ENSOLUM

January 8, 2024

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

Re: Remediation Work Plan
Jalmat Yates Unit #188
Incident Number NAPP2235373931
Lea County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum) on behalf of Maverick Permian, LLC (Maverick), has prepared the following *Remediation Work Plan* (*Work Plan*) to document site assessment and delineation activities completed to date and to propose a work plan to address the impacted soil identified at the Jalmat Yates Unit #188 (Site). The following *Work Plan* proposes excavation of chloride impacted soil from the top four feet of the release area and area surrounding the release, which is associated with a historical pit identified at the Site.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit C, Section 13, Township 22 South, Range 35 East, in Lea County, New Mexico (32.395541° N, -103.32178° W) and is associated with oil and gas exploration and production operations on land owned partially by the New Mexico State Land Office (NMSLO) and partially owned by Merchant Livestock Company.

On December 2, 2022, corrosion of a flow line resulted in the release of approximately 1 barrel (bbl) of crude oil and 5 bbls of produced water into the reclaimed well pad area east of the wellhead/pumpjack. No fluids were recovered. The release occurred on the surface of a historical/reclaimed pit. Maverick reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification Form C-141 (Form C-141) on December 19, 2022. The release was assigned Incident Number NAPP2235373931.

Since the release occurred on a previously disturbed area of the well pad, an assessment of cultural properties had already been completed prior to the construction of the well pad and as such, the Cultural Properties Protection Rule (CPP) has been followed. No additional cultural resource surveys were completed in connection with this release.

SITE CHARATERIZATION AND CLOSURE CRITERIA

The Site was characterized to assess applicability of Table 1, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC).

Results from the characterization desktop review are presented on page 3 of the Form C-141, Site Assessment/Characterization. Potential site receptors are identified on Figure 1.

Depth to groundwater at the Site is estimated to be greater than 105 feet below ground surface (bgs) based on the nearest groundwater well data. The closest groundwater well/soil boring with depth to groundwater data is soil boring DTW-01, located at the Site. The soil boring was drilled at the Site during December 2023 to a depth of 105 feet bgs. A field geologist logged and described soil continuously. The borehole lithologic log is included in Appendix A. No groundwater was encountered in the borehole to a depth of 105 feet bgs. The borehole was left open for over 72 hours to allow for potential infill of groundwater. After the 72-hour waiting period without observing groundwater, it was confirmed that groundwater beneath the Site is greater than 105 feet bgs. The borehole was properly abandoned using hydrated bentonite chips. All wells used for depth to groundwater determination are presented on Figure 1.

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

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

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

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

SITE ASSESSMENT AND INITIAL DELINEATION ACTIVITIES

During January and February 2023, Ensolum personnel were at the Site to delineate the release extent based on information provided on the Form C-141, the documented release extent, and visible observations. Potholes PH01 through PH10 were advanced via trackhoe within and around the release area to assess the extent of impacted soil. Soil from the potholes was field screened at 1-foot intervals for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. The potholes were advanced to depths ranging from 4 feet to 8 feet bgs. Indications of a historical pit, including increasing field screening results with depth and pieces of liner, were encountered in the potholes at depths ranging from 4 feet to 6 feet bgs. Field screening results and observations for the potholes were logged on lithologic soil sampling logs, which are included in Appendix C. Based on field screening results, discrete delineation samples were collected from the potholes at depths ranging from 1-foot to 8 feet bgs. The release extent and delineation soil sample locations were mapped utilizing a handheld Global Positioning System (GPS)

unit and are depicted on Figure 2. Photographic documentation was completed during the Site visit and a photographic log is included in Appendix C.

The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported at or below 4 degrees Celsius (°C) under strict chain-of-custody procedures to Eurofins Laboratories in Carlsbad, New Mexico, for analysis of the following contaminants of concern (COC): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

Laboratory analytical results for the delineation soil samples collected from potholes PH01 through PH10 indicated all COC concentrations were compliant with the Site Closure Criteria. However, chloride concentrations in potholes PH01 through PH05 and PH08 through PH10 exceeded the reclamation requirement for chloride in the top four feet and exceeded the most stringent Table I Closure Criteria at depths greater than 8 feet bgs where the historical pit was encountered. The laboratory analytical results are summarized on the attached Table 1.

The lateral and vertical extent of the December 2022 surface release was not able to be delineated to the most stringent Table I Closure Criteria due to a historical pit encountered beneath the release area. Based on the laboratory analytical results and presence of a historical pit beneath the release area, additional delineation activities were warranted.

ADDITIONAL DELINEATION ACTIVITIES

On December 7 and 8, 2023, Ensolum personnel returned to the Site to delineate the lateral and vertical extent of the historical pit to below the most stringent Table I Closure Criteria.

An air rotary drilling rig was used to advance boreholes at the locations of potholes PH01, PH02, PH03, and PH09, located within the historical pit. The boreholes were advanced to depths ranging from 24 feet to 46 feet bgs, to delineate the vertical extent of the historical pit. Soil from the potholes was field screened as described above. Final depth of the boreholes was determined by field screening results indicating compliance with the most stringent Table I Closure Criteria.

Boreholes BH01 through BH03 were advanced via drilling rig to the south, east, and west of the historical pit and potholes PH06 and PH07, located north and west of the historical pit, were deepened with the drilling rig to delineate the lateral extent of the pit. Boreholes BH01 through BH03 and potholes PH06 and PH07 were advanced to a depth of 30 feet bgs. Soil from the potholes and boreholes was field screened as described above. Field screening results and observations from the potholes and boreholes were documented on lithologic/soil sampling logs, which are included in Appendix C.

Delineation soil samples were collected from the potholes and boreholes at depths ranging from the ground surface to 46 feet bgs. The soil samples were collected, handled, and analyzed as described above at Cardinal Laboratories in Hobbs, New Mexico. The delineation soil sample locations are presented on Figure 2. Photographic documentation was completed during the delineation activities. A photographic log is included in Appendix B.

Laboratory analytical results for the delineation samples from potholes PH01, PH02, PH03, and PH09, advanced within the historical pit, indicated all COC concentrations were compliant with the most stringent Table I Closure Criteria at depths ranging from 24 feet to 46 feet bgs, and provided vertical delineation of impacted soil within the historical pit. Laboratory analytical results for the delineation

samples from potholes PH06 and PH07 and boreholes BH01 through BH03, advanced around the historical pit, indicated all COC concentrations were compliant with the most stringent Table I Closure Criteria at depths ranging from the ground surface to 30 feet bgs, and provided lateral delineation of the historical pit. The laboratory analytical results are summarized on the attached Table 1 and the complete laboratory analytical reports are included in Appendix D.

PROPOSED REMEDIATION WORK PLAN

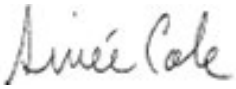
The delineation soil sample results indicate soil containing chloride concentrations exceeding the reclamation requirement is present across an approximate 20,000 square foot area and extends to a depth of 4 feet bgs. The impacted soil is associated with the December 2022 surface release as well as a historical pit located within/beneath the release area. The delineation soil sample results indicate all COC concentrations within the release area and historical pit are compliant with the Site Closure Criteria at depths below 4 feet bgs. Additionally, the historical pit was laterally and vertically delineated to below the most stringent Table I Closure Criteria. Based on the delineation soil sample analytical results, Maverick proposes to complete the following remediation activities:

- Excavation of chloride-impacted soil to a depth of 4 feet bgs within the release area and historical pit. Excavation will proceed laterally until sidewall samples confirm chloride concentrations are compliant with the reclamation requirement in the top four feet. Confirmation samples will be collected from the sidewalls and floor of the final excavation extent.
    - The sidewall samples will be collected at a frequency of every 200 square feet.
    - Due to the estimated size of the excavation, Maverick requests a variance for frequency of excavation floor samples. Maverick proposes collecting floor samples at a frequency of every 500 square feet from the excavation floor.
    - Soil remaining in-place below 4 feet bgs is compliant with the Site Closure Criteria. Depth to groundwater was confirmed to be greater than 105 feet bgs at the Site and the historical pit was vertically delineated to below the most stringent Table I Closure Criteria in potholes PH01, PH02, PH03, and PH09 at depths ranging from 24 feet to 46 feet bgs.
- The excavation samples will be handled as described above and analyzed for chloride only. The soil samples will be analyzed for chloride only since benzene, BTEX, and TPH concentrations were compliant with the Site Closure Criteria in the delineation soil samples.
- An estimated 3,000 cubic yards of chloride impacted soil will be excavated. The excavated soil will be transferred to an approved landfill facility for disposal.
- The excavation will be backfilled and recontoured to match pre-existing conditions. The disturbed area will be seeded with a landowner approved seed mixture. A Reclamation Plan for the disturbed area is included in Appendix E.

Maverick will complete the excavation activities within 90 days of the date of approval of this *Work Plan* by the NMOCD. NMOCD Notifications are included in Appendix F and the Form C-141 is included in Appendix G.

If you have any questions or comments, please contact Ms. Aimee Cole at (720) 384-7365 or acole@ensolum.com.

Sincerely,
Ensolum, LLC



Aimee Cole
Senior Managing Scientist

cc: Bryce Wagoner, Maverick Permian, LLC
New Mexico State Land Office
Merchant Livestock Company

Appendices:

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

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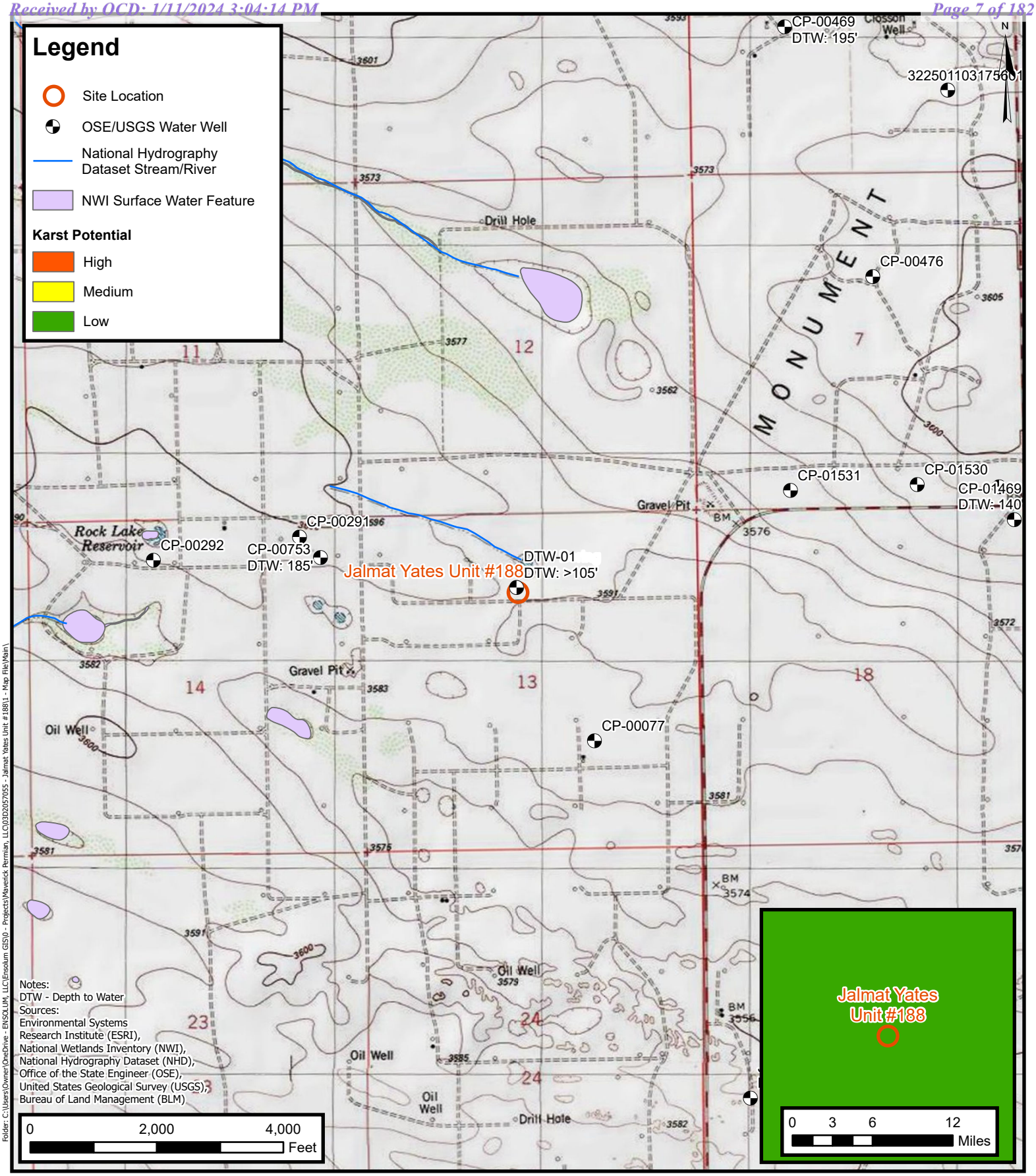
FIGURES



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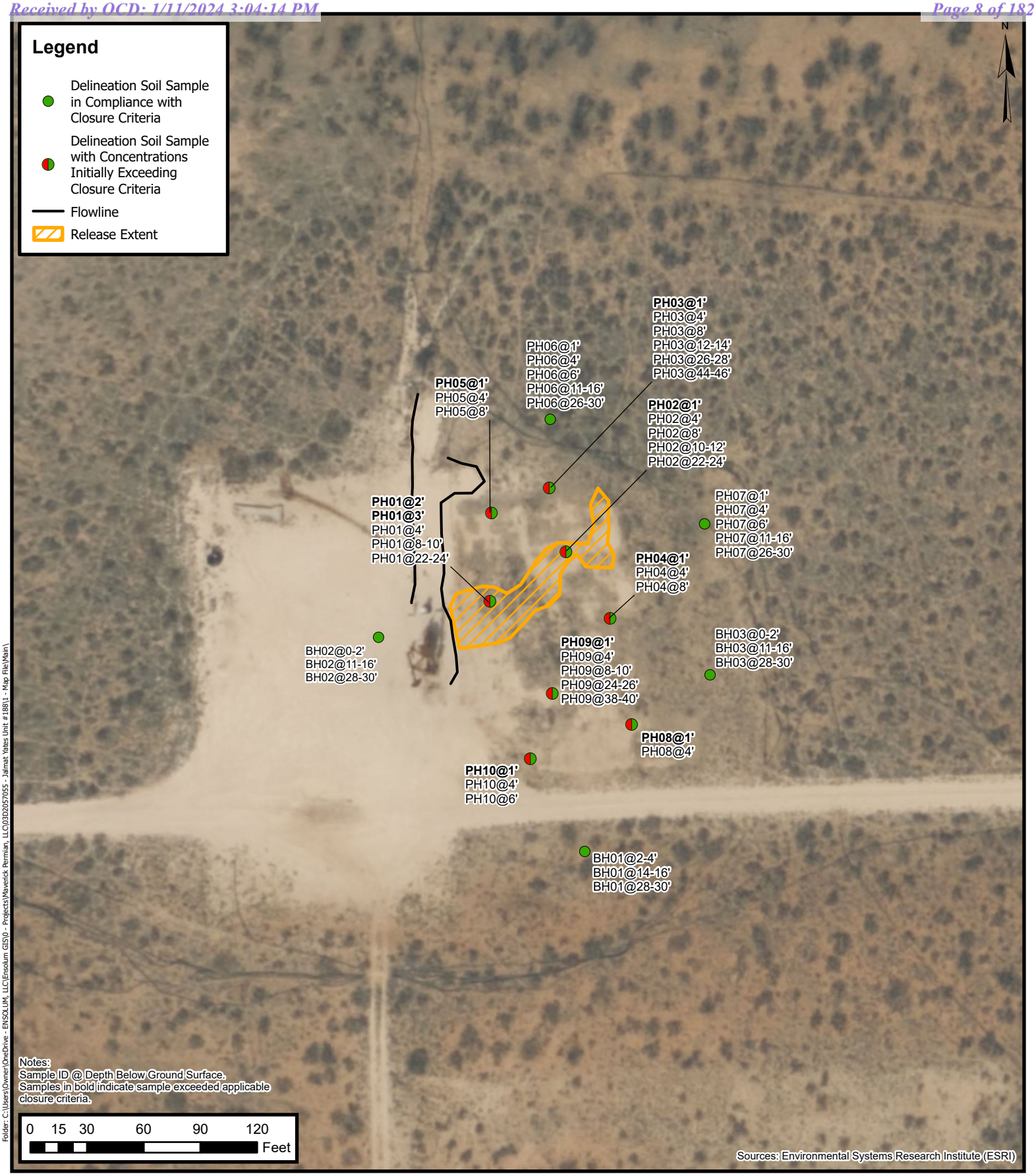
Site Receptor Map

