/06/23 13:13	02/07/23 10:58	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/06/23 13:13	02/07/23 10:58	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/06/23 13:13	02/07/23 10:58	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/06/23 13:13	02/07/23 10:58	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/06/23 13:13	02/07/23 10:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*74*		*70 - 130*	*02/06/23 13:13*	*02/07/23 10:58*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*02/06/23 13:13*	*02/07/23 10:58*	*1*

Lab Sample ID: MB 880-45694/5-A
Matrix: Solid
Analysis Batch: 45648

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 45694

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/07/23 12:47	02/07/23 22:42	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/07/23 12:47	02/07/23 22:42	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/07/23 12:47	02/07/23 22:42	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/07/23 12:47	02/07/23 22:42	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/07/23 12:47	02/07/23 22:42	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/07/23 12:47	02/07/23 22:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*76*		*70 - 130*	*02/07/23 12:47*	*02/07/23 22:42*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*02/07/23 12:47*	*02/07/23 22:42*	*1*

Lab Sample ID: LCS 880-45694/1-A
Matrix: Solid
Analysis Batch: 45648

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 45694

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09645		mg/Kg		96	70 - 130		
Toluene			0.100	0.09813		mg/Kg		98	70 - 130		
Ethylbenzene			0.100	0.09878		mg/Kg		99	70 - 130		
m-Xylene & p-Xylene			0.200	0.2143		mg/Kg		107	70 - 130		
o-Xylene			0.100	0.1073		mg/Kg		107	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*

Lab Sample ID: LCSD 880-45694/2-A
Matrix: Solid
Analysis Batch: 45648

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 45694

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1154		mg/Kg		115	70 - 130	18	35

QC Sample Results

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4011-1
SDG: 03D2057048

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

Lab Sample ID: LCSD 880-45694/2-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 45648 — **Prep Batch: 45694**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.09911		mg/Kg		99	70 - 130	1	35
Ethylbenzene			0.100	0.08932		mg/Kg		89	70 - 130	10	35
m-Xylene & p-Xylene			0.200	0.1768		mg/Kg		88	70 - 130	19	35
o-Xylene			0.100	0.08738		mg/Kg		87	70 - 130	20	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

Lab Sample ID: 880-24368-A-1-G MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 45648 — **Prep Batch: 45694**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U F2 F1	0.101	0.05813	F1	mg/Kg		58	70 - 130
Toluene	<0.00202	U F2 F1	0.101	0.04554	F1	mg/Kg		45	70 - 130
Ethylbenzene	<0.00202	U F2 F1	0.101	0.04571	F1	mg/Kg		45	70 - 130
m-Xylene & p-Xylene	<0.00403	U F2 F1	0.202	0.07871	F1	mg/Kg		39	70 - 130
o-Xylene	<0.00202	U F1	0.101	0.04457	F1	mg/Kg		44	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*62*	*S1-*	*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: 880-24368-A-1-H MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 45648 — **Prep Batch: 45694**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U F2 F1	0.0990	0.03472	F2 F1	mg/Kg		35	70 - 130	50	35
Toluene	<0.00202	U F2 F1	0.0990	0.02843	F2 F1	mg/Kg		29	70 - 130	46	35
Ethylbenzene	<0.00202	U F2 F1	0.0990	0.02963	F2 F1	mg/Kg		30	70 - 130	43	35
m-Xylene & p-Xylene	<0.00403	U F2 F1	0.198	0.05305	F2 F1	mg/Kg		27	70 - 130	39	35
o-Xylene	<0.00202	U F1	0.0990	0.03146	F1	mg/Kg		32	70 - 130	35	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*68*	*S1-*	*70 - 130*
1,4-Difluorobenzene (Surr)	*81*		*70 - 130*

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

Lab Sample ID: MB 880-45707/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 45735 — **Prep Batch: 45707**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/07/23 15:44	02/08/23 08:16	1

QC Sample Results

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4011-1
SDG: 03D2057048

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

Lab Sample ID: MB 880-45707/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 45735 — **Prep Batch: 45707**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/07/23 15:44	02/08/23 08:16	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/07/23 15:44	02/08/23 08:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*02/07/23 15:44*	*02/08/23 08:16*	*1*
o-Terphenyl	*126*		*70 - 130*	*02/07/23 15:44*	*02/08/23 08:16*	*1*

Lab Sample ID: LCS 880-45707/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 45735 — **Prep Batch: 45707**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	734.3		mg/Kg		73	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	849.1		mg/Kg		85	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*100*		*70 - 130*
o-Terphenyl	*108*		*70 - 130*

Lab Sample ID: LCSD 880-45707/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 45735 — **Prep Batch: 45707**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	793.5		mg/Kg		79	70 - 130	8	20
Diesel Range Organics (Over C10-C28)			1000	927.1		mg/Kg		93	70 - 130	9	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*101*		*70 - 130*
o-Terphenyl	*109*		*70 - 130*

Lab Sample ID: 890-3997-A-1-E MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 45735 — **Prep Batch: 45707**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	998	934.5		mg/Kg		92	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	998	968.9		mg/Kg		97	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*98*		*70 - 130*
o-Terphenyl	*99*		*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4011-1
SDG: 03D2057048

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

Lab Sample ID: 890-3997-A-1-F MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 45735 — **Prep Batch: 45707**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	999	933.9		mg/Kg		92	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<50.0	U	999	954.9		mg/Kg		96	70 - 130	1	20

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

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-45571/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 45597

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			02/06/23 13:37	1

Lab Sample ID: LCS 880-45571/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 45597

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	256.8		mg/Kg		103	90 - 110		

Lab Sample ID: LCSD 880-45571/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 45597

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	257.2		mg/Kg		103	90 - 110	0	20

Lab Sample ID: 890-4011-1 MS — **Client Sample ID: FS06A**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 45597

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	277		252	525.1		mg/Kg		99	90 - 110		

Lab Sample ID: 890-4011-1 MSD — **Client Sample ID: FS06A**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 45597

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	277		252	527.7		mg/Kg		100	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4011-1
SDG: 03D2057048

GC VOA

Prep Batch: 45604

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-45604/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 45648

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4011-1	FS06A	Total/NA	Solid	8021B	45694
MB 880-45604/5-A	Method Blank	Total/NA	Solid	8021B	45604
MB 880-45694/5-A	Method Blank	Total/NA	Solid	8021B	45694
LCS 880-45694/1-A	Lab Control Sample	Total/NA	Solid	8021B	45694
LCSD 880-45694/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	45694
880-24368-A-1-G MS	Matrix Spike	Total/NA	Solid	8021B	45694
880-24368-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	45694

Prep Batch: 45694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4011-1	FS06A	Total/NA	Solid	5035	
MB 880-45694/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-45694/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-45694/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-24368-A-1-G MS	Matrix Spike	Total/NA	Solid	5035	
880-24368-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 45774

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4011-1	FS06A	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 45707

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4011-1	FS06A	Total/NA	Solid	8015NM Prep	
MB 880-45707/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-45707/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-45707/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3997-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3997-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 45735

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4011-1	FS06A	Total/NA	Solid	8015B NM	45707
MB 880-45707/1-A	Method Blank	Total/NA	Solid	8015B NM	45707
LCS 880-45707/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	45707
LCSD 880-45707/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	45707
890-3997-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	45707
890-3997-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	45707

Analysis Batch: 45871

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4011-1	FS06A	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4011-1
SDG: 03D2057048

HPLC/IC

Leach Batch: 45571

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4011-1	FS06A	Soluble	Solid	DI Leach	
MB 880-45571/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-45571/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-45571/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4011-1 MS	FS06A	Soluble	Solid	DI Leach	
890-4011-1 MSD	FS06A	Soluble	Solid	DI Leach	

Analysis Batch: 45597

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4011-1	FS06A	Soluble	Solid	300.0	45571
MB 880-45571/1-A	Method Blank	Soluble	Solid	300.0	45571
LCS 880-45571/2-A	Lab Control Sample	Soluble	Solid	300.0	45571
LCSD 880-45571/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	45571
890-4011-1 MS	FS06A	Soluble	Solid	300.0	45571
890-4011-1 MSD	FS06A	Soluble	Solid	300.0	45571

Lab Chronicle

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4011-1
SDG: 03D2057048

Client Sample ID: FS06A

Date Collected: 02/01/23 08:50
Date Received: 02/02/23 16:28

Lab Sample ID: 890-4011-1

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	45694	02/07/23 12:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	45648	02/08/23 04:33	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			45774	02/08/23 11:08	AJ	EET MID
Total/NA	Analysis	8015 NM		1			45871	02/09/23 09:48	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	45707	02/07/23 15:44	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	45735	02/08/23 18:45	AJ	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	45571	02/06/23 10:56	KS	EET MID
Soluble	Analysis	300.0		1			45597	02/06/23 13:51	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: Wild Cobra 1 State 002H

Job ID: 890-4011-1
SDG: 03D2057048

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: Wild Cobra 1 State 002H

Job ID: 890-4011-1
SDG: 03D2057048

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

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4011-1
SDG: 03D2057048

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-4011-1	FS06A	Solid	02/01/23 08:50	02/02/23 16:28	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: _____

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Project Manager:	Josh Adams	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:	303-517-8437	Email:	kjennings@ensolum.com, jadams@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:	Wild Cobra 1 State 002H	**Turn Around**	
Project Number:	03D2024126	☐ Routine ☑ Rush	
Project Location:	Lea	Due Date:	3 day
Sampler's Name:	Peter Van Patten	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:	WM007
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	4.2
Total Containers:		Corrected Temperature:	4.0

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
FS06A	Soil	2/1/2023	850	0.5'	Comp	1		x	x	x	

890-4011 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 Peter Van Patten	Ace Alp 2.2.23	CRC 1628 1428	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4011-1
SDG Number: 03D2057048

Login Number: 4011
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: 890-4011-1
SDG Number: 03D2057048

Login Number: 4011
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 02/06/23 08:40 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: Hadlie Green
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 2/28/2023 2:42:41 PM

JOB DESCRIPTION

Wild Cobra 1 State 002H
SDG NUMBER 03D2024126

JOB NUMBER

890-4161-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

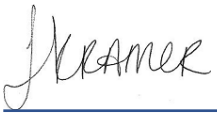
See page two for job notes and contact information.

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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2/28/2023 2:42:41 PM

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

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Laboratory Job ID: 890-4161-1
SDG: 03D2024126

Table of Contents

Definitions/Glossary

Client: Ensolum Job ID: 890-4161-1
Project/Site: Wild Cobra 1 State 002H SDG: 03D2024126

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4161-1
SDG: 03D2024126

Job ID: 890-4161-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-4161-1

Receipt
The sample was received on 2/20/2023 4:13 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.8°C

Receipt Exceptions
The following sample was received and analyzed from an unpreserved bulk soil jar: FS06A (890-4161-1).

GC VOA
Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-47310 and analytical batch 880-47287 was outside the control 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: The surrogate recovery for the blank associated with preparation batch 880-47228 and analytical batch 880-47221 was outside the upper control limits.

Method 8015MOD_NM: The method blank for preparation batch 880-47228 and analytical batch 880-47221 contained Gasoline Range Organics (GRO)-C6-C10 above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 880-47228 and analytical batch 880-47221 was outside control limits. Sample non-homogeneity is suspected.