Maverick Permian, LLC
Jalmat Yates Unit #188
Incident Number: NAPP2235373931
Unit C, Sec 13, T22S, R35E
Lea County, New Mexico

FIGURE 1



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Delineation Soil Sample Locations

Maverick Permian, LLC
Jalmat Yates Unit #188
Incident Number: NAPP2235373931
Unit C, Sec 13, T22S, R35E
Lea County, New Mexico

FIGURE 2

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TABLES

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Jalmat Yates Unit #188
Maverick Permian, LLC
Lea County, New Mexico

Sample Designation	Sample Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Delineation Soil Samples										
PH01*	1/9/2023	2	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	<49.9	**2,870**
PH01*	1/9/2023	3	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	**1,830**
PH01	1/9/2023	4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	2,530
PH01	12/7/2023	8-10	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	6,900
PH01	12/7/2023	22-24	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	528
PH02*	1/9/2023	1	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	**1,970**
PH02	1/9/2023	4	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	3,160
PH02	1/9/2023	8	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	11,800
PH02	12/7/2023	10-12	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	4,000
PH02	12/7/2023	22-24	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	512
PH03*	1/9/2023	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	**2,110**
PH03	1/9/2023	4	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	2,530
PH03	1/9/2023	8	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	2,840
PH03	12/7/2023	12-14	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	2,240
PH03	12/7/2023	26-28	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	4,240
PH03	12/7/2023	44-46	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	368
PH04*	1/9/2023	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	**1,210**
PH04	1/9/2023	4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	10,100
PH04	1/9/2023	8	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	11,400
PH05*	1/9/2023	1	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	**1,930**
PH05	1/9/2023	4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	2,610
PH05	1/9/2023	8	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	2,180

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TABLE 1
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Jalmat Yates Unit #188
Maverick Permian, LLC
Lea County, New Mexico

Sample Designation	Sample Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Delineation Soil Samples										
PH06*	2/23/2023	1	<0.00200	<0.00399	<50.4	<50.3	<50.2	<50.1	<50.0	11.9
PH06	2/23/2023	4	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	19.4
PH06	2/23/2023	6	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	27.8
PH06	12/8/2023	11-16	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
PH06	12/8/2023	26-30	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
PH07*	2/23/2023	1	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	<5.00
PH07	2/23/2023	4	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	14.0
PH07	2/23/2023	6	<0.00199	<0.00398	<49.5	<49.6	<49.7	<49.8	<49.9	14.4
PH07	12/8/2023	11-16	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	112
PH07	12/8/2023	26-30	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	112
PH08*	2/24/2023	1	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	**600**
PH08	2/24/2023	4	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	4,810
PH09*	2/24/2023	1	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	<49.9	**3,870**
PH09	2/24/2023	4	<0.00199	0.0558	54.2	518	<50.0	572	572	18,400
PH09	12/7/2023	8-10	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	7,200
PH09	12/7/2023	24-26	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	3,600
PH09	12/7/2023	38-40	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	272
PH10*	2/24/2023	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	**618**
PH10	2/24/2023	4	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	2,660
PH10	2/24/2023	6	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	4,180

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Jalmat Yates Unit #188
Maverick Permian, LLC
Lea County, New Mexico

Sample Designation	Sample Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			**10**	**50**	**NE**	**NE**	**NE**	**1,000**	**2,500**	**20,000**
Delineation Soil Samples										
BH01*	12/8/2023	2-4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	144
BH01	12/8/2023	14-16	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0
BH01	12/8/2023	28-30	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0
BH02*	12/8/2023	0-2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	176
BH02	12/8/2023	11-16	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	112
BH02	12/8/2023	28-30	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	96.0
BH03*	12/8/2023	0-2	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	64.0
BH03	12/8/2023	11-16	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0
BH03	12/8/2023	28-30	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	80.0

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

NMAC: New Mexico Administrative Code

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

*Concentrations in **bold** exceed the NMOCD Table 1 Closure Criteria or reclamation standard where applicable.*

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

***Grey** text represents samples that have been excavated*

** indicates sample was collected in area to be reclaimed after remediation is complete; reclamation requirement in the top 4 feet is 600 mg/kg for chloride and 100 mg/kg for TPH.*

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APPENDIX A

Referenced Well Records

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Sample Name: DTW-01	Date: 12/7/23
Site Name: Jalmat 188	
Incident Number: NAPP2235373931	
Job Number: 03D2057055	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Ronni Hayes / Method: Air rotary
Coordinates: 32.395757, -103.321849	Hole Diameter: 6" / Total Depth: 105'

Comments: Soil boring was advanced to a total depth of 101' bgs. No water was observed within the soil boring after at least 24 hours. On 12/8/2023 the soil boring was plugged and abandoned using hydrated bentonite chips.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
Dry	-	-	N	-	-	0	SP-SM	(0-10'), SAND, dry, fine to very fine grain, no stain, no odor, some subround small gravel, reddish tan, poorly graded with silt.
Dry	-	-	N	-	-	10	SP-SM	(10-30'), SAND, dry, fine to very fine grain, no stain, no odor, some subround small gravel, tan, poorly graded with silt.
Dry	-	-	N	-	-	20		
Dry	-	-	N	-	-	30	SP-SM	(30-40') Color change to white tan.
Dry	-	-	N	-	-	40	SP-SM	(40-50'), SAND, dry, fine grain, no stain, no odor, some subround small gravel, reddish brown, poorly graded with silt.
Dry	-	-	N	-	-	50	SP-SM	(50-70'), SAND, dry, very fine to fine grain, no stain, no odor, little subround small gravel, white tan, poorly graded with silt.
Dry	-	-	N	-	-	60		
Dry	-	-	N	-	-	70	SP-SM	(70-80') Color change to reddish tan.
Dry	-	-	N	-	-	80	SP-SM	(80-105') SAND, very fine grain, no stain, no odor, some small gravel, reddish brown, poorly graded with silt, noncohesive
Dry	-	-	N	-	-	90	SP-SM	(90-105') Color change to reddish tan.
Dry	-	-	N	-	-	100		
Dry	-	-	N	-	-	105		

Revised June 1972

STATE ENGINEER OFFICE

WELL RECORD

475984

Section 1. GENERAL INFORMATION

(A) Owner of well Merchant Livestock Company Owner's Well No. _____

Street or Post Office Address Box 1115

City and State Eunice, NM 88231

Well was drilled under Permit No. CP-753 and is located in the:

a. _____ ¼ _____ ¼ NE ¼ NE ¼ of Section 14 Township 22S Range 35 N.M.P.M.

b. Tract No. _____ of Map No. _____ of the _____

c. Lot No. _____ of Block No. _____ of the _____

Subdivision, recorded in Lea County.

d. X= _____ feet, Y= _____ feet, N.M. Coordinate System _____ Zone in the _____ Grant.

(B) Drilling Contractor W. L. VanNoy License No. WD_208

Address P.O. Box 7 , Oil Center, NM 88266

Drilling Began 7-11-90 Completed 7-18-90 Type tools Cable Size of hole 10 in.

Elevation of land surface or _____ at well is _____ ft. Total depth of well 215 ft.

Completed well is XXXX shallow ☐ artesian. Depth to water upon completion of well 185 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
195	210	15	water bearing sand	23

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet Top	Depth in Feet Bottom	Length (feet)	Type of Shoe	Perforations From	Perforations To
5"	PVC		0	215			201	211

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement

'90 SEP 7 AM 10 02
STATE ENGINEER OFFICE
SANTA FE, NEW MEXICO

Section 5. PLUGGING RECORD

Plugging Contractor _____

Address _____

Plugging Method _____

Date Well Plugged _____

Plugging approved by:

_____

State Engineer Representative

No.	Depth in Feet Top	Depth in Feet Bottom	Cubic Feet of Cement
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received July 23, 1990

Quad _____ FWL _____ FSL _____

File No. CP-753 Use STOCK Location No. 22.35.14.22131

Section 6. LOG OF HOLE

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color and Type of Material Encountered
0	10	10	Top Soil
10	100	90	Caliche
100	195	95	Sandy caliche
195	210	15	Water bearing sand
210	215	5	Red Bed

Section 7. REMARKS AND ADDITIONAL INFORMATION

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Driller

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the appropriate district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1(a) and Section 5 need be completed.

ENSOLUM

APPENDIX B

Photographic Log

ENSOLUM

Photographic Log
Maverick Natural Resources, LLC
Jalmat Yates Unit #188
NAPP2235373931

Photograph 1 Date: 12-19-22
Description: Soil staining during initial site visit
View: North

Photograph 2 Date: 1-9-23
Description: Delineation activities-backhoe
View: East

Photograph 3 Date: 12-7-23
Description: Delineation activities-air rotary
View: East

Photograph 4 Date: 12-8-23
Description: Delineation activities-air rotary
View: South

ENSOLUM

APPENDIX C

Lithologic Soil Sampling Logs

ENSOLUM

	Sample Name: PH01	Date: 12-7-23
	Site Name: Jalmat 188	
	Incident Number: NAPP2235373931	
	Job Number: 03D2057055	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Ronni Hayes	Method: Air Rotary
Coordinates: 32.395583, -103.321673	Hole Diameter: 6"	Total Depth: 24' bgs

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 factor included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
Dry	1,092	0.2	-			1	SM	SAND, silty sand, fine grained, no odor, dry, med to dark brown
Dry	1,377	0.6	-	PH01	2	2	SM	SAND, silty sand with gravel, fine grained, no odor, medium brown, dry
Dry	1,831	1.0	-	PH01	3	3	SAA	SAA
Dry	1,831	1.0	-	PH01	4	4	CCHE	CALICHE, sandy caliche, fine to coarse grained, med brown, dry, no odor
Dry	3,757.6	-	-			6-8	CCHE	CALICHE, sandy caliche, fine to medium coarse grained, light brown, dry, no odor
Dry	9,206.4	-	-	PH01	8-10	8-10	SAA	SAA, color change to reddish brown
Dry	4,832.8	-	N			10-12	SM	SAND, silty sand with gravel, very fine to fine grained, reddish tan, no odor, dry
Dry	6,160	-	N			12-14	SAA	SAA
Dry	5,241.6	-	N			14-16	SAA	SAA
Dry	3,035.2	-	N			16-18	SM	SAND, silty sand, very fine to fine grained, reddish tan, no odor, dry
Dry	1,299.2	-	N			18-20	SAA	SAA
Dry	862.4	-	N			20-22	SAA	SAA
Dry	470.4	-	N	PH01	22-24	22-24	SP-SM	SAND, silty sand with gravel, very fine to fine grained, reddish brown, no odor, dry
								TD at 24' bgs

ENSOLUM

Sample Name: PH02	Date: 12-7-23
Site Name: Jalmat 188	
Incident Number: NAPP2235373931	
Job Number: 03D2057055	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Ronni Hayes / Method: Air Rotary
Coordinates: 32.395654, -103.321536	Hole Diameter: 6" / Total Depth: 24' bgs

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 factor included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
Dry	1,590	1.4	-	PH02	1	1	SM	SAND, silty sand, fine grained, no odor, dry, med to dark brown
Dry	2,576	1.7	-			2	SAA	
Dry	3,188	0.7	-			3	SM	SAND, silty sand with gravel, fine grained, no odor, medium to light brown, dry
Dry	2,245	0.9	-	PH02	4	4	CCHE	CALICHE, sandy caliche, fine to coarse grained, medium brown, dry, no odor
Dry	5,364	2.1	-			5	SAA	SAA
Dry	13,232	1.5	-			6	SAA	SAA
Dry	12,129	1.3	-			7	CCHE	CALICHE, sandy caliche, fine to coarse grained, medium brown, dry, no odor
Dry	14,476	1.3	-	PH02	8	8	SAA	SAA, color change to reddish brown
Dry	4,093.60	-	N	PH02	10-12	10-12	SM	SAND, silty sand with gravel, very fine to coarse grained, dry, no odor, reddish brown
Dry	2,828	-	N			12-14	SAA	SAA
Dry	1,820.40	-	N			14-16	SAA	SAA
Dry	2,144.80	-	N			16-18	SAA	SAA, color change to medium brown
Dry	1,204	-	N			18-20	SAA	SAA, color change to reddish brown
Dry	1,108.80	-	N			20-22	SAA	SAA
Dry	526.4	-	N	PH02	22-24	22-24	SP-SM	SAND, silty sand with gravel, very fine to fine grained, reddish tan, no odor, dry TD at 24' bgs

ENSOLUM

Sample Name: PH03	Date: 12-7-23
Site Name: Jalmat 188	
Incident Number: NAPP2235373931	
Job Number: 03D2057055	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Ronni Hayes / Method: Air Rotary
Coordinates: 32.395745, -103.321564	Hole Diameter: 6" / Total Depth: 46' bgs

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 factor included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
Dry	1,422	1.3	-	PH03	1	1	SM	SAND, silty sand, fine grained, no odor, dry, med to dark brown
Dry	1,892	1.5	-	PH03	4	4	CCHE	CALICHE, sandy caliche, fine to coarse grained, medium brown, dry, no odor
Dry	1,892	1.0	-	PH03	8	8	SM	SAND, silty sand with gravel, very fine to coarse grained, dry, no odor, reddish brown
Dry	2,828	-	N			10-12	SAA	
Dry	3259.2	-	N	PH03	12-14	12-14	SAA	SAA
Dry	2,144.8	-	N			14-16	SM	SAND, silty sand with gravel, fine to medium grained, reddish tan, no odor, dry
Dry	4,452	-	N			16-18	SM	SAND, silty sand, very fine to medium grained, no odor, dry, reddish brown
Dry	3,259.2	-	N			18-20	SAA	SAA
Dry	3,511.2	-	N			20-22	SAA	SAA
Dry	3,511.20	-	N			22-24	SAA	SAA
Dry	3,035.20	-	N			24-26	SM	SAND, silty sand, very fine, no odor, dry, medium grained
Dry	6,160	-	N	PH03	26-28	26-28	SAA	SAA
Dry	5,241.60	-	N			28-30	SM	SAND, silty sand, very fine to medium grained, no odor, dry, tan
Dry	4,093.6	-	N			30-32	SAA	SAA
Dry	3,449.60	-	N			32-34	SAA	SAA
Dry	1,741.6	-	N			34-36	SAA	SAA
Dry	1,108.80	-	N			36-38	SAA	SAA
Dry	912.8	-	N			38-40	SM	SAND, silty sand, very fine to fine grained, no odor, dry, light brown
Dry	649.6	-	N			40-42	SAA	
Dry	588	-	N			42-44	SAA	
Dry	414.6	-	N	PH03	44-46	44-46	SAA	SAA, color change to tan TD at 46' bgs

ENSOLUM

	Sample Name: PH04	Date: 1/9/23
	Site Name: Jalmat 188	
	Incident Number: NAPP2235373931	
	Job Number: 03D2057055	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Peter Van Patten	Method: Backhoe
Coordinates: 32.395559, -103.321463	Hole Diameter: 3'	Total Depth: 8' bgs

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 factor included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
Dry	868	1.6	N	PH04	1	1	SP-SM	SAND, poorly graded sand with silt, very fine to fine grained, medium to dark brown, no odor
Dry			N			2	SAA	SAA, slight odor
Dry			N			3	SAA	SAA
Dry	8,685	1.9	N	PH04	4	4	SP-SM	SAND, poorly graded sand with silt, fine grained, medium brown, slight odor.
Dry			N			5	SAA	SAA
Dry			N			6	CCHE	CALICHE, sandy gravel, light brown, dry, no odor, fine to medium grained
Dry			N			7	SAA	SAA
Dry	11,132	0.9	N	PH04	8	8	SAA	SAA
								TD at 8 ft bgs

ENSOLUM

	Sample Name: PH05	Date: 1/9/23
	Site Name: Jalmat 188	
	Incident Number: NAPP2235373931	
	Job Number: 03D2057055	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Ronni Hayes	Method: Air Rotary
Coordinates: 32.395714, -103.321662	Hole Diameter: 3'	Total Depth: 8' bgs

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 factor included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
Dry	2,497	1.3	N	PH05	1	1	SM	SAND, poorly sorted sand with silt, fine grained, no odor, dry, med to dark brown
						2	SAA	SAA
						3	SAA	SAA
Dry	1,764	1.2	N	PH05	4	4	CCHE	CALICHE, sandy caliche, fine to coarse grained, medium brown, dry, no odor
						5	SAA	SAA, light brown
						6	SAA	SAA
						7	SP-SM	SAND, poorly sorted sand with gravel, fine to coarse grained, reddish brown, no odor, dry
Dry	2,872.00	0.6	N	PH05	8	8	SM	SAND, silty sand with gravel, very fine to coarse grained, dry, no odor, reddish brown
								TD at 8 ft bgs