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

HPLC/IC
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: Wild Cobra 1 State 002H

Job ID: 890-4161-1
SDG: 03D2024126

Client Sample ID: FS06A

Date Collected: 02/20/23 12:50
Date Received: 02/20/23 16:13
Sample Depth: 0.75

Lab Sample ID: 890-4161-1

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		02/27/23 12:05	02/27/23 20:25	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/27/23 12:05	02/27/23 20:25	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/27/23 12:05	02/27/23 20:25	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		02/27/23 12:05	02/27/23 20:25	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/27/23 12:05	02/27/23 20:25	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		02/27/23 12:05	02/27/23 20:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*02/27/23 12:05*	*02/27/23 20:25*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*02/27/23 12:05*	*02/27/23 20:25*	*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			02/28/23 12:13	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			02/27/23 12:30	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/25/23 08:55	02/25/23 23:28	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/25/23 08:55	02/25/23 23:28	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/25/23 08:55	02/25/23 23:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*02/25/23 08:55*	*02/25/23 23:28*	*1*
o-Terphenyl	*114*		*70 - 130*	*02/25/23 08:55*	*02/25/23 23:28*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11.4**		5.00		mg/Kg			02/27/23 01:01	1

Surrogate Summary

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4161-1
SDG: 03D2024126

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-4135-A-1-F MS	Matrix Spike	94	104
890-4135-A-1-G MSD	Matrix Spike Duplicate	94	112
890-4161-1	FS06A	94	90
LCS 880-47310/1-A	Lab Control Sample	112	116
LCSD 880-47310/2-A	Lab Control Sample Dup	107	115
MB 880-47310/5-A	Method Blank	67 S1-	93

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)
880-25168-A-21-B MS	Matrix Spike	114	113
880-25168-A-21-C MSD	Matrix Spike Duplicate	112	103
890-4161-1	FS06A	107	114
LCS 880-47228/2-A	Lab Control Sample	106	120
LCSD 880-47228/3-A	Lab Control Sample Dup	105	107
MB 880-47228/1-A	Method Blank	147 S1+	163 S1+

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4161-1
SDG: 03D2024126

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-47310/5-A
Matrix: Solid
Analysis Batch: 47287

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 47310

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/27/23 12:05	02/27/23 14:21	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/27/23 12:05	02/27/23 14:21	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/27/23 12:05	02/27/23 14:21	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/27/23 12:05	02/27/23 14:21	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/27/23 12:05	02/27/23 14:21	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/27/23 12:05	02/27/23 14:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*67*	*S1-*	*70 - 130*	*02/27/23 12:05*	*02/27/23 14:21*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*02/27/23 12:05*	*02/27/23 14:21*	*1*

Lab Sample ID: LCS 880-47310/1-A
Matrix: Solid
Analysis Batch: 47287

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 47310

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1116		mg/Kg		112	70 - 130		
Toluene			0.100	0.1199		mg/Kg		120	70 - 130		
Ethylbenzene			0.100	0.1156		mg/Kg		116	70 - 130		
m-Xylene & p-Xylene			0.200	0.2342		mg/Kg		117	70 - 130		
o-Xylene			0.100	0.1224		mg/Kg		122	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*
1,4-Difluorobenzene (Surr)	*116*		*70 - 130*

Lab Sample ID: LCSD 880-47310/2-A
Matrix: Solid
Analysis Batch: 47287

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 47310

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1297		mg/Kg		130	70 - 130	15	35
Toluene			0.100	0.1198		mg/Kg		120	70 - 130	0	35
Ethylbenzene			0.100	0.1198		mg/Kg		120	70 - 130	4	35
m-Xylene & p-Xylene			0.200	0.2430		mg/Kg		122	70 - 130	4	35
o-Xylene			0.100	0.1212		mg/Kg		121	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
1,4-Difluorobenzene (Surr)	*115*		*70 - 130*

Lab Sample ID: 890-4135-A-1-F MS
Matrix: Solid
Analysis Batch: 47287

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 47310

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00198	U	0.0998	0.08363		mg/Kg		84	70 - 130		
Toluene	<0.00198	U	0.0998	0.07891		mg/Kg		79	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4161-1
SDG: 03D2024126

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

Lab Sample ID: 890-4135-A-1-F MS
Matrix: Solid
Analysis Batch: 47287

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 47310

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00198	U	0.0998	0.07883		mg/Kg		79	70 - 130
m-Xylene & p-Xylene	<0.00396	U	0.200	0.1596		mg/Kg		80	70 - 130
o-Xylene	<0.00198	U	0.0998	0.08053		mg/Kg		81	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: 890-4135-A-1-G MSD
Matrix: Solid
Analysis Batch: 47287

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 47310

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00198	U	0.100	0.09210		mg/Kg		92	70 - 130	10	35
Toluene	<0.00198	U	0.100	0.08926		mg/Kg		89	70 - 130	12	35
Ethylbenzene	<0.00198	U	0.100	0.08939		mg/Kg		89	70 - 130	13	35
m-Xylene & p-Xylene	<0.00396	U	0.201	0.1793		mg/Kg		89	70 - 130	12	35
o-Xylene	<0.00198	U	0.100	0.09125		mg/Kg		91	70 - 130	12	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*

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

Lab Sample ID: MB 880-47228/1-A
Matrix: Solid
Analysis Batch: 47221

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 47228

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/25/23 08:55	02/25/23 20:13	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/25/23 08:55	02/25/23 20:13	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/25/23 08:55	02/25/23 20:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*147*	*S1+*	*70 - 130*	*02/25/23 08:55*	*02/25/23 20:13*	*1*
o-Terphenyl	*163*	*S1+*	*70 - 130*	*02/25/23 08:55*	*02/25/23 20:13*	*1*

Lab Sample ID: LCS 880-47228/2-A
Matrix: Solid
Analysis Batch: 47221

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 47228

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10			1000	969.7		mg/Kg		97	70 - 130
Diesel Range Organics (Over C10-C28)			1000	1086		mg/Kg		109	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4161-1
SDG: 03D2024126

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

Lab Sample ID: LCS 880-47228/2-A
Matrix: Solid
Analysis Batch: 47221

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 47228

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	106		70 - 130
o-Terphenyl	120		70 - 130

Lab Sample ID: LCSD 880-47228/3-A
Matrix: Solid
Analysis Batch: 47221

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 47228

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	968.1		mg/Kg		97	70 - 130	0	20
Diesel Range Organics (Over C10-C28)			1000	951.5		mg/Kg		95	70 - 130	13	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	105		70 - 130
o-Terphenyl	107		70 - 130

Lab Sample ID: 880-25168-A-21-B MS
Matrix: Solid
Analysis Batch: 47221

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 47228

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 F2	998	1095		mg/Kg		107	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	998	1035		mg/Kg		104	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	114		70 - 130
o-Terphenyl	113		70 - 130

Lab Sample ID: 880-25168-A-21-C MSD
Matrix: Solid
Analysis Batch: 47221

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 47228

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 F2	999	836.1	F2	mg/Kg		81	70 - 130	27	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	926.5		mg/Kg		93	70 - 130	11	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	112		70 - 130
o-Terphenyl	103		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4161-1
SDG: 03D2024126

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-47101/1-A
Matrix: Solid
Analysis Batch: 47257

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			02/26/23 23:36	1

Lab Sample ID: LCS 880-47101/2-A
Matrix: Solid
Analysis Batch: 47257

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	253.6		mg/Kg		101	90 - 110		

Lab Sample ID: LCSD 880-47101/3-A
Matrix: Solid
Analysis Batch: 47257

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	257.0		mg/Kg		103	90 - 110	1	20

Lab Sample ID: 890-4160-A-1-B MS
Matrix: Solid
Analysis Batch: 47257

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	37.9		251	266.7		mg/Kg		91	90 - 110		

Lab Sample ID: 890-4160-A-1-C MSD
Matrix: Solid
Analysis Batch: 47257

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	37.9		251	269.9		mg/Kg		92	90 - 110	1	20

QC Association Summary

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4161-1
SDG: 03D2024126

GC VOA

Analysis Batch: 47287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4161-1	FS06A	Total/NA	Solid	8021B	47310
MB 880-47310/5-A	Method Blank	Total/NA	Solid	8021B	47310
LCS 880-47310/1-A	Lab Control Sample	Total/NA	Solid	8021B	47310
LCSD 880-47310/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	47310
890-4135-A-1-F MS	Matrix Spike	Total/NA	Solid	8021B	47310
890-4135-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	47310

Prep Batch: 47310

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4161-1	FS06A	Total/NA	Solid	5035	
MB 880-47310/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-47310/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-47310/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-4135-A-1-F MS	Matrix Spike	Total/NA	Solid	5035	
890-4135-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 47454

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4161-1	FS06A	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 47221

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4161-1	FS06A	Total/NA	Solid	8015B NM	47228
MB 880-47228/1-A	Method Blank	Total/NA	Solid	8015B NM	47228
LCS 880-47228/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	47228
LCSD 880-47228/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	47228
880-25168-A-21-B MS	Matrix Spike	Total/NA	Solid	8015B NM	47228
880-25168-A-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	47228

Prep Batch: 47228

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4161-1	FS06A	Total/NA	Solid	8015NM Prep	
MB 880-47228/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-47228/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-47228/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-25168-A-21-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-25168-A-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 47325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4161-1	FS06A	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 47101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4161-1	FS06A	Soluble	Solid	DI Leach	
MB 880-47101/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-47101/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-47101/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4161-1
SDG: 03D2024126

HPLC/IC (Continued)

Leach Batch: 47101 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4160-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-4160-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 47257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4161-1	FS06A	Soluble	Solid	300.0	47101
MB 880-47101/1-A	Method Blank	Soluble	Solid	300.0	47101
LCS 880-47101/2-A	Lab Control Sample	Soluble	Solid	300.0	47101
LCSD 880-47101/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	47101
890-4160-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	47101
890-4160-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	47101

Lab Chronicle

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4161-1
SDG: 03D2024126

Client Sample ID: FS06A

Date Collected: 02/20/23 12:50
Date Received: 02/20/23 16:13

Lab Sample ID: 890-4161-1

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	47310	02/27/23 12:05	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	47287	02/27/23 20:25	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			47454	02/28/23 12:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			47325	02/27/23 12:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	47228	02/25/23 08:55	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	47221	02/25/23 23:28	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	47101	02/23/23 15:20	KS	EET MID
Soluble	Analysis	300.0		1			47257	02/27/23 01:01	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: Wild Cobra 1 State 002H

Job ID: 890-4161-1
SDG: 03D2024126

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: Wild Cobra 1 State 002H

Job ID: 890-4161-1
SDG: 03D2024126

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

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4161-1
SDG: 03D2024126

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-4161-1	FS06A	Solid	02/20/23 12:50	02/20/23 16:13	0.75

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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: _____

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Project Manager:	Hadlie Green	Bill to: (if different)	Kaise Jennings
Company Name:	Ensolum LLC	Company Name:	Ensolum
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:	432-557-8895	Email:	Kjennings@ensolum.com, hgreen@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:	Wild Cobra 1 State Com 4H	Turn Around	☒ Routine ☐ Rush
Project Number:	03D2024126	Due Date:	
Project Location:	Lea	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Peter Van Patten		
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:	5.0
Total Containers:		Corrected Temperature:	4.8

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: Chlorides (EPA 300)	TPH (8015)	BTEX (8021)
FS06A	soil	2-20-23	1250	0.75'	Comp	1		X	X	X

ANALYSIS REQUEST

890-4161 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 Peter Van Patten	Ensolum Lea Staff	2-20-23 1613	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4161-1
SDG Number: 03D2024126

Login Number: 4161
List Number: 1
Creator: Stutzman, Amanda

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: 890-4161-1
SDG Number: 03D2024126

Login Number: 4161
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 02/22/23 12:07 PM

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: Kalei Jennings
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 3/20/2023 11:38:08 AM

JOB DESCRIPTION

Wild Cobra 1 State 002H
SDG NUMBER 03D2024126

JOB NUMBER

890-4243-1

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

Generated
3/20/2023 11:38:08 AM

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

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Laboratory Job ID: 890-4243-1
SDG: 03D2024126

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4243-1
SDG: 03D2024126

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD 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: Wild Cobra 1 State 002H

Job ID: 890-4243-1
SDG: 03D2024126

Job ID: 890-4243-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-4243-1

Receipt
The samples were received on 3/6/2023 3:14 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.4°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: BH01 (890-4243-1), BH01A (890-4243-2), BH02 (890-4243-3), BH02A (890-4243-4), BH03 (890-4243-5), BH03A (890-4243-6), BH04 (890-4243-7), BH04A (890-4243-8), BH05 (890-4243-9), BH05A (890-4243-10), SS01 (890-4243-11), SS02 (890-4243-12), SS03 (890-4243-13) and SS04 (890-4243-14).