ENSOLUM

	Sample Name: PH06	Date: 12-8-23
	Site Name: Jalmat 188	
	Incident Number: NAPP2235373931	
	Job Number: 03D2057055	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Ronni Hayes	Method: Air Rotary
Coordinates: 32.32395842, -103.321561	Hole Diameter: 6"	Total Depth: 30' bgs

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 factor included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
Dry	<168	0.0	N	PH06	1	1	SM	SAND, silty sand, medium-dark brown, fine grained, no odor, dry
Dry	<168	0.0	N		2	2	SM	SAND, silty sand with gravel, fine-medium grained, no odor, medium-dark brown, dry
Dry	<168	0.0	N		3	3	SM	SAA
Dry	<168	0.0	N	PH06	4	4	CCHE	CALICHE, sandy caliche, fine-med coarse grained, tan-light brown, dry, no odor
Dry	<168	0.0	N		5	5	CCHE	CALICHE, sandy caliche, fine-med coarse grained, tan-light brown, dry, no odor
Dry	<168	0.0	N	PH06	6	6-11	CCHE	SAA
Dry	<156	-	N	PH06	11-16	11-16	SP-SM	SAND, silty sand with gravel, fine grained, no odor reddish brown, dry
Dry	<156	-	N			16-21	SAA	SAA
Dry	<156	-	N			21-26	SAA	SAA
Dry	<156	-	N	PH06	26-30	26-30	SP-SM	SAND, silty sand with gravel, very fine to medium grained, tan color, dry, no odor
								TD at 30' bgs

ENSOLUM

	Sample Name: PH07	Date: 12-8-23
	Site Name: Jalmat 188	
	Incident Number: NAPP2235373931	
	Job Number: 03D2057055	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Ronni Hayes	Method: Air Rotary
Coordinates: 32.395692, -103.321297	Hole Diameter: 6"	Total Depth: 30' bgs

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 factor included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
Dry	<168	0.0	N	PH07	1	1	SM	SAND, silty sand with gravel, very fine-fine-medium grained, medium-dark brown, no odor, dry
Dry	<168	0.0	N		2	2	SM	SAND, silty sand, very fine-fine grained, medium brown-tan, no odor, dry
Dry	<168	0.0	N		3	3	SM	SAND, silty sand with gravel, fine-medium grained, medium brown-tan, poorly graded, no odor, dry
Dry	<168	0.0	N	PH07	4	4	CCHE	CALICHE, sandy caliche, fine-med coarse grained, tan-light brown, dry, no odor
Dry	<168	0.0	N		5	5	CCHE	CALICHE, sandy caliche, fine-med coarse grained, tan, dry, no odor
Dry	<168	0.0	N	PH07	6	6-11	CCHE	SAA
Dry	<156	-	N	PH07	11-16	11-16	SM	SAND, silty sand mix, very fine to fine grained, no odor, dry, tan to light brown color
Dry	<156	-	N			16-21	SM	SAA
Dry	<156	-	N			21-26	SM	SAND, silty sand mix, some gravel, very fine to fine grained, no odor, dry, tan color
Dry	<156	-	N	PH07	26-30	26-30	SM	SAND, silty sand mix, very fine to fine grained, no odor, dry, tan to light brown color
								TD at 30' bgs

ENSOLUM

	Sample Name: PH08	Date: 2-4-23
	Site Name: Jalmat 188	
	Incident Number: NAPP2235373931	
	Job Number: 03D2057055	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Julianna Falcomata	Method: Backhoe
Coordinates: 32.395400, -103.321424	Hole Diameter: 3'	Total Depth: 5' bgs

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 factor included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
Dry	649	0.3	N	PH08	1	1	SP-SM	SAND, poorly graded sand with silt, very fine to fine grained, medium to dark brown, dry, no odor
Dry	2676	0.2	N			2	SAA	SAA
Dry	3852	0.2	N			3	SP-SM	SAND, poorly graded sand with silt and gravel, very fine to fine grained, medium to dark brown, dry, no odor
Dry	4552	0.2	N	PH08	4	4	SAA	SAA
Dry	4188	3.2	N			5	SP-SC	SAND, poorly graded sand with clay and gravel, very fine to fine grained, dark brown, low plasticity, no odor
								TD at 5' bgs due to visible indications of a historical pit.

ENSOLUM

Sample Name: PH09	Date: 12-7-23	
Site Name: Jalmat 188		
Incident Number: NAPP2235373931		
Job Number: 03D2057055		
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Ronni Hayes	Method: Air Rotary
Coordinates: 32.395449, -103.321565	Hole Diameter: 6"	Total Depth: 42' bgs

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 factor included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
Dry	2872	0.3	N	PH09	1	1	SP-SM	(1-4') SAND, poorly graded sand with silt, very fine to fine grained, medium to dark brown, strong odor 2-4' bgs
Dry	3,533	0.3	N			2		
Dry	8013	4.9	N			3		
Damp	15,876	415	N	PH09	4	4	SAA	Visible indication of a historical pit at 4' bgs.
Dry	7,829	-	N			6-8	CCHE	CALICHE, sandy gravel, light brown, dry, no odor, fine to medium grained
Dry	9,206	-	N	PH09	8-10	8-10	SAA	SAA
Dry	6,670	-	N			10-12	SAA	SAA
Dry	6160	-	N			12-14	SAA	SAA
Dry	7,229.6	-	N			14-16	SM	SAND, silty sand with gravel, fine to medium grained, reddish tan, no odor, dry
Dry	5,684	-	N			16-18	SM	SAND, silty sand, very fine to medium grained, no odor, dry, reddish brown
Dry	5,684.0	-	N			18-20	SAA	SAA
Dry	8,489.6	-	N			20-22	SAA	SAA
Dry	7,229.60	-	N			22-24	SAA	SAA
Dry	3,511.20	-	N	PH09	24-26	24-26	SM	SAND, silty sand, very fine, no odor, dry, medium grained
Dry	2,828	-	N			26-28	SAA	SAA
Dry	2,637.60	-	N			28-30	SM	SAND, silty sand, very fine to medium grained, no odor, dry, tan
Dry	1,204.0	-	N			30-32	SAA	SAA
Dry	2,144.80	-	N			32-34	SAA	SAA
Dry	1,299.2	-	N			34-36	SAA	SAA
Dry	862.40	-	N			36-38	SAA	SAA
Dry	319.2	-	N	PH09	38-40	38-40	SM	SAND, silty sand, very fine to fine grained, no odor, dry, light brown
Dry	470.4	-	N			40-42	SAA	
								TD at 42' bgs

ENSOLUM

	Sample Name: PH10	Date: 2-24-23
	Site Name: Jalmat 188	
	Incident Number: NAPP2235373931	
	Job Number: 03D2057055	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Julianna Falcomata	Method: Backhoe
Coordinates: 32.395355, -103.321602	Hole Diameter: 3'	Total Depth: 6' bgs

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 factor included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
Dry	414	0.6	N	PH10	1	1	SM	SAND, silty sand with gravel, very fine to fine to medium grained, medium brown, no odor
Dry	3,651	0.7	N			2	SAA	SAA except tan to medium brown color
Dry	2,329	0.7	N			3	SAA	SAA except tan to reddish brown color
Dry	2,676	0.6	N	PH10	4	4	SAA	SAA, except reddish color
Dry	1036	0.6	N			5	SAA	SAA
Dry	470	0.5	N	PH10	6	6	SAA	SAA
								TD at 6' bgs

ENSOLUM

Sample Name: BH01	Date: 12-8-23	
Site Name: Jalmat 188		
Incident Number: NAPP2235373931		
Job Number: 03D2057055		
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Ronni Hayes	Method: Air Rotary
Coordinates: 32.395223, -103.321510	Hole Diameter: 6"	Total Depth: 30' bgs

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 factor included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
Dry	<156	--	N			0-2	SM	SAND, silty sand with gravel, fine grained, medium brown, no odor, dry
Dry	156	--	N	BH01	2-4	2-4	SAA	SAA
Dry	<156	--	N			4-6	CCHE	CALICHE, sandy caliche, fine to coarse grained, med brown, dry, no odor
Dry	<156	--	N			6-8	SAA	SAA
Dry	<156	--	N			8-10	SM	SAND, silty sand, very fine to medium grained, med to dark brown, no odor, dry
Dry	<156	--	N			10-12	SAA	SAA
Dry	<156	--	N			12-14	SAA	SAA
Dry	<156	--	N	BH01	14-16	14-16	SM	SAND, silty sand with gravel, fine to medium grained, reddish tan, no odor, dry
Dry	<156	--	N			16-18	SM	SAND, silty sand, very fine to medium grained, no odor, dry, reddish brown
Dry	<156	--	N			18-20	SAA	SAA
Dry	<156	--	N			20-22	SAA	SAA
Dry	<156	--	N			22-24	SAA	SAA
Dry	<156	--	N			24-26	SM	SAND, silty sand, very fine, no odor, dry, medium grained
Dry	<156	--	N			26-28	SAA	SAA
Dry	<156	--	N	BH01	28-30	28-30	SM	SAND, silty sand, very fine to medium grained, no odor, dry, tan
								TD at 30' bgs

ENSOLUM

	Sample Name: BH02	Date: 12-8-23
	Site Name: Jalmat 188	
	Incident Number: NAPP2235373931	
	Job Number: 03D2057055	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Ronni Hayes	Method: Air Rotary
Coordinates: 32.395534, -103.321857	Hole Diameter: 6"	Total Depth: 30' bgs

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 factor included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
Dry	352.8	--	N	BH02	0-2	0-2	SM	SAND, silty sand with gravel, very fine to fine grained, medium to dark brown, no odor, dry
Dry	<156	--	N			2-4	SAA	SAA
Dry	<156	--	N			4-6	CCHE	CALICHE, sandy caliche, fine to medium coarse grained, med brown, dry, no odor
Dry	<156	--	N			6-11	SAA	SAA
Dry	<156	--	N	BH02	11-16	11-16	SM	SAND, silty sand, very fine to medium grained, reddish brown, no odor, dry
Dry	<156	--	N			16-21	SAA	SAA
Dry	<156	--	N			21-26	SAA	SAA
Dry	<156	--	N	BH02	28-30	28-30	SM	SAND, silty sand, very fine to medium grained, tan to light brown, no odor, dry
								TD at 30' bgs

ENSOLUM

	Sample Name: BH03	Date: 12-8-23
	Site Name: Jalmat 188	
	Incident Number: NAPP2235373931	
	Job Number: 03D2057055	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Ronni Hayes	Method: Air Rotary
Coordinates: 32.395471, -103.321293	Hole Diameter: 6"	Total Depth: 30' bgs

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 factor included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
Dry	<156	--	N	BH03	0-2	0-2	SM	SAND, silty sand with gravel, very fine to fine grained, medium to dark brown, no odor, dry
Dry	<156	--	N			2-4	SAA	SAA
Dry	<156	--	N			4-6	CCHE	CALICHE, sandy caliche, fine to medium coarse grained, med brown, dry, no odor
Dry	<156	--	N			6-11	SAA	SAA
Dry	<156	--	N	BH03	11-16	11-16	SM	SAND, silty sand with gravel, very fine to medium grained, medium brown, no odor, dry
Dry	<156	--	N			16-21	SAA	SAA
Dry	<156	--	N			21-26	SAA	SAA
Dry	<156	--	N	BH03	28-30	28-30	SM	SAND, silty sand with gravel, very fine to medium grained, tan, no odor, dry
								TD at 30' bgs

ENSOLUM

APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

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JOB DESCRIPTION

JALMAT YATES UNIT #188
SDG NUMBER Lea

JOB NUMBER

890-3814-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

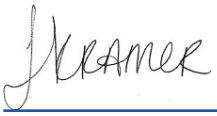
my EOL

Eurofins Carlsbad

Job Notes

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

Authorization



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

Client: Ensolum
Project/Site: JALMAT YATES UNIT #188

Laboratory Job ID: 890-3814-1
SDG: Lea

Table of Contents

Definitions/Glossary

Client: Ensolum Job ID: 890-3814-1
Project/Site: JALMAT YATES UNIT #188 SDG: Lea

Qualifiers

GC VOA

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

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: JALMAT YATES UNIT #188

Job ID: 890-3814-1
SDG: Lea

Job ID: 890-3814-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3814-1

Receipt
The samples were received on 1/10/2023 9:05 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 2.6°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: PH01 (890-3814-1), PH01 (890-3814-2), PH01 (890-3814-3), PH02 (890-3814-4), PH02 (890-3814-5), PH02 (890-3814-6), PH03 (890-3814-7), PH03 (890-3814-8), PH03 (890-3814-9), PH04 (890-3814-10), PH04 (890-3814-11), PH04 (890-3814-12), PH05 (890-3814-13), PH05 (890-3814-14) and PH05 (890-3814-15).

GC VOA
Method 8021B: Surrogate recovery for the following sample was outside control limits: PH03 (890-3814-9). 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
Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: PH01 (890-3814-1), PH02 (890-3814-4), PH02 (890-3814-6), PH03 (890-3814-8), PH03 (890-3814-9), PH05 (890-3814-15) and (MB 880-43836/1-A). Evidence of matrix interferences is not obvious.

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

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-43786 and analytical batch 880-43927 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: JALMAT YATES UNIT #188

Job ID: 890-3814-1
SDG: Lea

Client Sample ID: PH01
Date Collected: 01/09/23 11:00
Date Received: 01/10/23 09:05
Sample Depth: 2

Lab Sample ID: 890-3814-1
Matrix: Solid

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		01/11/23 13:33	01/13/23 16:52	1
Toluene	<0.00202	U	0.00202		mg/Kg		01/11/23 13:33	01/13/23 16:52	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		01/11/23 13:33	01/13/23 16:52	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		01/11/23 13:33	01/13/23 16:52	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		01/11/23 13:33	01/13/23 16:52	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		01/11/23 13:33	01/13/23 16:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*01/11/23 13:33*	*01/13/23 16:52*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*01/11/23 13:33*	*01/13/23 16:52*	*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			01/16/23 17:06	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			01/16/23 16:35	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		01/12/23 15:08	01/13/23 11:01	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/12/23 15:08	01/13/23 11:01	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/12/23 15:08	01/13/23 11:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*137*	*S1+*	*70 - 130*	*01/12/23 15:08*	*01/13/23 11:01*	*1*
o-Terphenyl	*134*	*S1+*	*70 - 130*	*01/12/23 15:08*	*01/13/23 11:01*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2870**		24.8		mg/Kg			01/14/23 02:06	5

Client Sample ID: PH01
Date Collected: 01/09/23 11:05
Date Received: 01/10/23 09:05
Sample Depth: 3

Lab Sample ID: 890-3814-2
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		01/11/23 13:33	01/13/23 17:13	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/11/23 13:33	01/13/23 17:13	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/11/23 13:33	01/13/23 17:13	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		01/11/23 13:33	01/13/23 17:13	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/11/23 13:33	01/13/23 17:13	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/11/23 13:33	01/13/23 17:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*129*		*70 - 130*	*01/11/23 13:33*	*01/13/23 17:13*	*1*

Client Sample Results

Client: Ensolum
Project/Site: JALMAT YATES UNIT #188

Job ID: 890-3814-1
SDG: Lea

Client Sample ID: PH01

Lab Sample ID: 890-3814-2
Matrix: Solid
Date Collected: 01/09/23 11:05
Date Received: 01/10/23 09:05
Sample Depth: 3

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*01/11/23 13:33*	*01/13/23 17:13*	*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			01/16/23 17:06	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			01/16/23 16:35	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		01/12/23 15:08	01/13/23 12:07	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		01/12/23 15:08	01/13/23 12:07	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		01/12/23 15:08	01/13/23 12:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*122*		*70 - 130*	*01/12/23 15:08*	*01/13/23 12:07*	*1*
o-Terphenyl	*111*		*70 - 130*	*01/12/23 15:08*	*01/13/23 12:07*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1830**		25.0	mg/Kg			01/14/23 02:11	5

Client Sample ID: PH01

Lab Sample ID: 890-3814-3
Matrix: Solid
Date Collected: 01/09/23 11:10
Date Received: 01/10/23 09:05
Sample Depth: 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		01/11/23 13:33	01/13/23 17:33	1
Toluene	<0.00199	U	0.00199	mg/Kg		01/11/23 13:33	01/13/23 17:33	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		01/11/23 13:33	01/13/23 17:33	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		01/11/23 13:33	01/13/23 17:33	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		01/11/23 13:33	01/13/23 17:33	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		01/11/23 13:33	01/13/23 17:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*127*		*70 - 130*	*01/11/23 13:33*	*01/13/23 17:33*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*01/11/23 13:33*	*01/13/23 17:33*	*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			01/16/23 17:06	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			01/16/23 16:35	1

Client Sample Results

Client: Ensolum
Project/Site: JALMAT YATES UNIT #188

Job ID: 890-3814-1
SDG: Lea

Client Sample ID: PH01

Lab Sample ID: 890-3814-3
Matrix: Solid
Date Collected: 01/09/23 11:10
Date Received: 01/10/23 09:05
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		01/12/23 15:08	01/13/23 12:29	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/12/23 15:08	01/13/23 12:29	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/12/23 15:08	01/13/23 12:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*127*		*70 - 130*	*01/12/23 15:08*	*01/13/23 12:29*	*1*
o-Terphenyl	*123*		*70 - 130*	*01/12/23 15:08*	*01/13/23 12:29*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2530**		25.0		mg/Kg			01/14/23 02:17	5

Client Sample ID: PH02

Lab Sample ID: 890-3814-4
Matrix: Solid
Date Collected: 01/09/23 12:30
Date Received: 01/10/23 09:05
Sample Depth: 1

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		01/11/23 13:33	01/13/23 17:54	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/11/23 13:33	01/13/23 17:54	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/11/23 13:33	01/13/23 17:54	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		01/11/23 13:33	01/13/23 17:54	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/11/23 13:33	01/13/23 17:54	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		01/11/23 13:33	01/13/23 17:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*	*01/11/23 13:33*	*01/13/23 17:54*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*01/11/23 13:33*	*01/13/23 17:54*	*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			01/16/23 17:06	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			01/16/23 16:35	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		01/12/23 15:08	01/13/23 12:51	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		01/12/23 15:08	01/13/23 12:51	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		01/12/23 15:08	01/13/23 12:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*141*	*S1+*	*70 - 130*	*01/12/23 15:08*	*01/13/23 12:51*	*1*
o-Terphenyl	*131*	*S1+*	*70 - 130*	*01/12/23 15:08*	*01/13/23 12:51*	*1*

Client Sample Results

Client: Ensolum
Project/Site: JALMAT YATES UNIT #188

Job ID: 890-3814-1
SDG: Lea

Client Sample ID: PH02

Lab Sample ID: 890-3814-4
Matrix: Solid
Date Collected: 01/09/23 12:30
Date Received: 01/10/23 09:05
Sample Depth: 1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1970		25.1		mg/Kg			01/14/23 02:22	5

Client Sample ID: PH02

Lab Sample ID: 890-3814-5
Matrix: Solid
Date Collected: 01/09/23 12:35
Date Received: 01/10/23 09:05
Sample Depth: 4

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		01/11/23 13:33	01/13/23 18:15	1
Toluene	<0.00201	U	0.00201		mg/Kg		01/11/23 13:33	01/13/23 18:15	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		01/11/23 13:33	01/13/23 18:15	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		01/11/23 13:33	01/13/23 18:15	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		01/11/23 13:33	01/13/23 18:15	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		01/11/23 13:33	01/13/23 18:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*131*	*S1+*	*70 - 130*	*01/11/23 13:33*	*01/13/23 18:15*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*01/11/23 13:33*	*01/13/23 18:15*	*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			01/16/23 17:06	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			01/16/23 16:35	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		01/12/23 15:08	01/13/23 13:13	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/12/23 15:08	01/13/23 13:13	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/12/23 15:08	01/13/23 13:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*01/12/23 15:08*	*01/13/23 13:13*	*1*
o-Terphenyl	*109*		*70 - 130*	*01/12/23 15:08*	*01/13/23 13:13*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3160		24.9		mg/Kg			01/14/23 02:28	5

Client Sample Results

Client: Ensolum
Project/Site: JALMAT YATES UNIT #188

Job ID: 890-3814-1
SDG: Lea

Client Sample ID: PH02

Lab Sample ID: 890-3814-6
Matrix: Solid
Date Collected: 01/09/23 12:40
Date Received: 01/10/23 09:05
Sample Depth: 8

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		01/11/23 13:33	01/13/23 18:35	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/11/23 13:33	01/13/23 18:35	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/11/23 13:33	01/13/23 18:35	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		01/11/23 13:33	01/13/23 18:35	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/11/23 13:33	01/13/23 18:35	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/11/23 13:33	01/13/23 18:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*	*01/11/23 13:33*	*01/13/23 18:35*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*01/11/23 13:33*	*01/13/23 18:35*	*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			01/16/23 17:06	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			01/16/23 16:35	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		01/12/23 15:08	01/13/23 13:35	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/12/23 15:08	01/13/23 13:35	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/12/23 15:08	01/13/23 13:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*137*	*S1+*	*70 - 130*	*01/12/23 15:08*	*01/13/23 13:35*	*1*
o-Terphenyl	*127*		*70 - 130*	*01/12/23 15:08*	*01/13/23 13:35*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11800**		99.6		mg/Kg			01/14/23 02:33	20

Client Sample ID: PH03

Lab Sample ID: 890-3814-7
Matrix: Solid
Date Collected: 01/09/23 13:35
Date Received: 01/10/23 09:05
Sample Depth: 1

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		01/11/23 13:33	01/13/23 18:56	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/11/23 13:33	01/13/23 18:56	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/11/23 13:33	01/13/23 18:56	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		01/11/23 13:33	01/13/23 18:56	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/11/23 13:33	01/13/23 18:56	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/11/23 13:33	01/13/23 18:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*	*01/11/23 13:33*	*01/13/23 18:56*	*1*

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Client Sample Results

Client: Ensolum
Project/Site: JALMAT YATES UNIT #188

Job ID: 890-3814-1
SDG: Lea

Client Sample ID: PH03

Lab Sample ID: 890-3814-7
Matrix: Solid
Date Collected: 01/09/23 13:35
Date Received: 01/10/23 09:05
Sample Depth: 1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*80*		*70 - 130*	*01/11/23 13:33*	*01/13/23 18:56*	*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			01/16/23 17:06	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			01/16/23 16:35	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		01/12/23 15:08	01/13/23 13:57	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/12/23 15:08	01/13/23 13:57	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/12/23 15:08	01/13/23 13:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*118*		*70 - 130*	*01/12/23 15:08*	*01/13/23 13:57*	*1*
o-Terphenyl	*116*		*70 - 130*	*01/12/23 15:08*	*01/13/23 13:57*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2110**		25.0	mg/Kg			01/13/23 21:43	5

Client Sample ID: PH03

Lab Sample ID: 890-3814-8
Matrix: Solid
Date Collected: 01/09/23 13:40
Date Received: 01/10/23 09:05
Sample Depth: 4

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		01/11/23 13:33	01/13/23 19:17	1
Toluene	<0.00200	U	0.00200	mg/Kg		01/11/23 13:33	01/13/23 19:17	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		01/11/23 13:33	01/13/23 19:17	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		01/11/23 13:33	01/13/23 19:17	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		01/11/23 13:33	01/13/23 19:17	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		01/11/23 13:33	01/13/23 19:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*127*		*70 - 130*	*01/11/23 13:33*	*01/13/23 19:17*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*01/11/23 13:33*	*01/13/23 19:17*	*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			01/16/23 17:06	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			01/16/23 16:35	1

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Client Sample Results

Client: Ensolum
Project/Site: JALMAT YATES UNIT #188

Job ID: 890-3814-1
SDG: Lea

Client Sample ID: PH03

Lab Sample ID: 890-3814-8
Matrix: Solid
Date Collected: 01/09/23 13:40
Date Received: 01/10/23 09:05
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		01/12/23 15:08	01/13/23 14:19	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/12/23 15:08	01/13/23 14:19	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/12/23 15:08	01/13/23 14:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*140*	*S1+*	*70 - 130*	*01/12/23 15:08*	*01/13/23 14:19*	*1*
o-Terphenyl	*130*		*70 - 130*	*01/12/23 15:08*	*01/13/23 14:19*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2530**		24.9		mg/Kg			01/13/23 21:49	5

Client Sample ID: PH03

Lab Sample ID: 890-3814-9
Matrix: Solid
Date Collected: 01/09/23 13:45
Date Received: 01/10/23 09:05
Sample Depth: 8

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		01/11/23 13:33	01/13/23 19:37	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/11/23 13:33	01/13/23 19:37	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/11/23 13:33	01/13/23 19:37	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		01/11/23 13:33	01/13/23 19:37	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/11/23 13:33	01/13/23 19:37	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		01/11/23 13:33	01/13/23 19:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*55*	*S1-*	*70 - 130*	*01/11/23 13:33*	*01/13/23 19:37*	*1*
1,4-Difluorobenzene (Surr)	*71*		*70 - 130*	*01/11/23 13:33*	*01/13/23 19:37*	*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			01/16/23 17:06	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			01/16/23 16:35	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		01/12/23 15:08	01/13/23 14:42	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/12/23 15:08	01/13/23 14:42	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/12/23 15:08	01/13/23 14:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*140*	*S1+*	*70 - 130*	*01/12/23 15:08*	*01/13/23 14:42*	*1*
o-Terphenyl	*130*		*70 - 130*	*01/12/23 15:08*	*01/13/23 14:42*	*1*

Client Sample Results

Client: Ensolum
Project/Site: JALMAT YATES UNIT #188

Job ID: 890-3814-1
SDG: Lea

Client Sample ID: PH03

Lab Sample ID: 890-3814-9
Matrix: Solid
Date Collected: 01/09/23 13:45
Date Received: 01/10/23 09:05
Sample Depth: 8

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2840		25.0		mg/Kg			01/13/23 22:08	5

Client Sample ID: PH04

Lab Sample ID: 890-3814-10
Matrix: Solid
Date Collected: 01/09/23 13:50
Date Received: 01/10/23 09:05
Sample Depth: 1

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		01/11/23 13:33	01/13/23 19:58	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/11/23 13:33	01/13/23 19:58	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/11/23 13:33	01/13/23 19:58	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		01/11/23 13:33	01/13/23 19:58	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/11/23 13:33	01/13/23 19:58	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/11/23 13:33	01/13/23 19:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*123*		*70 - 130*	*01/11/23 13:33*	*01/13/23 19:58*	*1*
1,4-Difluorobenzene (Surr)	*77*		*70 - 130*	*01/11/23 13:33*	*01/13/23 19:58*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			01/16/23 17:06	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			01/16/23 16:35	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		01/12/23 15:08	01/13/23 15:04	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/12/23 15:08	01/13/23 15:04	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/12/23 15:08	01/13/23 15:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*01/12/23 15:08*	*01/13/23 15:04*	*1*
o-Terphenyl	*104*		*70 - 130*	*01/12/23 15:08*	*01/13/23 15:04*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1210		4.95		mg/Kg			01/13/23 22:14	1

Client Sample Results

Client: Ensolum
Project/Site: JALMAT YATES UNIT #188

Job ID: 890-3814-1
SDG: Lea

Client Sample ID: PH04

Date Collected: 01/09/23 13:55
Date Received: 01/10/23 09:05
Sample Depth: 4

Lab Sample ID: 890-3814-11
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		01/11/23 13:33	01/13/23 21:22	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/11/23 13:33	01/13/23 21:22	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/11/23 13:33	01/13/23 21:22	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		01/11/23 13:33	01/13/23 21:22	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/11/23 13:33	01/13/23 21:22	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/11/23 13:33	01/13/23 21:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*01/11/23 13:33*	*01/13/23 21:22*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*01/11/23 13:33*	*01/13/23 21:22*	*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			01/16/23 17:06	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			01/16/23 16:35	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		01/12/23 15:08	01/13/23 15:48	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/12/23 15:08	01/13/23 15:48	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/12/23 15:08	01/13/23 15:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*129*		*70 - 130*	*01/12/23 15:08*	*01/13/23 15:48*	*1*
o-Terphenyl	*116*		*70 - 130*	*01/12/23 15:08*	*01/13/23 15:48*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10100**		100		mg/Kg			01/13/23 22:20	20

Client Sample ID: PH04

Date Collected: 01/09/23 14:00
Date Received: 01/10/23 09:05
Sample Depth: 8

Lab Sample ID: 890-3814-12
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/11/23 13:33	01/13/23 21:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/11/23 13:33	01/13/23 21:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/11/23 13:33	01/13/23 21:43	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		01/11/23 13:33	01/13/23 21:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/11/23 13:33	01/13/23 21:43	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		01/11/23 13:33	01/13/23 21:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*121*		*70 - 130*	*01/11/23 13:33*	*01/13/23 21:43*	*1*

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Client Sample Results

Client: Ensolum
Project/Site: JALMAT YATES UNIT #188

Job ID: 890-3814-1
SDG: Lea

Client Sample ID: PH04

Lab Sample ID: 890-3814-12
Matrix: Solid
Date Collected: 01/09/23 14:00
Date Received: 01/10/23 09:05
Sample Depth: 8

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*01/11/23 13:33*	*01/13/23 21:43*	*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			01/16/23 17:06	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			01/16/23 16:35	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		01/12/23 15:08	01/13/23 16:10	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		01/12/23 15:08	01/13/23 16:10	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		01/12/23 15:08	01/13/23 16:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*112*		*70 - 130*	*01/12/23 15:08*	*01/13/23 16:10*	*1*
o-Terphenyl	*110*		*70 - 130*	*01/12/23 15:08*	*01/13/23 16:10*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11400**		99.4	mg/Kg			01/13/23 22:26	20

Client Sample ID: PH05

Lab Sample ID: 890-3814-13
Matrix: Solid
Date Collected: 01/09/23 14:30
Date Received: 01/10/23 09:05
Sample Depth: 1

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		01/11/23 13:33	01/13/23 22:04	1
Toluene	<0.00201	U	0.00201	mg/Kg		01/11/23 13:33	01/13/23 22:04	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		01/11/23 13:33	01/13/23 22:04	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		01/11/23 13:33	01/13/23 22:04	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		01/11/23 13:33	01/13/23 22:04	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		01/11/23 13:33	01/13/23 22:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*127*		*70 - 130*	*01/11/23 13:33*	*01/13/23 22:04*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*01/11/23 13:33*	*01/13/23 22:04*	*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			01/16/23 17:06	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			01/16/23 16:35	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: JALMAT YATES UNIT #188

Job ID: 890-3814-1
SDG: Lea

Client Sample ID: PH05

Lab Sample ID: 890-3814-13
Matrix: Solid
Date Collected: 01/09/23 14:30
Date Received: 01/10/23 09:05
Sample Depth: 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		01/12/23 15:08	01/13/23 16:32	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/12/23 15:08	01/13/23 16:32	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/12/23 15:08	01/13/23 16:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*126*		*70 - 130*	*01/12/23 15:08*	*01/13/23 16:32*	*1*
o-Terphenyl	*117*		*70 - 130*	*01/12/23 15:08*	*01/13/23 16:32*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1930**		25.0		mg/Kg			01/13/23 22:32	5

Client Sample ID: PH05

Lab Sample ID: 890-3814-14
Matrix: Solid
Date Collected: 01/09/23 14:35
Date Received: 01/10/23 09:05
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		01/11/23 13:33	01/13/23 22:25	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/11/23 13:33	01/13/23 22:25	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/11/23 13:33	01/13/23 22:25	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		01/11/23 13:33	01/13/23 22:25	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/11/23 13:33	01/13/23 22:25	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/11/23 13:33	01/13/23 22:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*130*		*70 - 130*	*01/11/23 13:33*	*01/13/23 22:25*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*01/11/23 13:33*	*01/13/23 22:25*	*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			01/16/23 17:06	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			01/16/23 16:35	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		01/12/23 15:08	01/13/23 16:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/12/23 15:08	01/13/23 16:55	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/12/23 15:08	01/13/23 16:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*111*		*70 - 130*	*01/12/23 15:08*	*01/13/23 16:55*	*1*
o-Terphenyl	*109*		*70 - 130*	*01/12/23 15:08*	*01/13/23 16:55*	*1*

Client Sample Results

Client: Ensolum
Project/Site: JALMAT YATES UNIT #188

Job ID: 890-3814-1
SDG: Lea

Client Sample ID: PH05

Lab Sample ID: 890-3814-14
Matrix: Solid
Date Collected: 01/09/23 14:35
Date Received: 01/10/23 09:05
Sample Depth: 4

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2610		24.8		mg/Kg			01/13/23 22:38	5

Client Sample ID: PH05

Lab Sample ID: 890-3814-15
Matrix: Solid
Date Collected: 01/09/23 14:40
Date Received: 01/10/23 09:05
Sample Depth: 8