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-48725 and analytical batch 880-48708 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: The surrogate recovery for the blank associated with preparation batch 880-48166 and analytical batch 880-48177 was outside the upper control limits.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-48202 and analytical batch 880-48272 was outside the upper control limits.

Method 8015MOD_NM: The method blank for preparation batch 880-48202 and analytical batch 880-48272 contained Gasoline Range Organics (GRO)-C6-C10 above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples 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 880-48186 and 880-48186 and analytical batch 880-48242 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-48204 and analytical batch 880-48263 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: Wild Cobra 1 State 002H

Job ID: 890-4243-1
SDG: 03D2024126

Client Sample ID: BH01

Date Collected: 03/06/23 09:50
Date Received: 03/06/23 15:14
Sample Depth: 0.5'

Lab Sample ID: 890-4243-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U F2 F1	0.00202		mg/Kg		03/16/23 09:41	03/17/23 00:47	1
Toluene	<0.00202	U F1	0.00202		mg/Kg		03/16/23 09:41	03/17/23 00:47	1
Ethylbenzene	<0.00202	U F1	0.00202		mg/Kg		03/16/23 09:41	03/17/23 00:47	1
m-Xylene & p-Xylene	<0.00403	U F1	0.00403		mg/Kg		03/16/23 09:41	03/17/23 00:47	1
o-Xylene	<0.00202	U F1	0.00202		mg/Kg		03/16/23 09:41	03/17/23 00:47	1
Xylenes, Total	<0.00403	U F1	0.00403		mg/Kg		03/16/23 09:41	03/17/23 00:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*03/16/23 09:41*	*03/17/23 00:47*	*1*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*03/16/23 09:41*	*03/17/23 00:47*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			03/19/23 17:50	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			03/13/23 15:13	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		03/09/23 10:55	03/10/23 10:56	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/09/23 10:55	03/10/23 10:56	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/09/23 10:55	03/10/23 10:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*03/09/23 10:55*	*03/10/23 10:56*	*1*
o-Terphenyl	*107*		*70 - 130*	*03/09/23 10:55*	*03/10/23 10:56*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**39.8**		5.00		mg/Kg			03/10/23 08:05	1

Client Sample ID: BH01A

Date Collected: 03/06/23 10:00
Date Received: 03/06/23 15:14
Sample Depth: 1.0'

Lab Sample ID: 890-4243-2
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		03/16/23 09:41	03/17/23 01:07	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/16/23 09:41	03/17/23 01:07	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/16/23 09:41	03/17/23 01:07	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/16/23 09:41	03/17/23 01:07	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/16/23 09:41	03/17/23 01:07	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/16/23 09:41	03/17/23 01:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*03/16/23 09:41*	*03/17/23 01:07*	*1*

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Client Sample Results

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4243-1
SDG: 03D2024126

Client Sample ID: BH01A

Date Collected: 03/06/23 10:00
Date Received: 03/06/23 15:14
Sample Depth: 1.0'

Lab Sample ID: 890-4243-2

Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*03/16/23 09:41*	*03/17/23 01:07*	*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			03/19/23 17:50	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			03/13/23 15:13	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		03/09/23 10:55	03/10/23 12:02	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/09/23 10:55	03/10/23 12:02	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/09/23 10:55	03/10/23 12:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*03/09/23 10:55*	*03/10/23 12:02*	*1*
o-Terphenyl	*111*		*70 - 130*	*03/09/23 10:55*	*03/10/23 12:02*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**67.1**		4.98	mg/Kg			03/10/23 08:11	1

Client Sample ID: BH02

Date Collected: 03/06/23 10:10
Date Received: 03/06/23 15:14
Sample Depth: 0.5'

Lab Sample ID: 890-4243-3

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		03/16/23 09:41	03/17/23 01:28	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/16/23 09:41	03/17/23 01:28	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/16/23 09:41	03/17/23 01:28	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/16/23 09:41	03/17/23 01:28	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/16/23 09:41	03/17/23 01:28	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/16/23 09:41	03/17/23 01:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*03/16/23 09:41*	*03/17/23 01:28*	*1*
1,4-Difluorobenzene (Surr)	*77*		*70 - 130*	*03/16/23 09:41*	*03/17/23 01:28*	*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			03/19/23 17:50	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			03/13/23 15:13	1

Client Sample Results

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4243-1
SDG: 03D2024126

Client Sample ID: BH02

Date Collected: 03/06/23 10:10
Date Received: 03/06/23 15:14
Sample Depth: 0.5'

Lab Sample ID: 890-4243-3
Matrix: Solid

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		03/09/23 10:55	03/10/23 12:24	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/09/23 10:55	03/10/23 12:24	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/09/23 10:55	03/10/23 12:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*111*		*70 - 130*	*03/09/23 10:55*	*03/10/23 12:24*	*1*
o-Terphenyl	*114*		*70 - 130*	*03/09/23 10:55*	*03/10/23 12:24*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**36.7**		4.97		mg/Kg			03/10/23 08:30	1

Client Sample ID: BH02A

Date Collected: 03/06/23 10:20
Date Received: 03/06/23 15:14
Sample Depth: 1.0'

Lab Sample ID: 890-4243-4
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		03/16/23 09:41	03/17/23 01:48	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/16/23 09:41	03/17/23 01:48	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/16/23 09:41	03/17/23 01:48	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/16/23 09:41	03/17/23 01:48	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/16/23 09:41	03/17/23 01:48	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/16/23 09:41	03/17/23 01:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*03/16/23 09:41*	*03/17/23 01:48*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*03/16/23 09:41*	*03/17/23 01:48*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			03/19/23 17:50	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			03/13/23 15:13	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		03/09/23 10:55	03/10/23 12:46	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/09/23 10:55	03/10/23 12:46	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/09/23 10:55	03/10/23 12:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*03/09/23 10:55*	*03/10/23 12:46*	*1*
o-Terphenyl	*112*		*70 - 130*	*03/09/23 10:55*	*03/10/23 12:46*	*1*

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Client Sample Results

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4243-1
SDG: 03D2024126

Client Sample ID: BH02A

Lab Sample ID: 890-4243-4
Matrix: Solid
Date Collected: 03/06/23 10:20
Date Received: 03/06/23 15:14
Sample Depth: 1.0'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	66.6		4.96		mg/Kg			03/10/23 08:36	1

Client Sample ID: BH03

Lab Sample ID: 890-4243-5
Matrix: Solid
Date Collected: 03/06/23 10:30
Date Received: 03/06/23 15:14
Sample Depth: 0.5'

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		03/16/23 09:41	03/17/23 02:09	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/16/23 09:41	03/17/23 02:09	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/16/23 09:41	03/17/23 02:09	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/16/23 09:41	03/17/23 02:09	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/16/23 09:41	03/17/23 02:09	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/16/23 09:41	03/17/23 02:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*03/16/23 09:41*	*03/17/23 02:09*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*03/16/23 09:41*	*03/17/23 02:09*	*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			03/19/23 17:50	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			03/13/23 15:13	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		03/09/23 10:55	03/10/23 13:09	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/09/23 10:55	03/10/23 13:09	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/09/23 10:55	03/10/23 13:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*03/09/23 10:55*	*03/10/23 13:09*	*1*
o-Terphenyl	*107*		*70 - 130*	*03/09/23 10:55*	*03/10/23 13:09*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	50.5		5.04		mg/Kg			03/10/23 08:42	1

Client Sample Results

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4243-1
SDG: 03D2024126

Client Sample ID: BH03A

Date Collected: 03/06/23 10:40
Date Received: 03/06/23 15:14
Sample Depth: 1.0'

Lab Sample ID: 890-4243-6
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		03/16/23 09:41	03/17/23 02:29	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/16/23 09:41	03/17/23 02:29	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/16/23 09:41	03/17/23 02:29	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		03/16/23 09:41	03/17/23 02:29	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/16/23 09:41	03/17/23 02:29	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		03/16/23 09:41	03/17/23 02:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*	*03/16/23 09:41*	*03/17/23 02:29*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*03/16/23 09:41*	*03/17/23 02:29*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			03/19/23 17:50	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			03/13/23 15:13	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		03/09/23 10:55	03/10/23 13:32	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/09/23 10:55	03/10/23 13:32	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/09/23 10:55	03/10/23 13:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*03/09/23 10:55*	*03/10/23 13:32*	*1*
o-Terphenyl	*110*		*70 - 130*	*03/09/23 10:55*	*03/10/23 13:32*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**119**		4.98		mg/Kg			03/10/23 08:48	1

Client Sample ID: BH04

Date Collected: 03/06/23 10:50
Date Received: 03/06/23 15:14
Sample Depth: 0.5'

Lab Sample ID: 890-4243-7
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		03/16/23 09:41	03/17/23 02:49	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/16/23 09:41	03/17/23 02:49	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/16/23 09:41	03/17/23 02:49	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/16/23 09:41	03/17/23 02:49	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/16/23 09:41	03/17/23 02:49	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/16/23 09:41	03/17/23 02:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*03/16/23 09:41*	*03/17/23 02:49*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4243-1
SDG: 03D2024126

Client Sample ID: BH04

Date Collected: 03/06/23 10:50
Date Received: 03/06/23 15:14
Sample Depth: 0.5'

Lab Sample ID: 890-4243-7

Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*03/16/23 09:41*	*03/17/23 02:49*	*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			03/19/23 17:50	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			03/13/23 15:13	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		03/09/23 10:55	03/10/23 13:53	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/09/23 10:55	03/10/23 13:53	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/09/23 10:55	03/10/23 13:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*03/09/23 10:55*	*03/10/23 13:53*	*1*
o-Terphenyl	*105*		*70 - 130*	*03/09/23 10:55*	*03/10/23 13:53*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**147**		4.95	mg/Kg			03/10/23 08:55	1