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		01/11/23 13:33	01/13/23 22:45	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/11/23 13:33	01/13/23 22:45	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/11/23 13:33	01/13/23 22:45	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		01/11/23 13:33	01/13/23 22:45	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/11/23 13:33	01/13/23 22:45	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/11/23 13:33	01/13/23 22:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*125*		*70 - 130*	*01/11/23 13:33*	*01/13/23 22:45*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*01/11/23 13:33*	*01/13/23 22:45*	*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			01/16/23 17:06	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			01/16/23 16:35	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		01/12/23 15:08	01/13/23 17:17	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/12/23 15:08	01/13/23 17:17	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/12/23 15:08	01/13/23 17:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*148*	*S1+*	*70 - 130*	*01/12/23 15:08*	*01/13/23 17:17*	*1*
o-Terphenyl	*135*	*S1+*	*70 - 130*	*01/12/23 15:08*	*01/13/23 17:17*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2180		24.8		mg/Kg			01/13/23 22:44	5

Surrogate Summary

Client: Ensolum
Project/Site: JALMAT YATES UNIT #188

Job ID: 890-3814-1
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)
890-3814-1	PH01	117	99
890-3814-1 MS	PH01	101	102
890-3814-1 MSD	PH01	103	100
890-3814-2	PH01	129	98
890-3814-3	PH01	127	103
890-3814-4	PH02	126	101
890-3814-5	PH02	131 S1+	100
890-3814-6	PH02	121	101
890-3814-7	PH03	121	80
890-3814-8	PH03	127	105
890-3814-9	PH03	55 S1-	71
890-3814-10	PH04	123	77
890-3814-11	PH04	112	106
890-3814-12	PH04	121	110
890-3814-13	PH05	127	107
890-3814-14	PH05	130	97
890-3814-15	PH05	125	109
LCS 880-43747/1-A	Lab Control Sample	94	98
LCSD 880-43747/2-A	Lab Control Sample Dup	99	98
MB 880-43747/5-A	Method Blank	99	86

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)
890-3814-1	PH01	137 S1+	134 S1+
890-3814-1 MS	PH01	116	102
890-3814-1 MSD	PH01	103	96
890-3814-2	PH01	122	111
890-3814-3	PH01	127	123
890-3814-4	PH02	141 S1+	131 S1+
890-3814-5	PH02	110	109
890-3814-6	PH02	137 S1+	127
890-3814-7	PH03	118	116
890-3814-8	PH03	140 S1+	130
890-3814-9	PH03	140 S1+	130
890-3814-10	PH04	113	104
890-3814-11	PH04	129	116
890-3814-12	PH04	112	110
890-3814-13	PH05	126	117
890-3814-14	PH05	111	109
890-3814-15	PH05	148 S1+	135 S1+
LCS 880-43836/2-A	Lab Control Sample	110	103
LCSD 880-43836/3-A	Lab Control Sample Dup	126	115

Surrogate Summary

Client: Ensolum Job ID: 890-3814-1
Project/Site: JALMAT YATES UNIT #188 SDG: Lea

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

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

		Percent Surrogate Recovery (Acceptance Limits)									
		1CO1	OTPH1								
Lab Sample ID	Client Sample ID	(70-130)	(70-130)								
MB 880-43836/1-A	Method Blank	176 S1+	160 S1+								

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: JALMAT YATES UNIT #188

Job ID: 890-3814-1
SDG: Lea

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-43747/5-A
Matrix: Solid
Analysis Batch: 43877

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 43747

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/11/23 13:33	01/13/23 16:30	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/11/23 13:33	01/13/23 16:30	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/11/23 13:33	01/13/23 16:30	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/11/23 13:33	01/13/23 16:30	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/11/23 13:33	01/13/23 16:30	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/11/23 13:33	01/13/23 16:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*01/11/23 13:33*	*01/13/23 16:30*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*01/11/23 13:33*	*01/13/23 16:30*	*1*

Lab Sample ID: LCS 880-43747/1-A
Matrix: Solid
Analysis Batch: 43877

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 43747

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1093		mg/Kg		109	70 - 130		
Toluene			0.100	0.1016		mg/Kg		102	70 - 130		
Ethylbenzene			0.100	0.1124		mg/Kg		112	70 - 130		
m-Xylene & p-Xylene			0.200	0.2022		mg/Kg		101	70 - 130		
o-Xylene			0.100	0.1032		mg/Kg		103	70 - 130		

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

Lab Sample ID: LCSD 880-43747/2-A
Matrix: Solid
Analysis Batch: 43877

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 43747

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1056		mg/Kg		106	70 - 130	3	35
Toluene			0.100	0.09865		mg/Kg		99	70 - 130	3	35
Ethylbenzene			0.100	0.1114		mg/Kg		111	70 - 130	1	35
m-Xylene & p-Xylene			0.200	0.2049		mg/Kg		102	70 - 130	1	35
o-Xylene			0.100	0.1048		mg/Kg		105	70 - 130	2	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: 890-3814-1 MS
Matrix: Solid
Analysis Batch: 43877

Client Sample ID: PH01
Prep Type: Total/NA
Prep Batch: 43747

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00202	U	0.0998	0.09921		mg/Kg		99	70 - 130		
Toluene	<0.00202	U	0.0998	0.09304		mg/Kg		93	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: JALMAT YATES UNIT #188

Job ID: 890-3814-1
SDG: Lea

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

Lab Sample ID: 890-3814-1 MS
Matrix: Solid
Analysis Batch: 43877

Client Sample ID: PH01
Prep Type: Total/NA
Prep Batch: 43747

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00202	U	0.0998	0.1028		mg/Kg		103	70 - 130
m-Xylene & p-Xylene	<0.00404	U	0.200	0.1889		mg/Kg		95	70 - 130
o-Xylene	<0.00202	U	0.0998	0.09590		mg/Kg		96	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 890-3814-1 MSD
Matrix: Solid
Analysis Batch: 43877

Client Sample ID: PH01
Prep Type: Total/NA
Prep Batch: 43747

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.100	0.09991		mg/Kg		99	70 - 130	1	35
Toluene	<0.00202	U	0.100	0.09481		mg/Kg		95	70 - 130	2	35
Ethylbenzene	<0.00202	U	0.100	0.1062		mg/Kg		106	70 - 130	3	35
m-Xylene & p-Xylene	<0.00404	U	0.200	0.1967		mg/Kg		98	70 - 130	4	35
o-Xylene	<0.00202	U	0.100	0.09996		mg/Kg		100	70 - 130	4	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

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

Lab Sample ID: MB 880-43836/1-A
Matrix: Solid
Analysis Batch: 43854

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 43836

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		01/12/23 15:08	01/13/23 08:27	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		01/12/23 15:08	01/13/23 08:27	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		01/12/23 15:08	01/13/23 08:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*176*	*S1+*	*70 - 130*	*01/12/23 15:08*	*01/13/23 08:27*	*1*
o-Terphenyl	*160*	*S1+*	*70 - 130*	*01/12/23 15:08*	*01/13/23 08:27*	*1*

Lab Sample ID: LCS 880-43836/2-A
Matrix: Solid
Analysis Batch: 43854

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 43836

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	967.7		mg/Kg		97	70 - 130
Diesel Range Organics (Over C10-C28)	1000	919.0		mg/Kg		92	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: JALMAT YATES UNIT #188

Job ID: 890-3814-1
SDG: Lea

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

Lab Sample ID: LCS 880-43836/2-A
Matrix: Solid
Analysis Batch: 43854

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 43836

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	110		70 - 130
o-Terphenyl	103		70 - 130

Lab Sample ID: LCSD 880-43836/3-A
Matrix: Solid
Analysis Batch: 43854

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 43836

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1093		mg/Kg		109	70 - 130	12	20
Diesel Range Organics (Over C10-C28)			1000	1022		mg/Kg		102	70 - 130	11	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	126		70 - 130
o-Terphenyl	115		70 - 130

Lab Sample ID: 890-3814-1 MS
Matrix: Solid
Analysis Batch: 43854

Client Sample ID: PH01
Prep Type: Total/NA
Prep Batch: 43836

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	1041		mg/Kg		102	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	998	1012		mg/Kg		101	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	116		70 - 130
o-Terphenyl	102		70 - 130

Lab Sample ID: 890-3814-1 MSD
Matrix: Solid
Analysis Batch: 43854

Client Sample ID: PH01
Prep Type: Total/NA
Prep Batch: 43836

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	1007		mg/Kg		99	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<49.9	U	997	940.5		mg/Kg		94	70 - 130	7	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	96		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: JALMAT YATES UNIT #188

Job ID: 890-3814-1
SDG: Lea

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-43792/1-A
Matrix: Solid
Analysis Batch: 43924

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			01/13/23 23:50	1

Lab Sample ID: LCS 880-43792/2-A
Matrix: Solid
Analysis Batch: 43924

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	255.0		mg/Kg		102	90 - 110		

Lab Sample ID: LCSD 880-43792/3-A
Matrix: Solid
Analysis Batch: 43924

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	251.6		mg/Kg		101	90 - 110	1	20

Lab Sample ID: 890-3810-A-1-C MS
Matrix: Solid
Analysis Batch: 43924

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	428		250	673.4		mg/Kg		98	90 - 110		

Lab Sample ID: 890-3810-A-1-D MSD
Matrix: Solid
Analysis Batch: 43924

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	428		250	670.2		mg/Kg		97	90 - 110	0	20

Lab Sample ID: MB 880-43786/1-A
Matrix: Solid
Analysis Batch: 43927

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			01/13/23 19:39	1

Lab Sample ID: LCS 880-43786/2-A
Matrix: Solid
Analysis Batch: 43927

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	269.2		mg/Kg		108	90 - 110		

Lab Sample ID: LCSD 880-43786/3-A
Matrix: Solid
Analysis Batch: 43927

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	274.1		mg/Kg		110	90 - 110	2	20

QC Sample Results

Client: Ensolum
Project/Site: JALMAT YATES UNIT #188

Job ID: 890-3814-1
SDG: Lea

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-3786-A-3-C MS
Matrix: Solid
Analysis Batch: 43927

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	63.8	F1	252	356.8	F1	mg/Kg		116	90 - 110

Lab Sample ID: 890-3786-A-3-D MSD
Matrix: Solid
Analysis Batch: 43927

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	63.8	F1	252	370.6	F1	mg/Kg		122	90 - 110	4	20

QC Association Summary

Client: Ensolum
Project/Site: JALMAT YATES UNIT #188

Job ID: 890-3814-1
SDG: Lea

GC VOA

Prep Batch: 43747

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3814-1	PH01	Total/NA	Solid	5035	
890-3814-2	PH01	Total/NA	Solid	5035	
890-3814-3	PH01	Total/NA	Solid	5035	
890-3814-4	PH02	Total/NA	Solid	5035	
890-3814-5	PH02	Total/NA	Solid	5035	
890-3814-6	PH02	Total/NA	Solid	5035	
890-3814-7	PH03	Total/NA	Solid	5035	
890-3814-8	PH03	Total/NA	Solid	5035	
890-3814-9	PH03	Total/NA	Solid	5035	
890-3814-10	PH04	Total/NA	Solid	5035	
890-3814-11	PH04	Total/NA	Solid	5035	
890-3814-12	PH04	Total/NA	Solid	5035	
890-3814-13	PH05	Total/NA	Solid	5035	
890-3814-14	PH05	Total/NA	Solid	5035	
890-3814-15	PH05	Total/NA	Solid	5035	
MB 880-43747/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-43747/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-43747/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3814-1 MS	PH01	Total/NA	Solid	5035	
890-3814-1 MSD	PH01	Total/NA	Solid	5035	

Analysis Batch: 43877

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3814-1	PH01	Total/NA	Solid	8021B	43747
890-3814-2	PH01	Total/NA	Solid	8021B	43747
890-3814-3	PH01	Total/NA	Solid	8021B	43747
890-3814-4	PH02	Total/NA	Solid	8021B	43747
890-3814-5	PH02	Total/NA	Solid	8021B	43747
890-3814-6	PH02	Total/NA	Solid	8021B	43747
890-3814-7	PH03	Total/NA	Solid	8021B	43747
890-3814-8	PH03	Total/NA	Solid	8021B	43747
890-3814-9	PH03	Total/NA	Solid	8021B	43747
890-3814-10	PH04	Total/NA	Solid	8021B	43747
890-3814-11	PH04	Total/NA	Solid	8021B	43747
890-3814-12	PH04	Total/NA	Solid	8021B	43747
890-3814-13	PH05	Total/NA	Solid	8021B	43747
890-3814-14	PH05	Total/NA	Solid	8021B	43747
890-3814-15	PH05	Total/NA	Solid	8021B	43747
MB 880-43747/5-A	Method Blank	Total/NA	Solid	8021B	43747
LCS 880-43747/1-A	Lab Control Sample	Total/NA	Solid	8021B	43747
LCSD 880-43747/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	43747
890-3814-1 MS	PH01	Total/NA	Solid	8021B	43747
890-3814-1 MSD	PH01	Total/NA	Solid	8021B	43747

Analysis Batch: 44107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3814-1	PH01	Total/NA	Solid	Total BTEX	
890-3814-2	PH01	Total/NA	Solid	Total BTEX	
890-3814-3	PH01	Total/NA	Solid	Total BTEX	
890-3814-4	PH02	Total/NA	Solid	Total BTEX	
890-3814-5	PH02	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: Ensolum
Project/Site: JALMAT YATES UNIT #188

Job ID: 890-3814-1
SDG: Lea

GC VOA (Continued)

Analysis Batch: 44107 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3814-6	PH02	Total/NA	Solid	Total BTEX	
890-3814-7	PH03	Total/NA	Solid	Total BTEX	
890-3814-8	PH03	Total/NA	Solid	Total BTEX	
890-3814-9	PH03	Total/NA	Solid	Total BTEX	
890-3814-10	PH04	Total/NA	Solid	Total BTEX	
890-3814-11	PH04	Total/NA	Solid	Total BTEX	
890-3814-12	PH04	Total/NA	Solid	Total BTEX	
890-3814-13	PH05	Total/NA	Solid	Total BTEX	
890-3814-14	PH05	Total/NA	Solid	Total BTEX	
890-3814-15	PH05	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 43836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3814-1	PH01	Total/NA	Solid	8015NM Prep	
890-3814-2	PH01	Total/NA	Solid	8015NM Prep	
890-3814-3	PH01	Total/NA	Solid	8015NM Prep	
890-3814-4	PH02	Total/NA	Solid	8015NM Prep	
890-3814-5	PH02	Total/NA	Solid	8015NM Prep	
890-3814-6	PH02	Total/NA	Solid	8015NM Prep	
890-3814-7	PH03	Total/NA	Solid	8015NM Prep	
890-3814-8	PH03	Total/NA	Solid	8015NM Prep	
890-3814-9	PH03	Total/NA	Solid	8015NM Prep	
890-3814-10	PH04	Total/NA	Solid	8015NM Prep	
890-3814-11	PH04	Total/NA	Solid	8015NM Prep	
890-3814-12	PH04	Total/NA	Solid	8015NM Prep	
890-3814-13	PH05	Total/NA	Solid	8015NM Prep	
890-3814-14	PH05	Total/NA	Solid	8015NM Prep	
890-3814-15	PH05	Total/NA	Solid	8015NM Prep	
MB 880-43836/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-43836/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-43836/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3814-1 MS	PH01	Total/NA	Solid	8015NM Prep	
890-3814-1 MSD	PH01	Total/NA	Solid	8015NM Prep	

Analysis Batch: 43854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3814-1	PH01	Total/NA	Solid	8015B NM	43836
890-3814-2	PH01	Total/NA	Solid	8015B NM	43836
890-3814-3	PH01	Total/NA	Solid	8015B NM	43836
890-3814-4	PH02	Total/NA	Solid	8015B NM	43836
890-3814-5	PH02	Total/NA	Solid	8015B NM	43836
890-3814-6	PH02	Total/NA	Solid	8015B NM	43836
890-3814-7	PH03	Total/NA	Solid	8015B NM	43836
890-3814-8	PH03	Total/NA	Solid	8015B NM	43836
890-3814-9	PH03	Total/NA	Solid	8015B NM	43836
890-3814-10	PH04	Total/NA	Solid	8015B NM	43836
890-3814-11	PH04	Total/NA	Solid	8015B NM	43836
890-3814-12	PH04	Total/NA	Solid	8015B NM	43836
890-3814-13	PH05	Total/NA	Solid	8015B NM	43836

QC Association Summary

Client: Ensolum
Project/Site: JALMAT YATES UNIT #188

Job ID: 890-3814-1
SDG: Lea

GC Semi VOA (Continued)