Client Sample ID: BH04A

Date Collected: 03/06/23 11:00
Date Received: 03/06/23 15:14
Sample Depth: 1.0'

Lab Sample ID: 890-4243-8

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		03/16/23 09:41	03/17/23 03:10	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/16/23 09:41	03/17/23 03:10	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/16/23 09:41	03/17/23 03:10	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/16/23 09:41	03/17/23 03:10	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/16/23 09:41	03/17/23 03:10	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/16/23 09:41	03/17/23 03:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*	*03/16/23 09:41*	*03/17/23 03:10*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*03/16/23 09:41*	*03/17/23 03:10*	*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			03/19/23 17:50	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			03/13/23 15:13	1

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Client Sample Results

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4243-1
SDG: 03D2024126

Client Sample ID: BH04A

Date Collected: 03/06/23 11:00
Date Received: 03/06/23 15:14
Sample Depth: 1.0'

Lab Sample ID: 890-4243-8
Matrix: Solid

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		03/09/23 10:55	03/10/23 14:16	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/09/23 10:55	03/10/23 14:16	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/09/23 10:55	03/10/23 14:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*03/09/23 10:55*	*03/10/23 14:16*	*1*
o-Terphenyl	*102*		*70 - 130*	*03/09/23 10:55*	*03/10/23 14:16*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**103**		4.97		mg/Kg			03/10/23 09:01	1

Client Sample ID: BH05

Date Collected: 03/06/23 11:10
Date Received: 03/06/23 15:14
Sample Depth: 0.5'

Lab Sample ID: 890-4243-9
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		03/16/23 09:41	03/17/23 03:30	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/16/23 09:41	03/17/23 03:30	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/16/23 09:41	03/17/23 03:30	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/16/23 09:41	03/17/23 03:30	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/16/23 09:41	03/17/23 03:30	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/16/23 09:41	03/17/23 03:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*	*03/16/23 09:41*	*03/17/23 03:30*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*03/16/23 09:41*	*03/17/23 03:30*	*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			03/19/23 17:50	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			03/13/23 15:13	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		03/09/23 10:55	03/10/23 14:37	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/09/23 10:55	03/10/23 14:37	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/09/23 10:55	03/10/23 14:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*03/09/23 10:55*	*03/10/23 14:37*	*1*
o-Terphenyl	*108*		*70 - 130*	*03/09/23 10:55*	*03/10/23 14:37*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4243-1
SDG: 03D2024126

Client Sample ID: BH05

Lab Sample ID: 890-4243-9
Matrix: Solid
Date Collected: 03/06/23 11:10
Date Received: 03/06/23 15:14
Sample Depth: 0.5'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	120		4.97		mg/Kg			03/10/23 09:07	1

Client Sample ID: BH05A

Lab Sample ID: 890-4243-10
Matrix: Solid
Date Collected: 03/06/23 11:20
Date Received: 03/06/23 15:14
Sample Depth: 1.0'

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		03/16/23 09:41	03/17/23 03:51	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/16/23 09:41	03/17/23 03:51	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/16/23 09:41	03/17/23 03:51	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/16/23 09:41	03/17/23 03:51	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/16/23 09:41	03/17/23 03:51	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/16/23 09:41	03/17/23 03:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*72*		*70 - 130*	*03/16/23 09:41*	*03/17/23 03:51*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*03/16/23 09:41*	*03/17/23 03:51*	*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			03/19/23 17:50	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			03/13/23 15:13	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		03/09/23 10:55	03/10/23 15:00	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/09/23 10:55	03/10/23 15:00	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/09/23 10:55	03/10/23 15:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*03/09/23 10:55*	*03/10/23 15:00*	*1*
o-Terphenyl	*106*		*70 - 130*	*03/09/23 10:55*	*03/10/23 15:00*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	116		4.99		mg/Kg			03/09/23 23:09	1

Client Sample Results

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4243-1
SDG: 03D2024126

Client Sample ID: SS01

Lab Sample ID: 890-4243-11
Matrix: Solid
Date Collected: 03/06/23 09:05
Date Received: 03/06/23 15:14
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		03/16/23 09:41	03/17/23 05:41	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/16/23 09:41	03/17/23 05:41	1
Ethylbenzene	**0.00898**		0.00199		mg/Kg		03/16/23 09:41	03/17/23 05:41	1
m-Xylene & p-Xylene	**0.00922**		0.00398		mg/Kg		03/16/23 09:41	03/17/23 05:41	1
o-Xylene	**0.00586**		0.00199		mg/Kg		03/16/23 09:41	03/17/23 05:41	1
Xylenes, Total	**0.0151**		0.00398		mg/Kg		03/16/23 09:41	03/17/23 05:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*	*03/16/23 09:41*	*03/17/23 05:41*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*03/16/23 09:41*	*03/17/23 05:41*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0241**		0.00398		mg/Kg			03/19/23 17:50	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			03/13/23 15:13	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		03/09/23 10:55	03/10/23 15:44	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/09/23 10:55	03/10/23 15:44	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/09/23 10:55	03/10/23 15:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*03/09/23 10:55*	*03/10/23 15:44*	*1*
o-Terphenyl	*106*		*70 - 130*	*03/09/23 10:55*	*03/10/23 15:44*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**158**		5.04		mg/Kg			03/09/23 23:28	1

Client Sample ID: SS02

Lab Sample ID: 890-4243-12
Matrix: Solid
Date Collected: 03/06/23 09:10
Date Received: 03/06/23 15:14
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		03/16/23 09:41	03/17/23 06:01	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/16/23 09:41	03/17/23 06:01	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/16/23 09:41	03/17/23 06:01	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/16/23 09:41	03/17/23 06:01	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/16/23 09:41	03/17/23 06:01	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/16/23 09:41	03/17/23 06:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*03/16/23 09:41*	*03/17/23 06:01*	*1*

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Client Sample Results

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4243-1
SDG: 03D2024126

Client Sample ID: SS02

Date Collected: 03/06/23 09:10
Date Received: 03/06/23 15:14
Sample Depth: 0.5'

Lab Sample ID: 890-4243-12
Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*03/16/23 09:41*	*03/17/23 06:01*	*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			03/19/23 17:50	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			03/13/23 15:13	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		03/09/23 10:55	03/10/23 16:07	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/09/23 10:55	03/10/23 16:07	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/09/23 10:55	03/10/23 16:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*03/09/23 10:55*	*03/10/23 16:07*	*1*
o-Terphenyl	*106*		*70 - 130*	*03/09/23 10:55*	*03/10/23 16:07*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**155**		4.99	mg/Kg			03/09/23 23:34	1

Client Sample ID: SS03

Date Collected: 03/06/23 09:15
Date Received: 03/06/23 15:14
Sample Depth: 0.5'

Lab Sample ID: 890-4243-13
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		03/16/23 09:41	03/17/23 06:21	1
Toluene	<0.00201	U	0.00201	mg/Kg		03/16/23 09:41	03/17/23 06:21	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		03/16/23 09:41	03/17/23 06:21	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		03/16/23 09:41	03/17/23 06:21	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		03/16/23 09:41	03/17/23 06:21	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		03/16/23 09:41	03/17/23 06:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*78*		*70 - 130*	*03/16/23 09:41*	*03/17/23 06:21*	*1*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*	*03/16/23 09:41*	*03/17/23 06:21*	*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			03/19/23 17:50	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			03/10/23 17:58	1

Client Sample Results

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4243-1
SDG: 03D2024126

Client Sample ID: SS03

Lab Sample ID: 890-4243-13
Matrix: Solid
Date Collected: 03/06/23 09:15
Date Received: 03/06/23 15:14
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		03/08/23 17:08	03/09/23 18:48	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/08/23 17:08	03/09/23 18:48	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/08/23 17:08	03/09/23 18:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*03/08/23 17:08*	*03/09/23 18:48*	*1*
o-Terphenyl	*100*		*70 - 130*	*03/08/23 17:08*	*03/09/23 18:48*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**45.6**		4.98		mg/Kg			03/09/23 23:40	1

Client Sample ID: SS04

Lab Sample ID: 890-4243-14
Matrix: Solid
Date Collected: 03/06/23 09:20
Date Received: 03/06/23 15:14
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/16/23 09:41	03/17/23 06:42	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/16/23 09:41	03/17/23 06:42	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/16/23 09:41	03/17/23 06:42	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		03/16/23 09:41	03/17/23 06:42	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/16/23 09:41	03/17/23 06:42	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		03/16/23 09:41	03/17/23 06:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*76*		*70 - 130*	*03/16/23 09:41*	*03/17/23 06:42*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*03/16/23 09:41*	*03/17/23 06:42*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			03/19/23 17:50	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			03/10/23 17:58	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		03/08/23 17:08	03/09/23 19:08	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/08/23 17:08	03/09/23 19:08	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/08/23 17:08	03/09/23 19:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*03/08/23 17:08*	*03/09/23 19:08*	*1*
o-Terphenyl	*114*		*70 - 130*	*03/08/23 17:08*	*03/09/23 19:08*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4243-1
SDG: 03D2024126

Client Sample ID: SS04
Date Collected: 03/06/23 09:20
Date Received: 03/06/23 15:14
Sample Depth: 0.5'

Lab Sample ID: 890-4243-14
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	53.2		5.05		mg/Kg			03/09/23 23:46	1

Surrogate Summary

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4243-1
SDG: 03D2024126

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-4243-1	BH01	101	85
890-4243-1 MS	BH01	109	100
890-4243-1 MSD	BH01	105	94
890-4243-2	BH01A	101	90
890-4243-3	BH02	98	77
890-4243-4	BH02A	104	92
890-4243-5	BH03	102	92
890-4243-6	BH03A	87	89
890-4243-7	BH04	107	91
890-4243-8	BH04A	106	90
890-4243-9	BH05	91	90
890-4243-10	BH05A	72	90
890-4243-11	SS01	87	95
890-4243-12	SS02	100	90
890-4243-13	SS03	78	88
890-4243-14	SS04	76	92
LCS 880-48725/1-A	Lab Control Sample	103	99
LCSD 880-48725/2-A	Lab Control Sample Dup	106	85
MB 880-48321/5-A	Method Blank	94	85
MB 880-48725/5-A	Method Blank	92	88

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)
890-4242-A-1-B MS	Matrix Spike	114	98
890-4242-A-1-C MSD	Matrix Spike Duplicate	113	96
890-4243-1	BH01	97	107
890-4243-1 MS	BH01	105	107
890-4243-1 MSD	BH01	103	106
890-4243-2	BH01A	102	111
890-4243-3	BH02	111	114
890-4243-4	BH02A	100	112
890-4243-5	BH03	97	107
890-4243-6	BH03A	99	110
890-4243-7	BH04	96	105
890-4243-8	BH04A	89	102
890-4243-9	BH05	105	108
890-4243-10	BH05A	93	106
890-4243-11	SS01	104	106
890-4243-12	SS02	94	106
890-4243-13	SS03	103	100
890-4243-14	SS04	113	114
LCS 880-48166/2-A	Lab Control Sample	108	102

Surrogate Summary

Client: Ensolum Job ID: 890-4243-1
Project/Site: Wild Cobra 1 State 002H SDG: 03D2024126

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

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

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)								
LCS 880-48202/2-A	Lab Control Sample	102	111								
LCSD 880-48166/3-A	Lab Control Sample Dup	102	97								
LCSD 880-48202/3-A	Lab Control Sample Dup	91	103								
MB 880-48166/1-A	Method Blank	143 S1+	147 S1+								
MB 880-48202/1-A	Method Blank	158 S1+	163 S1+								

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4243-1
SDG: 03D2024126

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-48321/5-A
Matrix: Solid
Analysis Batch: 48708

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 48321

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/10/23 12:38	03/16/23 12:20	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/10/23 12:38	03/16/23 12:20	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/10/23 12:38	03/16/23 12:20	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/10/23 12:38	03/16/23 12:20	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/10/23 12:38	03/16/23 12:20	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/10/23 12:38	03/16/23 12:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*03/10/23 12:38*	*03/16/23 12:20*	*1*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*03/10/23 12:38*	*03/16/23 12:20*	*1*

Lab Sample ID: MB 880-48725/5-A
Matrix: Solid
Analysis Batch: 48708

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 48725

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/16/23 09:41	03/17/23 00:18	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/16/23 09:41	03/17/23 00:18	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/16/23 09:41	03/17/23 00:18	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/16/23 09:41	03/17/23 00:18	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/16/23 09:41	03/17/23 00:18	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/16/23 09:41	03/17/23 00:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*03/16/23 09:41*	*03/17/23 00:18*	*1*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*	*03/16/23 09:41*	*03/17/23 00:18*	*1*

Lab Sample ID: LCS 880-48725/1-A
Matrix: Solid
Analysis Batch: 48708

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 48725

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.08158		mg/Kg		82	70 - 130		
Toluene			0.100	0.08444		mg/Kg		84	70 - 130		
Ethylbenzene			0.100	0.08116		mg/Kg		81	70 - 130		
m-Xylene & p-Xylene			0.200	0.1669		mg/Kg		83	70 - 130		
o-Xylene			0.100	0.08621		mg/Kg		86	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: LCSD 880-48725/2-A
Matrix: Solid
Analysis Batch: 48708

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 48725

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.07569		mg/Kg		76	70 - 130	7	35

QC Sample Results

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4243-1
SDG: 03D2024126

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

Lab Sample ID: LCSD 880-48725/2-A
Matrix: Solid
Analysis Batch: 48708

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 48725

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.09026		mg/Kg		90	70 - 130	7	35
Ethylbenzene			0.100	0.08849		mg/Kg		88	70 - 130	9	35
m-Xylene & p-Xylene			0.200	0.1820		mg/Kg		91	70 - 130	9	35
o-Xylene			0.100	0.09232		mg/Kg		92	70 - 130	7	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*

Lab Sample ID: 890-4243-1 MS
Matrix: Solid
Analysis Batch: 48708

Client Sample ID: BH01
Prep Type: Total/NA
Prep Batch: 48725

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U F2 F1	0.100	0.08674		mg/Kg		86	70 - 130
Toluene	<0.00202	U F1	0.100	0.08774		mg/Kg		87	70 - 130
Ethylbenzene	<0.00202	U F1	0.100	0.08400		mg/Kg		84	70 - 130
m-Xylene & p-Xylene	<0.00403	U F1	0.201	0.1706		mg/Kg		85	70 - 130
o-Xylene	<0.00202	U F1	0.100	0.08652		mg/Kg		86	70 - 130

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

Lab Sample ID: 890-4243-1 MSD
Matrix: Solid
Analysis Batch: 48708

Client Sample ID: BH01
Prep Type: Total/NA
Prep Batch: 48725

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U F2 F1	0.0990	0.05865	F2 F1	mg/Kg		59	70 - 130	39	35
Toluene	<0.00202	U F1	0.0990	0.06162	F1	mg/Kg		62	70 - 130	35	35
Ethylbenzene	<0.00202	U F1	0.0990	0.06348	F1	mg/Kg		64	70 - 130	28	35
m-Xylene & p-Xylene	<0.00403	U F1	0.198	0.1298	F1	mg/Kg		66	70 - 130	27	35
o-Xylene	<0.00202	U F1	0.0990	0.06675	F1	mg/Kg		67	70 - 130	26	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*

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

Lab Sample ID: MB 880-48166/1-A
Matrix: Solid
Analysis Batch: 48177

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 48166

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		03/08/23 17:08	03/09/23 08:37	1

QC Sample Results

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4243-1
SDG: 03D2024126

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

Lab Sample ID: MB 880-48166/1-A
Matrix: Solid
Analysis Batch: 48177

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 48166

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/08/23 17:08	03/09/23 08:37	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/08/23 17:08	03/09/23 08:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*143*	*S1+*	*70 - 130*	*03/08/23 17:08*	*03/09/23 08:37*	*1*
o-Terphenyl	*147*	*S1+*	*70 - 130*	*03/08/23 17:08*	*03/09/23 08:37*	*1*

Lab Sample ID: LCS 880-48166/2-A
Matrix: Solid
Analysis Batch: 48177

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 48166

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	943.7		mg/Kg		94	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1105		mg/Kg		110	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*108*		*70 - 130*
o-Terphenyl	*102*		*70 - 130*

Lab Sample ID: LCSD 880-48166/3-A
Matrix: Solid
Analysis Batch: 48177

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 48166

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	997.4		mg/Kg		100	70 - 130	6	20
Diesel Range Organics (Over C10-C28)			1000	1050		mg/Kg		105	70 - 130	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*102*		*70 - 130*
o-Terphenyl	*97*		*70 - 130*

Lab Sample ID: 890-4242-A-1-B MS
Matrix: Solid
Analysis Batch: 48177

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 48166

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	998	1118		mg/Kg		109	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	998	936.0		mg/Kg		91	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*114*		*70 - 130*
o-Terphenyl	*98*		*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4243-1
SDG: 03D2024126

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

Lab Sample ID: 890-4242-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 48177 — **Prep Batch: 48166**

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	1082		mg/Kg		105	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	922.0		mg/Kg		90	70 - 130	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*113*		*70 - 130*
o-Terphenyl	*96*		*70 - 130*

Lab Sample ID: MB 880-48202/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 48272 — **Prep Batch: 48202**

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		03/09/23 10:55	03/10/23 08:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/09/23 10:55	03/10/23 08:23	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/09/23 10:55	03/10/23 08:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*158*	*S1+*	*70 - 130*	*03/09/23 10:55*	*03/10/23 08:23*	*1*
o-Terphenyl	*163*	*S1+*	*70 - 130*	*03/09/23 10:55*	*03/10/23 08:23*	*1*

Lab Sample ID: LCS 880-48202/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 48272 — **Prep Batch: 48202**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1110		mg/Kg		111	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1132		mg/Kg		113	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*102*		*70 - 130*
o-Terphenyl	*111*		*70 - 130*

Lab Sample ID: LCSD 880-48202/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 48272 — **Prep Batch: 48202**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	965.1		mg/Kg		97	70 - 130	14	20
Diesel Range Organics (Over C10-C28)			1000	1032		mg/Kg		103	70 - 130	9	20

QC Sample Results

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4243-1
SDG: 03D2024126

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

Lab Sample ID: LCSD 880-48202/3-A
Matrix: Solid
Analysis Batch: 48272

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 48202

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	91		70 - 130
o-Terphenyl	103		70 - 130

Lab Sample ID: 890-4243-1 MS
Matrix: Solid
Analysis Batch: 48272

Client Sample ID: BH01
Prep Type: Total/NA
Prep Batch: 48202

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	998	1007		mg/Kg		99	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	998	1011		mg/Kg		101	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	105		70 - 130
o-Terphenyl	107		70 - 130

Lab Sample ID: 890-4243-1 MSD
Matrix: Solid
Analysis Batch: 48272

Client Sample ID: BH01
Prep Type: Total/NA
Prep Batch: 48202

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	1045		mg/Kg		102	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	991.9		mg/Kg		99	70 - 130	2	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	106		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-48186/1-A
Matrix: Solid
Analysis Batch: 48242

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			03/10/23 06:02	1

Lab Sample ID: LCS 880-48186/2-A
Matrix: Solid
Analysis Batch: 48242

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride			250	266.9		mg/Kg		107	90 - 110

QC Sample Results

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4243-1
SDG: 03D2024126

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-48186/3-A
Matrix: Solid
Analysis Batch: 48242

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	266.0		mg/Kg		106	90 - 110	0	20

Lab Sample ID: 890-4242-A-11-C MS
Matrix: Solid
Analysis Batch: 48242

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	73.1	F1	248	315.8		mg/Kg		98	90 - 110		

Lab Sample ID: 890-4242-A-11-D MSD
Matrix: Solid
Analysis Batch: 48242

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	73.1	F1	198	316.7	F1	mg/Kg		123	90 - 110	0	20

Lab Sample ID: MB 880-48204/1-A
Matrix: Solid
Analysis Batch: 48263

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			03/09/23 22:51	1

Lab Sample ID: LCS 880-48204/2-A
Matrix: Solid
Analysis Batch: 48263

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	253.2		mg/Kg		101	90 - 110		

Lab Sample ID: LCSD 880-48204/3-A
Matrix: Solid
Analysis Batch: 48263

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	253.2		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 890-4243-10 MS
Matrix: Solid
Analysis Batch: 48263

Client Sample ID: BH05A
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	116		250	388.4		mg/Kg		109	90 - 110		

Lab Sample ID: 890-4243-10 MSD
Matrix: Solid
Analysis Batch: 48263

Client Sample ID: BH05A
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	116		250	388.0		mg/Kg		109	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4243-1
SDG: 03D2024126

GC VOA

Prep Batch: 48321

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-48321/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 48708

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4243-1	BH01	Total/NA	Solid	8021B	48725
890-4243-2	BH01A	Total/NA	Solid	8021B	48725
890-4243-3	BH02	Total/NA	Solid	8021B	48725
890-4243-4	BH02A	Total/NA	Solid	8021B	48725
890-4243-5	BH03	Total/NA	Solid	8021B	48725
890-4243-6	BH03A	Total/NA	Solid	8021B	48725
890-4243-7	BH04	Total/NA	Solid	8021B	48725
890-4243-8	BH04A	Total/NA	Solid	8021B	48725
890-4243-9	BH05	Total/NA	Solid	8021B	48725
890-4243-10	BH05A	Total/NA	Solid	8021B	48725
890-4243-11	SS01	Total/NA	Solid	8021B	48725
890-4243-12	SS02	Total/NA	Solid	8021B	48725
890-4243-13	SS03	Total/NA	Solid	8021B	48725
890-4243-14	SS04	Total/NA	Solid	8021B	48725
MB 880-48321/5-A	Method Blank	Total/NA	Solid	8021B	48321
MB 880-48725/5-A	Method Blank	Total/NA	Solid	8021B	48725
LCS 880-48725/1-A	Lab Control Sample	Total/NA	Solid	8021B	48725
LCSD 880-48725/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	48725
890-4243-1 MS	BH01	Total/NA	Solid	8021B	48725
890-4243-1 MSD	BH01	Total/NA	Solid	8021B	48725