Analysis Batch: 43854 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3814-14	PH05	Total/NA	Solid	8015B NM	43836
890-3814-15	PH05	Total/NA	Solid	8015B NM	43836
MB 880-43836/1-A	Method Blank	Total/NA	Solid	8015B NM	43836
LCS 880-43836/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	43836
LCSD 880-43836/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	43836
890-3814-1 MS	PH01	Total/NA	Solid	8015B NM	43836
890-3814-1 MSD	PH01	Total/NA	Solid	8015B NM	43836

Analysis Batch: 44027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3814-1	PH01	Total/NA	Solid	8015 NM	
890-3814-2	PH01	Total/NA	Solid	8015 NM	
890-3814-3	PH01	Total/NA	Solid	8015 NM	
890-3814-4	PH02	Total/NA	Solid	8015 NM	
890-3814-5	PH02	Total/NA	Solid	8015 NM	
890-3814-6	PH02	Total/NA	Solid	8015 NM	
890-3814-7	PH03	Total/NA	Solid	8015 NM	
890-3814-8	PH03	Total/NA	Solid	8015 NM	
890-3814-9	PH03	Total/NA	Solid	8015 NM	
890-3814-10	PH04	Total/NA	Solid	8015 NM	
890-3814-11	PH04	Total/NA	Solid	8015 NM	
890-3814-12	PH04	Total/NA	Solid	8015 NM	
890-3814-13	PH05	Total/NA	Solid	8015 NM	
890-3814-14	PH05	Total/NA	Solid	8015 NM	
890-3814-15	PH05	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 43786

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3814-7	PH03	Soluble	Solid	DI Leach	
890-3814-8	PH03	Soluble	Solid	DI Leach	
890-3814-9	PH03	Soluble	Solid	DI Leach	
890-3814-10	PH04	Soluble	Solid	DI Leach	
890-3814-11	PH04	Soluble	Solid	DI Leach	
890-3814-12	PH04	Soluble	Solid	DI Leach	
890-3814-13	PH05	Soluble	Solid	DI Leach	
890-3814-14	PH05	Soluble	Solid	DI Leach	
890-3814-15	PH05	Soluble	Solid	DI Leach	
MB 880-43786/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-43786/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-43786/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3786-A-3-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3786-A-3-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 43792

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3814-1	PH01	Soluble	Solid	DI Leach	
890-3814-2	PH01	Soluble	Solid	DI Leach	
890-3814-3	PH01	Soluble	Solid	DI Leach	
890-3814-4	PH02	Soluble	Solid	DI Leach	

QC Association Summary

Client: Ensolum
Project/Site: JALMAT YATES UNIT #188

Job ID: 890-3814-1
SDG: Lea

HPLC/IC (Continued)

Leach Batch: 43792 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3814-5	PH02	Soluble	Solid	DI Leach	
890-3814-6	PH02	Soluble	Solid	DI Leach	
MB 880-43792/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-43792/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-43792/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3810-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3810-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 43924

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3814-1	PH01	Soluble	Solid	300.0	43792
890-3814-2	PH01	Soluble	Solid	300.0	43792
890-3814-3	PH01	Soluble	Solid	300.0	43792
890-3814-4	PH02	Soluble	Solid	300.0	43792
890-3814-5	PH02	Soluble	Solid	300.0	43792
890-3814-6	PH02	Soluble	Solid	300.0	43792
MB 880-43792/1-A	Method Blank	Soluble	Solid	300.0	43792
LCS 880-43792/2-A	Lab Control Sample	Soluble	Solid	300.0	43792
LCSD 880-43792/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	43792
890-3810-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	43792
890-3810-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	43792

Analysis Batch: 43927

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3814-7	PH03	Soluble	Solid	300.0	43786
890-3814-8	PH03	Soluble	Solid	300.0	43786
890-3814-9	PH03	Soluble	Solid	300.0	43786
890-3814-10	PH04	Soluble	Solid	300.0	43786
890-3814-11	PH04	Soluble	Solid	300.0	43786
890-3814-12	PH04	Soluble	Solid	300.0	43786
890-3814-13	PH05	Soluble	Solid	300.0	43786
890-3814-14	PH05	Soluble	Solid	300.0	43786
890-3814-15	PH05	Soluble	Solid	300.0	43786
MB 880-43786/1-A	Method Blank	Soluble	Solid	300.0	43786
LCS 880-43786/2-A	Lab Control Sample	Soluble	Solid	300.0	43786
LCSD 880-43786/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	43786
890-3786-A-3-C MS	Matrix Spike	Soluble	Solid	300.0	43786
890-3786-A-3-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	43786

Lab Chronicle

Client: Ensolum
Project/Site: JALMAT YATES UNIT #188

Job ID: 890-3814-1
SDG: Lea

Client Sample ID: PH01
Date Collected: 01/09/23 11:00
Date Received: 01/10/23 09:05

Lab Sample ID: 890-3814-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	43747	01/11/23 13:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43877	01/13/23 16:52	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44107	01/16/23 17:06	AJ	EET MID
Total/NA	Analysis	8015 NM		1			44027	01/16/23 16:35	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	43836	01/12/23 15:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43854	01/13/23 11:01	AJ	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	43792	01/12/23 09:21	KS	EET MID
Soluble	Analysis	300.0		5			43924	01/14/23 02:06	CH	EET MID

Client Sample ID: PH01
Date Collected: 01/09/23 11:05
Date Received: 01/10/23 09:05

Lab Sample ID: 890-3814-2
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	43747	01/11/23 13:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43877	01/13/23 17:13	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44107	01/16/23 17:06	AJ	EET MID
Total/NA	Analysis	8015 NM		1			44027	01/16/23 16:35	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	43836	01/12/23 15:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43854	01/13/23 12:07	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	43792	01/12/23 09:21	KS	EET MID
Soluble	Analysis	300.0		5			43924	01/14/23 02:11	CH	EET MID

Client Sample ID: PH01
Date Collected: 01/09/23 11:10
Date Received: 01/10/23 09:05

Lab Sample ID: 890-3814-3
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	43747	01/11/23 13:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43877	01/13/23 17:33	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44107	01/16/23 17:06	AJ	EET MID
Total/NA	Analysis	8015 NM		1			44027	01/16/23 16:35	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	43836	01/12/23 15:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43854	01/13/23 12:29	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	43792	01/12/23 09:21	KS	EET MID
Soluble	Analysis	300.0		5			43924	01/14/23 02:17	CH	EET MID

Client Sample ID: PH02
Date Collected: 01/09/23 12:30
Date Received: 01/10/23 09:05

Lab Sample ID: 890-3814-4
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	43747	01/11/23 13:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43877	01/13/23 17:54	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44107	01/16/23 17:06	AJ	EET MID

Lab Chronicle

Client: Ensolum
Job ID: 890-3814-1
Project/Site: JALMAT YATES UNIT #188
SDG: Lea

Client Sample ID: PH02
Lab Sample ID: 890-3814-4
Date Collected: 01/09/23 12:30
Matrix: Solid
Date Received: 01/10/23 09:05

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			44027	01/16/23 16:35	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	43836	01/12/23 15:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43854	01/13/23 12:51	AJ	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	43792	01/12/23 09:21	KS	EET MID
Soluble	Analysis	300.0		5			43924	01/14/23 02:22	CH	EET MID

Client Sample ID: PH02
Lab Sample ID: 890-3814-5
Date Collected: 01/09/23 12:35
Matrix: Solid
Date Received: 01/10/23 09:05

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	43747	01/11/23 13:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43877	01/13/23 18:15	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44107	01/16/23 17:06	AJ	EET MID
Total/NA	Analysis	8015 NM		1			44027	01/16/23 16:35	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	43836	01/12/23 15:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43854	01/13/23 13:13	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	43792	01/12/23 09:21	KS	EET MID
Soluble	Analysis	300.0		5			43924	01/14/23 02:28	CH	EET MID

Client Sample ID: PH02
Lab Sample ID: 890-3814-6
Date Collected: 01/09/23 12:40
Matrix: Solid
Date Received: 01/10/23 09:05

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	43747	01/11/23 13:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43877	01/13/23 18:35	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44107	01/16/23 17:06	AJ	EET MID
Total/NA	Analysis	8015 NM		1			44027	01/16/23 16:35	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	43836	01/12/23 15:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43854	01/13/23 13:35	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	43792	01/12/23 09:21	KS	EET MID
Soluble	Analysis	300.0		20			43924	01/14/23 02:33	CH	EET MID

Client Sample ID: PH03
Lab Sample ID: 890-3814-7
Date Collected: 01/09/23 13:35
Matrix: Solid
Date Received: 01/10/23 09:05

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	43747	01/11/23 13:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43877	01/13/23 18:56	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44107	01/16/23 17:06	AJ	EET MID
Total/NA	Analysis	8015 NM		1			44027	01/16/23 16:35	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	43836	01/12/23 15:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43854	01/13/23 13:57	AJ	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: JALMAT YATES UNIT #188

Job ID: 890-3814-1
SDG: Lea

Client Sample ID: PH03
Date Collected: 01/09/23 13:35
Date Received: 01/10/23 09:05

Lab Sample ID: 890-3814-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	43786	01/12/23 09:15	KS	EET MID
Soluble	Analysis	300.0		5			43927	01/13/23 21:43	CH	EET MID

Client Sample ID: PH03
Date Collected: 01/09/23 13:40
Date Received: 01/10/23 09:05

Lab Sample ID: 890-3814-8
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			5.01 g	5 mL	43747	01/11/23 13:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43877	01/13/23 19:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44107	01/16/23 17:06	AJ	EET MID
Total/NA	Analysis	8015 NM		1			44027	01/16/23 16:35	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	43836	01/12/23 15:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43854	01/13/23 14:19	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	43786	01/12/23 09:15	KS	EET MID
Soluble	Analysis	300.0		5			43927	01/13/23 21:49	CH	EET MID

Client Sample ID: PH03
Date Collected: 01/09/23 13:45
Date Received: 01/10/23 09:05

Lab Sample ID: 890-3814-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	43747	01/11/23 13:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43877	01/13/23 19:37	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44107	01/16/23 17:06	AJ	EET MID
Total/NA	Analysis	8015 NM		1			44027	01/16/23 16:35	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	43836	01/12/23 15:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43854	01/13/23 14:42	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	43786	01/12/23 09:15	KS	EET MID
Soluble	Analysis	300.0		5			43927	01/13/23 22:08	CH	EET MID

Client Sample ID: PH04
Date Collected: 01/09/23 13:50
Date Received: 01/10/23 09:05

Lab Sample ID: 890-3814-10
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	43747	01/11/23 13:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43877	01/13/23 19:58	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44107	01/16/23 17:06	AJ	EET MID
Total/NA	Analysis	8015 NM		1			44027	01/16/23 16:35	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	43836	01/12/23 15:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43854	01/13/23 15:04	AJ	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	43786	01/12/23 09:15	KS	EET MID
Soluble	Analysis	300.0		1			43927	01/13/23 22:14	CH	EET MID

Lab Chronicle

Client: Ensolum
Job ID: 890-3814-1
Project/Site: JALMAT YATES UNIT #188
SDG: Lea

Client Sample ID: PH04
Lab Sample ID: 890-3814-11
Date Collected: 01/09/23 13:55
Matrix: Solid
Date Received: 01/10/23 09:05

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	43747	01/11/23 13:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43877	01/13/23 21:22	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44107	01/16/23 17:06	AJ	EET MID
Total/NA	Analysis	8015 NM		1			44027	01/16/23 16:35	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	43836	01/12/23 15:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43854	01/13/23 15:48	AJ	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	43786	01/12/23 09:15	KS	EET MID
Soluble	Analysis	300.0		20			43927	01/13/23 22:20	CH	EET MID

Client Sample ID: PH04
Lab Sample ID: 890-3814-12
Date Collected: 01/09/23 14:00
Matrix: Solid
Date Received: 01/10/23 09:05

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	43747	01/11/23 13:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43877	01/13/23 21:43	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44107	01/16/23 17:06	AJ	EET MID
Total/NA	Analysis	8015 NM		1			44027	01/16/23 16:35	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	43836	01/12/23 15:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43854	01/13/23 16:10	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	43786	01/12/23 09:15	KS	EET MID
Soluble	Analysis	300.0		20			43927	01/13/23 22:26	CH	EET MID

Client Sample ID: PH05
Lab Sample ID: 890-3814-13
Date Collected: 01/09/23 14:30
Matrix: Solid
Date Received: 01/10/23 09:05

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	43747	01/11/23 13:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43877	01/13/23 22:04	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44107	01/16/23 17:06	AJ	EET MID
Total/NA	Analysis	8015 NM		1			44027	01/16/23 16:35	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	43836	01/12/23 15:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43854	01/13/23 16:32	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	43786	01/12/23 09:15	KS	EET MID
Soluble	Analysis	300.0		5			43927	01/13/23 22:32	CH	EET MID

Client Sample ID: PH05
Lab Sample ID: 890-3814-14
Date Collected: 01/09/23 14:35
Matrix: Solid
Date Received: 01/10/23 09:05

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	43747	01/11/23 13:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43877	01/13/23 22:25	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44107	01/16/23 17:06	AJ	EET MID

Lab Chronicle

Client: Ensolum
Job ID: 890-3814-1
Project/Site: JALMAT YATES UNIT #188
SDG: Lea

Client Sample ID: PH05
Lab Sample ID: 890-3814-14
Date Collected: 01/09/23 14:35
Matrix: Solid
Date Received: 01/10/23 09:05

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			44027	01/16/23 16:35	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	43836	01/12/23 15:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43854	01/13/23 16:55	AJ	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	43786	01/12/23 09:15	KS	EET MID
Soluble	Analysis	300.0		5			43927	01/13/23 22:38	CH	EET MID

Client Sample ID: PH05
Lab Sample ID: 890-3814-15
Date Collected: 01/09/23 14:40
Matrix: Solid
Date Received: 01/10/23 09:05

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	43747	01/11/23 13:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	43877	01/13/23 22:45	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			44107	01/16/23 17:06	AJ	EET MID
Total/NA	Analysis	8015 NM		1			44027	01/16/23 16:35	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	43836	01/12/23 15:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	43854	01/13/23 17:17	AJ	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	43786	01/12/23 09:15	KS	EET MID
Soluble	Analysis	300.0		5			43927	01/13/23 22:44	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: 890-3814-1
Project/Site: JALMAT YATES UNIT #188
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: 890-3814-1
Project/Site: JALMAT YATES UNIT #188 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: JALMAT YATES UNIT #188

Job ID: 890-3814-1
SDG: Lea

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3814-1	PH01	Solid	01/09/23 11:00	01/10/23 09:05	2
890-3814-2	PH01	Solid	01/09/23 11:05	01/10/23 09:05	3
890-3814-3	PH01	Solid	01/09/23 11:10	01/10/23 09:05	4
890-3814-4	PH02	Solid	01/09/23 12:30	01/10/23 09:05	1
890-3814-5	PH02	Solid	01/09/23 12:35	01/10/23 09:05	4
890-3814-6	PH02	Solid	01/09/23 12:40	01/10/23 09:05	8
890-3814-7	PH03	Solid	01/09/23 13:35	01/10/23 09:05	1
890-3814-8	PH03	Solid	01/09/23 13:40	01/10/23 09:05	4
890-3814-9	PH03	Solid	01/09/23 13:45	01/10/23 09:05	8
890-3814-10	PH04	Solid	01/09/23 13:50	01/10/23 09:05	1
890-3814-11	PH04	Solid	01/09/23 13:55	01/10/23 09:05	4
890-3814-12	PH04	Solid	01/09/23 14:00	01/10/23 09:05	8
890-3814-13	PH05	Solid	01/09/23 14:30	01/10/23 09:05	1
890-3814-14	PH05	Solid	01/09/23 14:35	01/10/23 09:05	4
890-3814-15	PH05	Solid	01/09/23 14:40	01/10/23 09:05	8

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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)	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:	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:	Jalmat Yates Unit #188	Turn Around	
Project Number:	03D2057055	☑ 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:	TNM007
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	2.8
Total Containers:		Corrected Temperature:	2.6

ANALYSIS REQUEST — Parameters / Pres. Code

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)	Sample Comments
PHO1	Soil	1/9/2023	1100	2'	Comp	1	x	x	x	
PHO1	Soil	1/9/2023	1105	3'	Comp	1	x	x	x	
PHO1	Soil	1/9/2023	1110	4'	Comp	1	x	x	x	
PHO2	Soil	1/9/2023	1230	1'	Comp	1	x	x	x	
PHO2	Soil	1/9/2023	1235	4'	Comp	1	x	x	x	
PHO2	Soil	1/9/2023	1240	8'	Comp	1	x	x	x	
PHO3	Soil	1/9/2023	1335	1'	Comp	1	x	x	x	
~~PHO3~~	~~Soil~~	~~1/9/2023~~	~~1340~~	~~4'~~	~~Comp~~	~~1~~	~~x~~	~~x~~	~~x~~	
PHO3	Soil	1/9/2023	1345	8'	Comp	1	x	x	x	

890-3814 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

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Peter Van Patten	[signature]	1-10-23 905	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)	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:	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:	Jalmat Yates Unit #188	Turn Around	
Project Number:	03D2057055	☑ 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:	

Preservative Codes

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)	Sample Comments
PHO4	Soil	1/9/2023	1350	1'	Comp	1		x	x	x	
PHO4	Soil	1/9/2023	1355	4'	Comp	1		x	x	x	
PHO4	Soil	1/9/2023	1400	8'	Comp	1		x	x	x	
PHO5	Soil	1/9/2023	1430	1'	Comp	1		x	x	x	
PHO5	Soil	1/9/2023	1435	4'	Comp	1		x	x	x	
PHO5	Soil	1/9/2023	1440	8'	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	Clee		2		
3			4		
5			6		

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3814-1
SDG Number: Lea

Login Number: 3814
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: 890-3814-1
SDG Number: Lea

Login Number: 3814
List Number: 2
Creator: Teel, Brianna

List Source: Eurofins Midland
List Creation: 01/11/23 11:43 AM

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

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Joe Gable
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 3/6/2023 2:09:36 PM

JOB DESCRIPTION

Jalmat 188 - Maverick
SDG NUMBER 03D2057055

JOB NUMBER

890-4182-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

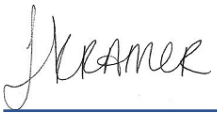
See page two for job notes and contact information.