Prep Batch: 48725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4243-1	BH01	Total/NA	Solid	5035	
890-4243-2	BH01A	Total/NA	Solid	5035	
890-4243-3	BH02	Total/NA	Solid	5035	
890-4243-4	BH02A	Total/NA	Solid	5035	
890-4243-5	BH03	Total/NA	Solid	5035	
890-4243-6	BH03A	Total/NA	Solid	5035	
890-4243-7	BH04	Total/NA	Solid	5035	
890-4243-8	BH04A	Total/NA	Solid	5035	
890-4243-9	BH05	Total/NA	Solid	5035	
890-4243-10	BH05A	Total/NA	Solid	5035	
890-4243-11	SS01	Total/NA	Solid	5035	
890-4243-12	SS02	Total/NA	Solid	5035	
890-4243-13	SS03	Total/NA	Solid	5035	
890-4243-14	SS04	Total/NA	Solid	5035	
MB 880-48725/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-48725/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-48725/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-4243-1 MS	BH01	Total/NA	Solid	5035	
890-4243-1 MSD	BH01	Total/NA	Solid	5035	

Analysis Batch: 48939

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4243-1	BH01	Total/NA	Solid	Total BTEX	
890-4243-2	BH01A	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4243-1
SDG: 03D2024126

GC VOA (Continued)

Analysis Batch: 48939 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4243-3	BH02	Total/NA	Solid	Total BTEX	
890-4243-4	BH02A	Total/NA	Solid	Total BTEX	
890-4243-5	BH03	Total/NA	Solid	Total BTEX	
890-4243-6	BH03A	Total/NA	Solid	Total BTEX	
890-4243-7	BH04	Total/NA	Solid	Total BTEX	
890-4243-8	BH04A	Total/NA	Solid	Total BTEX	
890-4243-9	BH05	Total/NA	Solid	Total BTEX	
890-4243-10	BH05A	Total/NA	Solid	Total BTEX	
890-4243-11	SS01	Total/NA	Solid	Total BTEX	
890-4243-12	SS02	Total/NA	Solid	Total BTEX	
890-4243-13	SS03	Total/NA	Solid	Total BTEX	
890-4243-14	SS04	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 48166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4243-13	SS03	Total/NA	Solid	8015NM Prep	
890-4243-14	SS04	Total/NA	Solid	8015NM Prep	
MB 880-48166/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-48166/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-48166/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-4242-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-4242-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 48177

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4243-13	SS03	Total/NA	Solid	8015B NM	48166
890-4243-14	SS04	Total/NA	Solid	8015B NM	48166
MB 880-48166/1-A	Method Blank	Total/NA	Solid	8015B NM	48166
LCS 880-48166/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	48166
LCSD 880-48166/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	48166
890-4242-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	48166
890-4242-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	48166

Prep Batch: 48202

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4243-1	BH01	Total/NA	Solid	8015NM Prep	
890-4243-2	BH01A	Total/NA	Solid	8015NM Prep	
890-4243-3	BH02	Total/NA	Solid	8015NM Prep	
890-4243-4	BH02A	Total/NA	Solid	8015NM Prep	
890-4243-5	BH03	Total/NA	Solid	8015NM Prep	
890-4243-6	BH03A	Total/NA	Solid	8015NM Prep	
890-4243-7	BH04	Total/NA	Solid	8015NM Prep	
890-4243-8	BH04A	Total/NA	Solid	8015NM Prep	
890-4243-9	BH05	Total/NA	Solid	8015NM Prep	
890-4243-10	BH05A	Total/NA	Solid	8015NM Prep	
890-4243-11	SS01	Total/NA	Solid	8015NM Prep	
890-4243-12	SS02	Total/NA	Solid	8015NM Prep	
MB 880-48202/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-48202/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4243-1
SDG: 03D2024126

GC Semi VOA (Continued)

Prep Batch: 48202 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-48202/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-4243-1 MS	BH01	Total/NA	Solid	8015NM Prep	
890-4243-1 MSD	BH01	Total/NA	Solid	8015NM Prep	

Analysis Batch: 48272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4243-1	BH01	Total/NA	Solid	8015B NM	48202
890-4243-2	BH01A	Total/NA	Solid	8015B NM	48202
890-4243-3	BH02	Total/NA	Solid	8015B NM	48202
890-4243-4	BH02A	Total/NA	Solid	8015B NM	48202
890-4243-5	BH03	Total/NA	Solid	8015B NM	48202
890-4243-6	BH03A	Total/NA	Solid	8015B NM	48202
890-4243-7	BH04	Total/NA	Solid	8015B NM	48202
890-4243-8	BH04A	Total/NA	Solid	8015B NM	48202
890-4243-9	BH05	Total/NA	Solid	8015B NM	48202
890-4243-10	BH05A	Total/NA	Solid	8015B NM	48202
890-4243-11	SS01	Total/NA	Solid	8015B NM	48202
890-4243-12	SS02	Total/NA	Solid	8015B NM	48202
MB 880-48202/1-A	Method Blank	Total/NA	Solid	8015B NM	48202
LCS 880-48202/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	48202
LCSD 880-48202/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	48202
890-4243-1 MS	BH01	Total/NA	Solid	8015B NM	48202
890-4243-1 MSD	BH01	Total/NA	Solid	8015B NM	48202

Analysis Batch: 48375

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4243-1	BH01	Total/NA	Solid	8015 NM	
890-4243-2	BH01A	Total/NA	Solid	8015 NM	
890-4243-3	BH02	Total/NA	Solid	8015 NM	
890-4243-4	BH02A	Total/NA	Solid	8015 NM	
890-4243-5	BH03	Total/NA	Solid	8015 NM	
890-4243-6	BH03A	Total/NA	Solid	8015 NM	
890-4243-7	BH04	Total/NA	Solid	8015 NM	
890-4243-8	BH04A	Total/NA	Solid	8015 NM	
890-4243-9	BH05	Total/NA	Solid	8015 NM	
890-4243-10	BH05A	Total/NA	Solid	8015 NM	
890-4243-11	SS01	Total/NA	Solid	8015 NM	
890-4243-12	SS02	Total/NA	Solid	8015 NM	
890-4243-13	SS03	Total/NA	Solid	8015 NM	
890-4243-14	SS04	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 48186

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4243-1	BH01	Soluble	Solid	DI Leach	
890-4243-2	BH01A	Soluble	Solid	DI Leach	
890-4243-3	BH02	Soluble	Solid	DI Leach	
890-4243-4	BH02A	Soluble	Solid	DI Leach	
890-4243-5	BH03	Soluble	Solid	DI Leach	
890-4243-6	BH03A	Soluble	Solid	DI Leach	

QC Association Summary

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4243-1
SDG: 03D2024126

HPLC/IC (Continued)

Leach Batch: 48186 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4243-7	BH04	Soluble	Solid	DI Leach	
890-4243-8	BH04A	Soluble	Solid	DI Leach	
890-4243-9	BH05	Soluble	Solid	DI Leach	
MB 880-48186/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-48186/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-48186/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4242-A-11-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-4242-A-11-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 48204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4243-10	BH05A	Soluble	Solid	DI Leach	
890-4243-11	SS01	Soluble	Solid	DI Leach	
890-4243-12	SS02	Soluble	Solid	DI Leach	
890-4243-13	SS03	Soluble	Solid	DI Leach	
890-4243-14	SS04	Soluble	Solid	DI Leach	
MB 880-48204/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-48204/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-48204/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4243-10 MS	BH05A	Soluble	Solid	DI Leach	
890-4243-10 MSD	BH05A	Soluble	Solid	DI Leach	

Analysis Batch: 48242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4243-1	BH01	Soluble	Solid	300.0	48186
890-4243-2	BH01A	Soluble	Solid	300.0	48186
890-4243-3	BH02	Soluble	Solid	300.0	48186
890-4243-4	BH02A	Soluble	Solid	300.0	48186
890-4243-5	BH03	Soluble	Solid	300.0	48186
890-4243-6	BH03A	Soluble	Solid	300.0	48186
890-4243-7	BH04	Soluble	Solid	300.0	48186
890-4243-8	BH04A	Soluble	Solid	300.0	48186
890-4243-9	BH05	Soluble	Solid	300.0	48186
MB 880-48186/1-A	Method Blank	Soluble	Solid	300.0	48186
LCS 880-48186/2-A	Lab Control Sample	Soluble	Solid	300.0	48186
LCSD 880-48186/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	48186
890-4242-A-11-C MS	Matrix Spike	Soluble	Solid	300.0	48186
890-4242-A-11-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	48186

Analysis Batch: 48263

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4243-10	BH05A	Soluble	Solid	300.0	48204
890-4243-11	SS01	Soluble	Solid	300.0	48204
890-4243-12	SS02	Soluble	Solid	300.0	48204
890-4243-13	SS03	Soluble	Solid	300.0	48204
890-4243-14	SS04	Soluble	Solid	300.0	48204
MB 880-48204/1-A	Method Blank	Soluble	Solid	300.0	48204
LCS 880-48204/2-A	Lab Control Sample	Soluble	Solid	300.0	48204
LCSD 880-48204/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	48204
890-4243-10 MS	BH05A	Soluble	Solid	300.0	48204
890-4243-10 MSD	BH05A	Soluble	Solid	300.0	48204

Lab Chronicle

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4243-1
SDG: 03D2024126

Client Sample ID: BH01

Date Collected: 03/06/23 09:50
Date Received: 03/06/23 15:14

Lab Sample ID: 890-4243-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	48725	03/16/23 09:41	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	48708	03/17/23 00:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			48939	03/19/23 17:50	AJ	EET MID
Total/NA	Analysis	8015 NM		1			48375	03/13/23 15:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	48202	03/09/23 10:55	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48272	03/10/23 10:56	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	48186	03/09/23 09:51	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	48242	03/10/23 08:05	CH	EET MID

Client Sample ID: BH01A

Date Collected: 03/06/23 10:00
Date Received: 03/06/23 15:14

Lab Sample ID: 890-4243-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	48725	03/16/23 09:41	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	48708	03/17/23 01:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			48939	03/19/23 17:50	AJ	EET MID
Total/NA	Analysis	8015 NM		1			48375	03/13/23 15:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	48202	03/09/23 10:55	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48272	03/10/23 12:02	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	48186	03/09/23 09:51	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	48242	03/10/23 08:11	CH	EET MID

Client Sample ID: BH02

Date Collected: 03/06/23 10:10
Date Received: 03/06/23 15:14

Lab Sample ID: 890-4243-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	48725	03/16/23 09:41	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	48708	03/17/23 01:28	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			48939	03/19/23 17:50	AJ	EET MID
Total/NA	Analysis	8015 NM		1			48375	03/13/23 15:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	48202	03/09/23 10:55	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48272	03/10/23 12:24	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	48186	03/09/23 09:51	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	48242	03/10/23 08:30	CH	EET MID

Client Sample ID: BH02A

Date Collected: 03/06/23 10:20
Date Received: 03/06/23 15:14

Lab Sample ID: 890-4243-4
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			5.01 g	5 mL	48725	03/16/23 09:41	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	48708	03/17/23 01:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			48939	03/19/23 17:50	AJ	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4243-1
SDG: 03D2024126

Client Sample ID: BH02A
Date Collected: 03/06/23 10:20
Date Received: 03/06/23 15:14

Lab Sample ID: 890-4243-4
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			48375	03/13/23 15:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	48202	03/09/23 10:55	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48272	03/10/23 12:46	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	48186	03/09/23 09:51	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	48242	03/10/23 08:36	CH	EET MID

Client Sample ID: BH03
Date Collected: 03/06/23 10:30
Date Received: 03/06/23 15:14

Lab Sample ID: 890-4243-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	48725	03/16/23 09:41	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	48708	03/17/23 02:09	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			48939	03/19/23 17:50	AJ	EET MID
Total/NA	Analysis	8015 NM		1			48375	03/13/23 15:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	48202	03/09/23 10:55	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48272	03/10/23 13:09	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	48186	03/09/23 09:51	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	48242	03/10/23 08:42	CH	EET MID

Client Sample ID: BH03A
Date Collected: 03/06/23 10:40
Date Received: 03/06/23 15:14

Lab Sample ID: 890-4243-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	48725	03/16/23 09:41	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	48708	03/17/23 02:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			48939	03/19/23 17:50	AJ	EET MID
Total/NA	Analysis	8015 NM		1			48375	03/13/23 15:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	48202	03/09/23 10:55	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48272	03/10/23 13:32	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	48186	03/09/23 09:51	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	48242	03/10/23 08:48	CH	EET MID

Client Sample ID: BH04
Date Collected: 03/06/23 10:50
Date Received: 03/06/23 15:14

Lab Sample ID: 890-4243-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	48725	03/16/23 09:41	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	48708	03/17/23 02:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			48939	03/19/23 17:50	AJ	EET MID
Total/NA	Analysis	8015 NM		1			48375	03/13/23 15:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	48202	03/09/23 10:55	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48272	03/10/23 13:53	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4243-1
SDG: 03D2024126

Client Sample ID: BH04
Date Collected: 03/06/23 10:50
Date Received: 03/06/23 15:14

Lab Sample ID: 890-4243-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.05 g	50 mL	48186	03/09/23 09:51	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	48242	03/10/23 08:55	CH	EET MID

Client Sample ID: BH04A
Date Collected: 03/06/23 11:00
Date Received: 03/06/23 15:14

Lab Sample ID: 890-4243-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	48725	03/16/23 09:41	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	48708	03/17/23 03:10	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			48939	03/19/23 17:50	AJ	EET MID
Total/NA	Analysis	8015 NM		1			48375	03/13/23 15:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	48202	03/09/23 10:55	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48272	03/10/23 14:16	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	48186	03/09/23 09:51	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	48242	03/10/23 09:01	CH	EET MID

Client Sample ID: BH05
Date Collected: 03/06/23 11:10
Date Received: 03/06/23 15:14

Lab Sample ID: 890-4243-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	48725	03/16/23 09:41	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	48708	03/17/23 03:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			48939	03/19/23 17:50	AJ	EET MID
Total/NA	Analysis	8015 NM		1			48375	03/13/23 15:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	48202	03/09/23 10:55	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48272	03/10/23 14:37	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	48186	03/09/23 09:51	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	48242	03/10/23 09:07	CH	EET MID

Client Sample ID: BH05A
Date Collected: 03/06/23 11:20
Date Received: 03/06/23 15:14

Lab Sample ID: 890-4243-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	48725	03/16/23 09:41	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	48708	03/17/23 03:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			48939	03/19/23 17:50	AJ	EET MID
Total/NA	Analysis	8015 NM		1			48375	03/13/23 15:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	48202	03/09/23 10:55	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48272	03/10/23 15:00	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	48204	03/09/23 11:30	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	48263	03/09/23 23:09	CH	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4243-1
SDG: 03D2024126

Client Sample ID: SS01

Date Collected: 03/06/23 09:05
Date Received: 03/06/23 15:14

Lab Sample ID: 890-4243-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	48725	03/16/23 09:41	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	48708	03/17/23 05:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			48939	03/19/23 17:50	AJ	EET MID
Total/NA	Analysis	8015 NM		1			48375	03/13/23 15:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	48202	03/09/23 10:55	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48272	03/10/23 15:44	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	48204	03/09/23 11:30	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	48263	03/09/23 23:28	CH	EET MID

Client Sample ID: SS02

Date Collected: 03/06/23 09:10
Date Received: 03/06/23 15:14

Lab Sample ID: 890-4243-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	48725	03/16/23 09:41	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	48708	03/17/23 06:01	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			48939	03/19/23 17:50	AJ	EET MID
Total/NA	Analysis	8015 NM		1			48375	03/13/23 15:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	48202	03/09/23 10:55	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48272	03/10/23 16:07	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	48204	03/09/23 11:30	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	48263	03/09/23 23:34	CH	EET MID

Client Sample ID: SS03

Date Collected: 03/06/23 09:15
Date Received: 03/06/23 15:14

Lab Sample ID: 890-4243-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	48725	03/16/23 09:41	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	48708	03/17/23 06:21	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			48939	03/19/23 17:50	AJ	EET MID
Total/NA	Analysis	8015 NM		1			48375	03/10/23 17:58	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	48166	03/08/23 17:08	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48177	03/09/23 18:48	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	48204	03/09/23 11:30	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	48263	03/09/23 23:40	CH	EET MID

Client Sample ID: SS04

Date Collected: 03/06/23 09:20
Date Received: 03/06/23 15:14

Lab Sample ID: 890-4243-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	48725	03/16/23 09:41	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	48708	03/17/23 06:42	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			48939	03/19/23 17:50	AJ	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4243-1
SDG: 03D2024126

Client Sample ID: SS04

Date Collected: 03/06/23 09:20
Date Received: 03/06/23 15:14

Lab Sample ID: 890-4243-14

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			48375	03/10/23 17:58	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	48166	03/08/23 17:08	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48177	03/09/23 19:08	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	48204	03/09/23 11:30	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	48263	03/09/23 23:46	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: Wild Cobra 1 State 002H

Job ID: 890-4243-1
SDG: 03D2024126

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: Wild Cobra 1 State 002H

Job ID: 890-4243-1
SDG: 03D2024126

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

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: Wild Cobra 1 State 002H

Job ID: 890-4243-1
SDG: 03D2024126

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-4243-1	BH01	Solid	03/06/23 09:50	03/06/23 15:14	0.5'
890-4243-2	BH01A	Solid	03/06/23 10:00	03/06/23 15:14	1.0'
890-4243-3	BH02	Solid	03/06/23 10:10	03/06/23 15:14	0.5'
890-4243-4	BH02A	Solid	03/06/23 10:20	03/06/23 15:14	1.0'
890-4243-5	BH03	Solid	03/06/23 10:30	03/06/23 15:14	0.5'
890-4243-6	BH03A	Solid	03/06/23 10:40	03/06/23 15:14	1.0'
890-4243-7	BH04	Solid	03/06/23 10:50	03/06/23 15:14	0.5'
890-4243-8	BH04A	Solid	03/06/23 11:00	03/06/23 15:14	1.0'
890-4243-9	BH05	Solid	03/06/23 11:10	03/06/23 15:14	0.5'
890-4243-10	BH05A	Solid	03/06/23 11:20	03/06/23 15:14	1.0'
890-4243-11	SS01	Solid	03/06/23 09:05	03/06/23 15:14	0.5'
890-4243-12	SS02	Solid	03/06/23 09:10	03/06/23 15:14	0.5'
890-4243-13	SS03	Solid	03/06/23 09:15	03/06/23 15:14	0.5'
890-4243-14	SS04	Solid	03/06/23 09:20	03/06/23 15:14	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 2

Project Manager:	Hadlie Green	Bill to: (if different)	Hadlie Green
Company Name:	Ensolum, LLC	Company Name:	Ensolum, LLC
Address:	601 N. Marienfeld St. Suit 400	Address:	601 N. Marienfeld St. Suit 400
City, State ZIP:	Midland, TX 79701	City, State ZIP:	Midland, TX 79701
Phone:	432-557-8895	Email:	hgreen@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:	Wild Cobra 1 State 002H	Turn Around	
Project Number:	03D2024126	☑ Routine ☐ Rush	
Project Location:	Lea	Due Date:	
Sampler's Name:	Peter Van Patten	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:	IR#8
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	5.6
Total Containers:		Corrected Temperature:	5.4

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: Chlorides (EPA:300.0)	TPH (8015)	BTEX (8021)
BH01	Soil	3-6-23	950	0.5'	Comp	1		X	X	X
BH01A			1000	1.0'						
BH02			1010	0.5'						
BH02A			1020	1.0'						
BH03			1030	0.5'						
BH03A			1040	1.0'						
BH04			1050	0.5'						
BH04A			1100	1.0'						
BH05			410	0.5'						
BH05A	↓	↓	1120	1.0'	↓	↓		↓	↓	↓

ANALYSIS REQUEST

890-4243 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 Peter Van Patten		3.6.23 1514	2		
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 2 of 2

Project Manager:	Hadlie Green	Bill to: (if different)	Hadlie Green
Company Name:	Ensolum, LLC	Company Name:	Ensolum, LLC
Address:	601 N. Marienfeld St. Suit 400	Address:	601 N. Marienfeld St. Suit 400
City, State ZIP:	Midland, TX 79701	City, State ZIP:	Midland, TX 79701
Phone:	432-557-8895 Email:		hgreen@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:	Wild Cobra 1 State 002H	Turn Around	
Project Number:	03D2024126	☑ Routine ☐ Rush	
Project Location:	Lea	Due Date:	
Sampler's Name:	Peter Van Patten	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:		
Cooler Custody Seals:	Yes No N/A	Correction Factor:		
Sample Custody Seals:	Yes No N/A	Temperature Reading:		
Total Containers:		Corrected Temperature:		

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	Soil	3-6-23	905	0.5'	Comp	1		X	X	X	
SS02			910								
SS03			915								
SS04			920								

ANALYSIS REQUEST

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

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 Peter Van Patten			2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4243-1
SDG Number: 03D2024126

Login Number: 4243
List Number: 1
Creator: Stutzman, Amanda

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: 890-4243-1
SDG Number: 03D2024126

Login Number: 4243
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 03/08/23 11:29 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 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	NAPP2233946889
District RP	
Facility ID	fAPP2203531785
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)*	NAPP2233946889
Contact mailing address	600 West Illinois Avenue, Midland, Texas 79701		

Location of Release Source

Latitude 32.69158 Longitude -103.52103
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Wild Cobra 1 State 002H	Site Type	Tank Battery
Date Release Discovered	November 30, 2022	API# *(if applicable)*	

Unit Letter	Section	Township	Range	County
E	01	19S	34E	Lea

Surface Owner: ■ State ☐ Federal ☐ Tribal ☐ Private (*Name:* _____)

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) 1.6	Volume Recovered (bbls) 0
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	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

The release was caused by a valve left shut causing pressure in heater treater and pushing fluids through the flare line resulting in a flare fire.
No fluids were recovered due to the fire burning off any standing fluids. This release and flare fire was off pad.

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2233946889
District RP	
Facility ID	fAPP2203531785
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? The release involved a fire.

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
Immediate notice was given by Charles Beauvais via e-mail November 30, 2022 at 12:28 pm to ocd.enviro@state.nm.us.

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: 12/5/2022

email: Brittany.Esparza@ConocoPhillips.com Telephone: (432) 221-0398

OCD Only

Received by: Jocelyn Harimon Date: 12/05/2022

L48 Spill Volume Estimate Form

Facility Name & Number:	Wild Cobra 1&2 StT Battery
Asset Area:	DBEN
Release Discovery Date & Time:	11/30/2022 8:00AM
Release Type:	Oil
Provide any known details about the event:	Supply valve to heater closed causing heater to swamp out and send oil to flare .