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: Jalmat 188 - Maverick

Laboratory Job ID: 890-4182-1
SDG: 03D2057055

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: Jalmat 188 - Maverick

Job ID: 890-4182-1
SDG: 03D2057055

Qualifiers

GC VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*1	LCS/LCSD RPD exceeds control limits.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

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: Jalmat 188 - Maverick

Job ID: 890-4182-1
SDG: 03D2057055

Job ID: 890-4182-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-4182-1

Receipt
The samples were received on 2/23/2023 2:52 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 2.0°C

Receipt Exceptions
The following samples analyzed for method <FRACTION_METHOD> were received and analyzed from an unpreserved bulk soil jar: PH06A (890-4182-1), PH06D (890-4182-2), PH06F (890-4182-3), PH07A (890-4182-4), PH07D (890-4182-5) and PH07F (890-4182-6).

The following samples were received and analyzed from an unpreserved bulk soil jar: PH06A (890-4182-1), PH06D (890-4182-2), PH06F (890-4182-3), PH07A (890-4182-4), PH07D (890-4182-5) and PH07F (890-4182-6).

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-47633 and analytical batch 880-47785 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 8021B: Spike compounds were inadvertently omitted during the extraction process for the matrix spike/matrix spike duplicate (MS/MSD); therefore, matrix spike recoveries are unavailable for preparation batch 880-47633 and analytical batch 880-47785. The associated laboratory control sample (LCS) met acceptance criteria.

Method 8021B: The spiking solution was inadvertently omitted during the extraction process for the laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) associated with preparation batch 880-47633; therefore, percent recoveries are unavailable. Due to only needing an LCS or LCSD for qualification, the affected samples were notre-prepared and.or re-analyzed, and the results have been reported.

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

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: PH06A (890-4182-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (890-4182-A-1-C MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The method blank for preparation batch 880-47331 and analytical batch 880-47385 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 RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-47356 and analytical batch 880-47599 recovered outside control limits for the following analytes: Diesel Range Organics (Over C10-C28).

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: Jalmat 188 - Maverick

Job ID: 890-4182-1
SDG: 03D2057055

Client Sample ID: PH06A

Date Collected: 02/23/23 12:20
Date Received: 02/23/23 14:52
Sample Depth: 1'

Lab Sample ID: 890-4182-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *- *1	0.00200		mg/Kg		03/02/23 11:45	03/05/23 03:59	1
Toluene	<0.00200	U *- *1	0.00200		mg/Kg		03/02/23 11:45	03/05/23 03:59	1
Ethylbenzene	<0.00200	U *- *1	0.00200		mg/Kg		03/02/23 11:45	03/05/23 03:59	1
m-Xylene & p-Xylene	<0.00399	U *- *1	0.00399		mg/Kg		03/02/23 11:45	03/05/23 03:59	1
o-Xylene	<0.00200	U *-	0.00200		mg/Kg		03/02/23 11:45	03/05/23 03:59	1
Xylenes, Total	<0.00399	U *-	0.00399		mg/Kg		03/02/23 11:45	03/05/23 03:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*130*		*70 - 130*	*03/02/23 11:45*	*03/05/23 03:59*	*1*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*03/02/23 11:45*	*03/05/23 03:59*	*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			03/06/23 14:55	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			03/01/23 14:20	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		02/27/23 14:00	02/28/23 11:14	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/27/23 14:00	02/28/23 11:14	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/27/23 14:00	02/28/23 11:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*208*	*S1+*	*70 - 130*	*02/27/23 14:00*	*02/28/23 11:14*	*1*
o-Terphenyl	*198*	*S1+*	*70 - 130*	*02/27/23 14:00*	*02/28/23 11:14*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11.9**		5.01		mg/Kg			02/28/23 15:04	1

Client Sample ID: PH06D

Date Collected: 02/23/23 12:35
Date Received: 02/23/23 14:52
Sample Depth: 4'

Lab Sample ID: 890-4182-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *- *1	0.00200		mg/Kg		03/02/23 11:45	03/05/23 04:26	1
Toluene	<0.00200	U *- *1	0.00200		mg/Kg		03/02/23 11:45	03/05/23 04:26	1
Ethylbenzene	<0.00200	U *- *1	0.00200		mg/Kg		03/02/23 11:45	03/05/23 04:26	1
m-Xylene & p-Xylene	<0.00401	U *- *1	0.00401		mg/Kg		03/02/23 11:45	03/05/23 04:26	1
o-Xylene	<0.00200	U *-	0.00200		mg/Kg		03/02/23 11:45	03/05/23 04:26	1
Xylenes, Total	<0.00401	U *-	0.00401		mg/Kg		03/02/23 11:45	03/05/23 04:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*135*	*S1+*	*70 - 130*	*03/02/23 11:45*	*03/05/23 04:26*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Jalmat 188 - Maverick

Job ID: 890-4182-1
SDG: 03D2057055

Client Sample ID: PH06D

Date Collected: 02/23/23 12:35
Date Received: 02/23/23 14:52
Sample Depth: 4'

Lab Sample ID: 890-4182-2

Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*03/02/23 11:45*	*03/05/23 04:26*	*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			03/06/23 14:55	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			03/01/23 14:20	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		02/27/23 14:00	02/28/23 12:20	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		02/27/23 14:00	02/28/23 12:20	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		02/27/23 14:00	02/28/23 12:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*115*		*70 - 130*	*02/27/23 14:00*	*02/28/23 12:20*	*1*
o-Terphenyl	*108*		*70 - 130*	*02/27/23 14:00*	*02/28/23 12:20*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**19.4**		4.97	mg/Kg			02/28/23 15:10	1

Client Sample ID: PH06F

Date Collected: 02/23/23 12:45
Date Received: 02/23/23 14:52
Sample Depth: 6'

Lab Sample ID: 890-4182-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *- *1	0.00199	mg/Kg		03/02/23 11:45	03/05/23 06:11	1
Toluene	<0.00199	U *- *1	0.00199	mg/Kg		03/02/23 11:45	03/05/23 06:11	1
Ethylbenzene	<0.00199	U *- *1	0.00199	mg/Kg		03/02/23 11:45	03/05/23 06:11	1
m-Xylene & p-Xylene	<0.00398	U *- *1	0.00398	mg/Kg		03/02/23 11:45	03/05/23 06:11	1
o-Xylene	<0.00199	U *-	0.00199	mg/Kg		03/02/23 11:45	03/05/23 06:11	1
Xylenes, Total	<0.00398	U *-	0.00398	mg/Kg		03/02/23 11:45	03/05/23 06:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*03/02/23 11:45*	*03/05/23 06:11*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*03/02/23 11:45*	*03/05/23 06:11*	*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			03/06/23 14:55	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			03/01/23 14:20	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: Jalmat 188 - Maverick

Job ID: 890-4182-1
SDG: 03D2057055

Client Sample ID: PH06F

Lab Sample ID: 890-4182-3
Matrix: Solid
Date Collected: 02/23/23 12:45
Date Received: 02/23/23 14:52
Sample Depth: 6'

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		02/27/23 14:00	02/28/23 12:42	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/27/23 14:00	02/28/23 12:42	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/27/23 14:00	02/28/23 12:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*120*		*70 - 130*	*02/27/23 14:00*	*02/28/23 12:42*	*1*
o-Terphenyl	*113*		*70 - 130*	*02/27/23 14:00*	*02/28/23 12:42*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**27.8**		4.99		mg/Kg			02/28/23 15:17	1

Client Sample ID: PH07A

Lab Sample ID: 890-4182-4
Matrix: Solid
Date Collected: 02/23/23 13:00
Date Received: 02/23/23 14:52
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U *- *1	0.00201		mg/Kg		03/02/23 11:45	03/05/23 06:36	1
Toluene	<0.00201	U *- *1	0.00201		mg/Kg		03/02/23 11:45	03/05/23 06:36	1
Ethylbenzene	<0.00201	U *- *1	0.00201		mg/Kg		03/02/23 11:45	03/05/23 06:36	1
m-Xylene & p-Xylene	<0.00402	U *- *1	0.00402		mg/Kg		03/02/23 11:45	03/05/23 06:36	1
o-Xylene	<0.00201	U *-	0.00201		mg/Kg		03/02/23 11:45	03/05/23 06:36	1
Xylenes, Total	<0.00402	U *-	0.00402		mg/Kg		03/02/23 11:45	03/05/23 06:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*150*	*S1+*	*70 - 130*	*03/02/23 11:45*	*03/05/23 06:36*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*03/02/23 11:45*	*03/05/23 06:36*	*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			03/06/23 14:55	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			03/01/23 14:20	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		02/27/23 14:00	02/28/23 13:04	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/27/23 14:00	02/28/23 13:04	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/27/23 14:00	02/28/23 13:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*02/27/23 14:00*	*02/28/23 13:04*	*1*
o-Terphenyl	*101*		*70 - 130*	*02/27/23 14:00*	*02/28/23 13:04*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Jalmat 188 - Maverick

Job ID: 890-4182-1
SDG: 03D2057055

Client Sample ID: PH07A

Lab Sample ID: 890-4182-4
Matrix: Solid
Date Collected: 02/23/23 13:00
Date Received: 02/23/23 14:52
Sample Depth: 1'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			02/28/23 15:23	1

Client Sample ID: PH07D

Lab Sample ID: 890-4182-5
Matrix: Solid
Date Collected: 02/23/23 13:15
Date Received: 02/23/23 14:52
Sample Depth: 4'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U *- *1	0.00201		mg/Kg		03/02/23 11:45	03/05/23 07:03	1
Toluene	<0.00201	U *- *1	0.00201		mg/Kg		03/02/23 11:45	03/05/23 07:03	1
Ethylbenzene	<0.00201	U *- *1	0.00201		mg/Kg		03/02/23 11:45	03/05/23 07:03	1
m-Xylene & p-Xylene	<0.00402	U *- *1	0.00402		mg/Kg		03/02/23 11:45	03/05/23 07:03	1
o-Xylene	<0.00201	U *-	0.00201		mg/Kg		03/02/23 11:45	03/05/23 07:03	1
Xylenes, Total	<0.00402	U *-	0.00402		mg/Kg		03/02/23 11:45	03/05/23 07:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*143*	*S1+*	*70 - 130*	*03/02/23 11:45*	*03/05/23 07:03*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*03/02/23 11:45*	*03/05/23 07:03*	*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			03/06/23 14:55	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			03/01/23 14:20	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		02/27/23 14:00	02/28/23 13:26	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/27/23 14:00	02/28/23 13:26	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/27/23 14:00	02/28/23 13:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*114*		*70 - 130*	*02/27/23 14:00*	*02/28/23 13:26*	*1*
o-Terphenyl	*109*		*70 - 130*	*02/27/23 14:00*	*02/28/23 13:26*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**14.0**		5.00		mg/Kg			02/28/23 15:29	1

Client Sample Results

Client: Ensolum
Project/Site: Jalmat 188 - Maverick

Job ID: 890-4182-1
SDG: 03D2057055

Client Sample ID: PH07F

Date Collected: 02/23/23 13:25
Date Received: 02/23/23 14:52
Sample Depth: 6'

Lab Sample ID: 890-4182-6

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *- *1	0.00199		mg/Kg		03/02/23 11:45	03/05/23 07:31	1
Toluene	<0.00199	U *- *1	0.00199		mg/Kg		03/02/23 11:45	03/05/23 07:31	1
Ethylbenzene	<0.00199	U *- *1	0.00199		mg/Kg		03/02/23 11:45	03/05/23 07:31	1
m-Xylene & p-Xylene	<0.00398	U *- *1	0.00398		mg/Kg		03/02/23 11:45	03/05/23 07:31	1
o-Xylene	<0.00199	U *-	0.00199		mg/Kg		03/02/23 11:45	03/05/23 07:31	1
Xylenes, Total	<0.00398	U *-	0.00398		mg/Kg		03/02/23 11:45	03/05/23 07:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*136*	*S1+*	*70 - 130*	*03/02/23 11:45*	*03/05/23 07:31*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*03/02/23 11:45*	*03/05/23 07:31*	*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			03/06/23 14:55	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			03/03/23 12:43	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		02/27/23 16:37	03/02/23 10:37	1
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9		mg/Kg		02/27/23 16:37	03/02/23 10:37	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/27/23 16:37	03/02/23 10:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*02/27/23 16:37*	*03/02/23 10:37*	*1*
o-Terphenyl	*104*		*70 - 130*	*02/27/23 16:37*	*03/02/23 10:37*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**14.4**		4.97		mg/Kg			02/28/23 15:35	1

Surrogate Summary

Client: Ensolum
Project/Site: Jalmat 188 - Maverick

Job ID: 890-4182-1
SDG: 03D2057055

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)
890-4169-A-1-C MS	Matrix Spike	109	101
890-4169-A-1-D MSD	Matrix Spike Duplicate	17145 S1+	21742 S1+
890-4182-1	PH06A	130	85
890-4182-2	PH06D	135 S1+	98
890-4182-3	PH06F	115	90
890-4182-4	PH07A	150 S1+	93
890-4182-5	PH07D	143 S1+	101
890-4182-6	PH07F	136 S1+	89
LCS 880-47633/1-A	Lab Control Sample	119	94
LCSD 880-47633/2-A	Lab Control Sample Dup	119	96
MB 880-47632/5-A	Method Blank	67 S1-	85
MB 880-47633/5-A	Method Blank	71	82

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)
890-4182-1	PH06A	208 S1+	198 S1+
890-4182-1 MS	PH06A	101	97
890-4182-1 MSD	PH06A	140 S1+	113
890-4182-2	PH06D	115	108
890-4182-3	PH06F	120	113
890-4182-4	PH07A	100	101
890-4182-5	PH07D	114	109
890-4182-6	PH07F	106	104
890-4182-6 MS	PH07F	104	98
890-4182-6 MSD	PH07F	106	99
LCS 880-47331/2-A	Lab Control Sample	77	81
LCS 880-47356/2-A	Lab Control Sample	109	108
LCSD 880-47331/3-A	Lab Control Sample Dup	89	85
LCSD 880-47356/3-A	Lab Control Sample Dup	84	90
MB 880-47331/1-A	Method Blank	105	104
MB 880-47356/1-A	Method Blank	107	110

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Jalmat 188 - Maverick

Job ID: 890-4182-1
SDG: 03D2057055

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-47632/5-A
Matrix: Solid
Analysis Batch: 47785

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 47632

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/02/23 11:31	03/04/23 10:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/02/23 11:31	03/04/23 10:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/02/23 11:31	03/04/23 10:38	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/02/23 11:31	03/04/23 10:38	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/02/23 11:31	03/04/23 10:38	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/02/23 11:31	03/04/23 10:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*67*	*S1-*	*70 - 130*	*03/02/23 11:31*	*03/04/23 10:38*	*1*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*03/02/23 11:31*	*03/04/23 10:38*	*1*