Spill Calculation - On Pad Surface Pool Spill

Convert Irregular shape into a series of rectangles	Length (ft.)	Width (ft.)	Deepest point in each of the areas (in.)	No. of boundaries of "shore" in each area	Estimated *Pool* Area (sq. ft.)	Estimated Average Depth (ft.)	Estimated volume of each pool area (bbl.)	Penetration allowance (ft.)	Total Estimated Volume of Spill (bbl.)
Rectangle A	14.0	24.0	0.25	4	336.000	0.005	0.312	0.000	0.312
Rectangle B	16.0	16.0	0.25	4	256.000	0.005	0.237	0.000	0.237
Rectangle C	16.0	40.0	0.25	4	640.000	0.005	0.593	0.000	0.593
Rectangle D	16.0	15.0	0.25	4	240.000	0.005	0.223	0.000	0.223
Rectangle E	13.0	17.0	0.25	4	221.000	0.005	0.205	0.000	0.205
Rectangle F					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle G					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle H					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle I					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle J					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
								Total Volume Release:	1.570

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 163898

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 163898
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	None	12/6/2022

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2233946889
District RP	
Facility ID	fAPP2203531785
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?	51-100 (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	NAPP2233946889
District RP	
Facility ID	fAPP2203531785
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: _____5/2/2023_____

email: __Jacob.Laird@conocophillips.com_____ Telephone: ___575-703-5482_____

OCD Only

Received by: ____Jocelyn Harimon_____ Date: ___05/09/2023___

Form C-141
Page 6

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2233946889
District RP	
Facility ID	fAPP2203531785
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: 5/2/2023

email: Jacob.Laird@conocophillips.com Telephone: 575-703-5482

OCD Only

Received by: Jocelyn Harimon Date: 05/09/2023

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: 07/28/2023

Printed Name: Nelson Velez Title: Environmental Specialist – Adv

ENSOLUM

APPENDIX F

NMOCD Notifications

From: Enviro, OCD, EMNRD
To: Kalei Jennings
Cc: Bratcher, Michael, EMNRD; Nobui, Jennifer, EMNRD
Subject: RE: [EXTERNAL] ConocoPhillips Company- Sampling Notification (Week of 12/19/2022)
Date: Wednesday, December 14, 2022 4:43:42 PM
Attachments: image005.jpg
image006.png
image007.png
image008.png
image009.png

[**EXTERNAL EMAIL**]

Good afternoon Kalei,

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.

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: Kalei Jennings <kjennings@ensolum.com>
Sent: Wednesday, December 14, 2022 3:21 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Subject: [EXTERNAL] ConocoPhillips Company- Sampling Notification (Week of 12/19/2022)

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 final sampling activities at the following sites the week of December 19, 2022.

- Gold Coast 26 Federal 1 H/ NAPP2234636400
- Wild Cobra 1 State 002H/ NAPP2233946889
- Zia Hills 19-1/ NAPP2216037138

Thank you,

Kalei Jennings
Senior Scientist
817-683-2503
Ensolum, LLC

From: Enviro, OCD, EMNRD
To: Kalei Jennings
Cc: Bratcher, Michael, EMNRD; Nobui, Jennifer, EMNRD
Subject: RE: [EXTERNAL] ConocoPhillips Company- Sampling Notification (Week of 01/02/2023)
Date: Friday, December 30, 2022 11:43:06 AM
Attachments: image005.jpg
image006.png
image007.png
image008.png
image009.png

[**EXTERNAL EMAIL**]

Good Morning Kalei,

Please be aware that notification requirements are **two business days**, per rule. Please proceed on your schedule. Also, please include this, and all correspondence, in the closure report to insure inclusion in the project file.

Thank you,
Jocelyn

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: Kalei Jennings <kjennings@ensolum.com>
Sent: Friday, December 30, 2022 10:39 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Hadlie Green <hgreen@ensolum.com>; Josh Adams <jadams@ensolum.com>
Subject: [EXTERNAL] ConocoPhillips Company- Sampling Notification (Week of 01/02/2023)

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 final sampling activities at the following sites the week of January 2, 2023.

- Gold Coast 26 Federal 1 H/ NAPP2234636400

- Wild Cobra 1 State 002H/ NAPP2233946889
- Triste Draw 5 Federal 001H / NAPP2229033410

Thank you,

Kalei Jennings
Senior Scientist
817-683-2503
Ensolum, LLC

From: Kalei Jennings
To: Josh Adams
Subject: FW: [EXTERNAL] ConocoPhillips Company- Sampling Notification (Week of 01/23/2023)
Date: Thursday, January 19, 2023 10:23:05 AM
Attachments: image005.jpg
image006.png
image007.png
image008.png
image009.png

Please file in appropriate project folders.

Kalei Jennings
Senior Scientist
817-683-2503
Ensolum, LLC

From: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Sent: Thursday, January 19, 2023 8:14 AM
To: Kalei Jennings <kjennings@ensolum.com>
Cc: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Nobui, Jennifer, EMNRD <Jennifer.Nobui@emnrd.nm.gov>
Subject: RE: [EXTERNAL] ConocoPhillips Company- Sampling Notification (Week of 01/23/2023)

[**EXTERNAL EMAIL**]

Kalei,

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: Kalei Jennings <kjennings@ensolum.com>

Sent: Wednesday, January 18, 2023 9:20 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Subject: [EXTERNAL] ConocoPhillips Company- Sampling Notification (Week of 01/23/2023)

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 final sampling activities at the following sites the week of January 23, 2023.

- Redtail State Com 1H/NAPP2233239048
- Wild Cobra/ NAPP2233946889
- Gold Coast/ NAPP2234636400

Thank you,

Kalei Jennings
Senior Scientist
817-683-2503
Ensolum, LLC

From: Enviro, OCD, EMNRD
To: Kalei Jennings
Cc: Nobui, Jennifer, EMNRD; Bratcher, Michael, EMNRD
Subject: RE: [EXTERNAL] ConocoPhillips Company- Sampling Notification (Week of 01/30/2023)
Date: Monday, January 30, 2023 9:22:17 AM
Attachments: image005.jpg
image006.png
image007.png
image008.png
image009.png

[**EXTERNAL EMAIL**]

Kalei,

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: Kalei Jennings <kjennings@ensolum.com>
Sent: Thursday, January 26, 2023 8:11 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Josh Adams <jadams@ensolum.com>
Subject: [EXTERNAL] ConocoPhillips Company- Sampling Notification (Week of 01/30/2023)

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 final sampling activities at the following sites the week of January 30, 2023.

- Wild Cobra/ NAPP2233946889
- Gold Coast/ NAPP2234636400
- Zia Hills 19-1/ NAPP2216037138

- Windward Flowline/ NAPP2218850477
- Battle Axe CTB / NAPP2300341479

Thank you,

Kalei Jennings
Senior Scientist
817-683-2503
Ensolum, LLC

From: Kalei Jennings
To: Hadlie Green
Subject: FW: [EXTERNAL](Extension Approval) COG COPC - Wild Cobra 1 State 002H (Incident Number NAPP2233946889)
Date: Thursday, February 23, 2023 9:03:28 AM
Attachments: image003.png
image001.png
image004.png
image005.png
image006.png

Approved, Please update the master spreadsheet.

Kalei Jennings
Senior Scientist
817-683-2503
Ensolum, LLC

From: Beauvais, Charles R <Charles.R.Beauvais@conocophillips.com>
Sent: Wednesday, February 22, 2023 7:28 PM
To: Kalei Jennings <kjennings@ensolum.com>
Subject: FW: [EXTERNAL](Extension Approval) COG COPC - Wild Cobra 1 State 002H (Incident Number NAPP2233946889)

[**EXTERNAL EMAIL**]

FYI

From: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Sent: Wednesday, February 22, 2023 3:52 PM
To: Beauvais, Charles R <Charles.R.Beauvais@conocophillips.com>
Cc: Esparza, Brittany <Brittany.Esparza@conocophillips.com>; Fejervary Morena, Gustavo A <G.Fejervary@conocophillips.com>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Nobui, Jennifer, EMNRD <Jennifer.Nobui@emnrd.nm.gov>; Harimon, Jocelyn, EMNRD <Jocelyn.Harimon@emnrd.nm.gov>
Subject: [EXTERNAL](Extension Approval) COG COPC - Wild Cobra 1 State 002H (Incident Number NAPP2233946889)

RE: Incident #**NAPP2233946889**

Charles,

Your request for an extension to **May 29th, 2023** is approved. In order to complete additional delineation activities and submit a remediation work plan or closure report, COG is requesting a 90-day extension of this deadline. Please include this e-mail correspondence in the remediation and/or closure report.

Robert Hamlet ● Environmental Specialist - Advanced
Environmental Bureau
EMNRD - Oil Conservation Division
506 W. Texas Ave.| Artesia, NM 88210
575.909.0302 | robert.hamlet@state.nm.us
http://www.emnrd.state.nm.us/OCD/

From: Beauvais, Charles R <Charles.R.Beauvais@conocophillips.com>
Sent: Wednesday, February 22, 2023 9:16 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>; EMNRD-OCD-District1spills <EMNRD-OCD-District1spills@state.nm.us>; Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>; CFO_Spill, BLM_NM <BLM_NM_CFO_Spill@blm.gov>
Cc: Esparza, Brittany <Brittany.Esparza@conocophillips.com>; Fejervary Morena, Gustavo A <G.Fejervary@conocophillips.com>
Subject: [EXTERNAL] COG COPC - Extension Request - Wild Cobra 1 State 002H (Incident Number NAPP2233946889)

To Whom It May Concern,

Wild Cobra 1 State 002H (Incident Number NAPP2233946889)

COG Operating, LLC (COG) is requesting an extension for the current deadline of February 28, 2023, for submitting a remediation work plan or closure report required in 19.15.29.12.B.(1) NMAC for Wild Cobra 1 State 002H (Incident Number NAPP2233946889). The release was discovered on November 30, 2022. Initial site assessment and excavation activities have been completed. Additional delineation activities are needed. In order to complete additional delineation activities and submit a remediation work plan or closure report, COG requests a 90-day extension of this deadline until May 29, 2023.

Respectfully,

Charles R. Beauvais II

Senior Environmental Engineer | GHG Reporting & Systems | **ConocoPhillips**
Permian Business Unit | **L48 Environmental & SD**
(M) 575-988-2043
Charles.R.Beauvais@conocophillips.com

Our work is never so urgent or important that we cannot take the time to do it safely and in an environmentally responsible manner.

From: Enviro, OCD, EMNRD
To: Hadlie Green
Cc: Nobui, Jennifer, EMNRD; Bratcher, Michael, EMNRD
Subject: RE: [EXTERNAL] Sampling Notification (Week of 3/6/2023)
Date: Wednesday, March 1, 2023 5:17:02 PM
Attachments: image006.png
image007.png
image008.png
image009.png

[**EXTERNAL EMAIL**]

Hadlie,

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 8:43 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Kalei Jennings <kjennings@ensolum.com>
Subject: [EXTERNAL] 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.

- Baseball Cap 25 M CTB / NAPP2303037207
- Wild Cobra 1 State 002H / NAPP2233946889
- Cabo Wabo Federal Com 705H / NAPP2236129464

Thank you,

Hadlie Green
Staff Geologist
432-557-8895
hgreen@ensolum.com
Ensolum, LLC

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 215084

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 215084
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	7/28/2023