Lab Sample ID: MB 880-47633/5-A
Matrix: Solid
Analysis Batch: 47785

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 47633

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/02/23 11:45	03/05/23 00:03	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/02/23 11:45	03/05/23 00:03	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/02/23 11:45	03/05/23 00:03	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/02/23 11:45	03/05/23 00:03	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/02/23 11:45	03/05/23 00:03	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/02/23 11:45	03/05/23 00:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*71*		*70 - 130*	*03/02/23 11:45*	*03/05/23 00:03*	*1*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*03/02/23 11:45*	*03/05/23 00:03*	*1*

Lab Sample ID: LCS 880-47633/1-A
Matrix: Solid
Analysis Batch: 47785

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 47633

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09295		mg/Kg		93	70 - 130		
Toluene			0.100	0.08689		mg/Kg		87	70 - 130		
Ethylbenzene			0.100	0.09172		mg/Kg		92	70 - 130		
m-Xylene & p-Xylene			0.200	0.1968		mg/Kg		98	70 - 130		
o-Xylene			0.100	0.09291		mg/Kg		93	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*

Lab Sample ID: LCSD 880-47633/2-A
Matrix: Solid
Analysis Batch: 47785

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 47633

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.05116	*- *1	mg/Kg		51	70 - 130	58	35

QC Sample Results

Client: Ensolum
Project/Site: Jalmat 188 - Maverick

Job ID: 890-4182-1
SDG: 03D2057055

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

Lab Sample ID: LCSD 880-47633/2-A
Matrix: Solid
Analysis Batch: 47785

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 47633

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.03518	*- *1	mg/Kg		35	70 - 130	85	35
Ethylbenzene			0.100	0.009089	*- *1	mg/Kg		9	70 - 130	164	35
m-Xylene & p-Xylene			0.200	0.1357	*- *1	mg/Kg		68	70 - 130	37	35
o-Xylene			0.100	0.06679	*-	mg/Kg		67	70 - 130	33	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*

Lab Sample ID: 890-4169-A-1-C MS
Matrix: Solid
Analysis Batch: 47785

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 47633

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U *- *1 F1	0.100	0.07714		mg/Kg		77	70 - 130
Toluene	<0.00200	U F1 *- *1	0.100	0.04719	F1	mg/Kg		47	70 - 130
Ethylbenzene	<0.00200	U F1 *- *1	0.100	0.01702	F1	mg/Kg		17	70 - 130
m-Xylene & p-Xylene	<0.00401	U *- *1 F1	0.200	0.1643		mg/Kg		82	70 - 130
o-Xylene	<0.00200	U *- F1 F2	0.100	0.08334		mg/Kg		83	70 - 130

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

Lab Sample ID: 890-4169-A-1-D MSD
Matrix: Solid
Analysis Batch: 47785

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 47633

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U *- *1 F1	0.0990	<0.00198	U F1	mg/Kg		0	70 - 130	NC	35
Toluene	<0.00200	U F1 *- *1	0.0990	<0.00198	U F1	mg/Kg		0	70 - 130	NC	35
Ethylbenzene	<0.00200	U F1 *- *1	0.0990	<0.00198	U F1	mg/Kg		0	70 - 130	NC	35
m-Xylene & p-Xylene	<0.00401	U *- *1 F1	0.198	<0.00396	U F1	mg/Kg		0	70 - 130	NC	35
o-Xylene	<0.00200	U *- F1 F2	0.0990	<0.00198	U F1 F2	mg/Kg		2	70 - 130	191	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*17145*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*21742*	*S1+*	*70 - 130*

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

Lab Sample ID: MB 880-47331/1-A
Matrix: Solid
Analysis Batch: 47385

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 47331

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		02/27/23 14:00	02/28/23 08:39	1

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QC Sample Results

Client: Ensolum
Project/Site: Jalmat 188 - Maverick

Job ID: 890-4182-1
SDG: 03D2057055

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

Lab Sample ID: MB 880-47331/1-A
Matrix: Solid
Analysis Batch: 47385

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 47331

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		02/27/23 14:00	02/28/23 08:39	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/27/23 14:00	02/28/23 08:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*02/27/23 14:00*	*02/28/23 08:39*	*1*
o-Terphenyl	*104*		*70 - 130*	*02/27/23 14:00*	*02/28/23 08:39*	*1*

Lab Sample ID: LCS 880-47331/2-A
Matrix: Solid
Analysis Batch: 47385

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 47331

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	809.0		mg/Kg		81	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	817.2		mg/Kg		82	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*77*		*70 - 130*
o-Terphenyl	*81*		*70 - 130*

Lab Sample ID: LCSD 880-47331/3-A
Matrix: Solid
Analysis Batch: 47385

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 47331

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	866.0		mg/Kg		87	70 - 130	7	20
Diesel Range Organics (Over C10-C28)			1000	875.2		mg/Kg		88	70 - 130	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*89*		*70 - 130*
o-Terphenyl	*85*		*70 - 130*

Lab Sample ID: 890-4182-1 MS
Matrix: Solid
Analysis Batch: 47385

Client Sample ID: PH06A
Prep Type: Total/NA
Prep Batch: 47331

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	952.2		mg/Kg		93	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	998	888.4		mg/Kg		87	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*101*		*70 - 130*
o-Terphenyl	*97*		*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: Jalmat 188 - Maverick

Job ID: 890-4182-1
SDG: 03D2057055

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

Lab Sample ID: 890-4182-1 MSD — **Client Sample ID: PH06A**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 47385 — **Prep Batch: 47331**

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	997	1087		mg/Kg		106	70 - 130	13	20
Diesel Range Organics (Over C10-C28)	<50.0	U	997	1053		mg/Kg		104	70 - 130	17	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*140*	*S1+*	*70 - 130*
o-Terphenyl	*113*		*70 - 130*

Lab Sample ID: MB 880-47356/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 47599 — **Prep Batch: 47356**

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		02/27/23 16:37	03/02/23 08:06	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/27/23 16:37	03/02/23 08:06	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/27/23 16:37	03/02/23 08:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*02/27/23 16:37*	*03/02/23 08:06*	*1*
o-Terphenyl	*110*		*70 - 130*	*02/27/23 16:37*	*03/02/23 08:06*	*1*

Lab Sample ID: LCS 880-47356/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 47599 — **Prep Batch: 47356**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1047		mg/Kg		105	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1126		mg/Kg		113	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*109*		*70 - 130*
o-Terphenyl	*108*		*70 - 130*

Lab Sample ID: LCSD 880-47356/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 47599 — **Prep Batch: 47356**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	912.6		mg/Kg		91	70 - 130	14	20
Diesel Range Organics (Over C10-C28)			1000	896.4	*1	mg/Kg		90	70 - 130	23	20

QC Sample Results

Client: Ensolum
Project/Site: Jalmat 188 - Maverick

Job ID: 890-4182-1
SDG: 03D2057055

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

Lab Sample ID: LCSD 880-47356/3-A
Matrix: Solid
Analysis Batch: 47599

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 47356

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	84		70 - 130
o-Terphenyl	90		70 - 130

Lab Sample ID: 890-4182-6 MS
Matrix: Solid
Analysis Batch: 47599

Client Sample ID: PH07F
Prep Type: Total/NA
Prep Batch: 47356

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	997	1148		mg/Kg		111	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U *1	997	1025		mg/Kg		103	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	98		70 - 130

Lab Sample ID: 890-4182-6 MSD
Matrix: Solid
Analysis Batch: 47599

Client Sample ID: PH07F
Prep Type: Total/NA
Prep Batch: 47356

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	1193		mg/Kg		116	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	<49.9	U *1	999	1031		mg/Kg		103	70 - 130	1	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	106		70 - 130
o-Terphenyl	99		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-47347/1-A
Matrix: Solid
Analysis Batch: 47423

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			02/28/23 13:50	1

Lab Sample ID: LCS 880-47347/2-A
Matrix: Solid
Analysis Batch: 47423

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride			250	225.2		mg/Kg		90	90 - 110

QC Sample Results

Client: Ensolum
Project/Site: Jalmat 188 - Maverick

Job ID: 890-4182-1
SDG: 03D2057055

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-47347/3-A
Matrix: Solid
Analysis Batch: 47423

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	229.1		mg/Kg		92	90 - 110	2	20

Lab Sample ID: 890-4182-6 MS
Matrix: Solid
Analysis Batch: 47423

Client Sample ID: PH07F
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	14.4		249	250.2		mg/Kg		95	90 - 110		

Lab Sample ID: 890-4182-6 MSD
Matrix: Solid
Analysis Batch: 47423

Client Sample ID: PH07F
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	14.4		249	249.2		mg/Kg		94	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: Jalmat 188 - Maverick

Job ID: 890-4182-1
SDG: 03D2057055

GC VOA

Prep Batch: 47632

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-47632/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 47633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4182-1	PH06A	Total/NA	Solid	5035	
890-4182-2	PH06D	Total/NA	Solid	5035	
890-4182-3	PH06F	Total/NA	Solid	5035	
890-4182-4	PH07A	Total/NA	Solid	5035	
890-4182-5	PH07D	Total/NA	Solid	5035	
890-4182-6	PH07F	Total/NA	Solid	5035	
MB 880-47633/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-47633/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-47633/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-4169-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-4169-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 47785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4182-1	PH06A	Total/NA	Solid	8021B	47633
890-4182-2	PH06D	Total/NA	Solid	8021B	47633
890-4182-3	PH06F	Total/NA	Solid	8021B	47633
890-4182-4	PH07A	Total/NA	Solid	8021B	47633
890-4182-5	PH07D	Total/NA	Solid	8021B	47633
890-4182-6	PH07F	Total/NA	Solid	8021B	47633
MB 880-47632/5-A	Method Blank	Total/NA	Solid	8021B	47632
MB 880-47633/5-A	Method Blank	Total/NA	Solid	8021B	47633
LCS 880-47633/1-A	Lab Control Sample	Total/NA	Solid	8021B	47633
LCSD 880-47633/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	47633
890-4169-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	47633
890-4169-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	47633

Analysis Batch: 47956

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4182-1	PH06A	Total/NA	Solid	Total BTEX	
890-4182-2	PH06D	Total/NA	Solid	Total BTEX	
890-4182-3	PH06F	Total/NA	Solid	Total BTEX	
890-4182-4	PH07A	Total/NA	Solid	Total BTEX	
890-4182-5	PH07D	Total/NA	Solid	Total BTEX	
890-4182-6	PH07F	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 47331

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4182-1	PH06A	Total/NA	Solid	8015NM Prep	
890-4182-2	PH06D	Total/NA	Solid	8015NM Prep	
890-4182-3	PH06F	Total/NA	Solid	8015NM Prep	
890-4182-4	PH07A	Total/NA	Solid	8015NM Prep	
890-4182-5	PH07D	Total/NA	Solid	8015NM Prep	
MB 880-47331/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-47331/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Ensolum
Project/Site: Jalmat 188 - Maverick

Job ID: 890-4182-1
SDG: 03D2057055

GC Semi VOA (Continued)

Prep Batch: 47331 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-47331/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-4182-1 MS	PH06A	Total/NA	Solid	8015NM Prep	
890-4182-1 MSD	PH06A	Total/NA	Solid	8015NM Prep	

Prep Batch: 47356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4182-6	PH07F	Total/NA	Solid	8015NM Prep	
MB 880-47356/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-47356/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-47356/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-4182-6 MS	PH07F	Total/NA	Solid	8015NM Prep	
890-4182-6 MSD	PH07F	Total/NA	Solid	8015NM Prep	

Analysis Batch: 47385

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4182-1	PH06A	Total/NA	Solid	8015B NM	47331
890-4182-2	PH06D	Total/NA	Solid	8015B NM	47331
890-4182-3	PH06F	Total/NA	Solid	8015B NM	47331
890-4182-4	PH07A	Total/NA	Solid	8015B NM	47331
890-4182-5	PH07D	Total/NA	Solid	8015B NM	47331
MB 880-47331/1-A	Method Blank	Total/NA	Solid	8015B NM	47331
LCS 880-47331/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	47331
LCSD 880-47331/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	47331
890-4182-1 MS	PH06A	Total/NA	Solid	8015B NM	47331
890-4182-1 MSD	PH06A	Total/NA	Solid	8015B NM	47331

Analysis Batch: 47542

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4182-1	PH06A	Total/NA	Solid	8015 NM	
890-4182-2	PH06D	Total/NA	Solid	8015 NM	
890-4182-3	PH06F	Total/NA	Solid	8015 NM	
890-4182-4	PH07A	Total/NA	Solid	8015 NM	
890-4182-5	PH07D	Total/NA	Solid	8015 NM	
890-4182-6	PH07F	Total/NA	Solid	8015 NM	

Analysis Batch: 47599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4182-6	PH07F	Total/NA	Solid	8015B NM	47356
MB 880-47356/1-A	Method Blank	Total/NA	Solid	8015B NM	47356
LCS 880-47356/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	47356
LCSD 880-47356/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	47356
890-4182-6 MS	PH07F	Total/NA	Solid	8015B NM	47356
890-4182-6 MSD	PH07F	Total/NA	Solid	8015B NM	47356

HPLC/IC

Leach Batch: 47347

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4182-1	PH06A	Soluble	Solid	DI Leach	
890-4182-2	PH06D	Soluble	Solid	DI Leach	
890-4182-3	PH06F	Soluble	Solid	DI Leach	

QC Association Summary

Client: Ensolum
Project/Site: Jalmat 188 - Maverick

Job ID: 890-4182-1
SDG: 03D2057055

HPLC/IC (Continued)

Leach Batch: 47347 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4182-4	PH07A	Soluble	Solid	DI Leach	
890-4182-5	PH07D	Soluble	Solid	DI Leach	
890-4182-6	PH07F	Soluble	Solid	DI Leach	
MB 880-47347/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-47347/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-47347/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4182-6 MS	PH07F	Soluble	Solid	DI Leach	
890-4182-6 MSD	PH07F	Soluble	Solid	DI Leach	

Analysis Batch: 47423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4182-1	PH06A	Soluble	Solid	300.0	47347
890-4182-2	PH06D	Soluble	Solid	300.0	47347
890-4182-3	PH06F	Soluble	Solid	300.0	47347
890-4182-4	PH07A	Soluble	Solid	300.0	47347
890-4182-5	PH07D	Soluble	Solid	300.0	47347
890-4182-6	PH07F	Soluble	Solid	300.0	47347
MB 880-47347/1-A	Method Blank	Soluble	Solid	300.0	47347
LCS 880-47347/2-A	Lab Control Sample	Soluble	Solid	300.0	47347
LCSD 880-47347/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	47347
890-4182-6 MS	PH07F	Soluble	Solid	300.0	47347
890-4182-6 MSD	PH07F	Soluble	Solid	300.0	47347

Lab Chronicle

Client: Ensolum
Project/Site: Jalmat 188 - Maverick

Job ID: 890-4182-1
SDG: 03D2057055

Client Sample ID: PH06A

Date Collected: 02/23/23 12:20
Date Received: 02/23/23 14:52

Lab Sample ID: 890-4182-1

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	47633	03/02/23 11:45	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	47785	03/05/23 03:59	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			47956	03/06/23 14:55	AJ	EET MID
Total/NA	Analysis	8015 NM		1			47542	03/01/23 14:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	47331	02/27/23 14:00	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	47385	02/28/23 11:14	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	47347	02/27/23 15:44	KS	EET MID
Soluble	Analysis	300.0		1			47423	02/28/23 15:04	CH	EET MID

Client Sample ID: PH06D

Date Collected: 02/23/23 12:35
Date Received: 02/23/23 14:52

Lab Sample ID: 890-4182-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	47633	03/02/23 11:45	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	47785	03/05/23 04:26	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			47956	03/06/23 14:55	AJ	EET MID
Total/NA	Analysis	8015 NM		1			47542	03/01/23 14:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	47331	02/27/23 14:00	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	47385	02/28/23 12:20	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	47347	02/27/23 15:44	KS	EET MID
Soluble	Analysis	300.0		1			47423	02/28/23 15:10	CH	EET MID

Client Sample ID: PH06F

Date Collected: 02/23/23 12:45
Date Received: 02/23/23 14:52

Lab Sample ID: 890-4182-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	47633	03/02/23 11:45	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	47785	03/05/23 06:11	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			47956	03/06/23 14:55	AJ	EET MID
Total/NA	Analysis	8015 NM		1			47542	03/01/23 14:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	47331	02/27/23 14:00	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	47385	02/28/23 12:42	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	47347	02/27/23 15:44	KS	EET MID
Soluble	Analysis	300.0		1			47423	02/28/23 15:17	CH	EET MID

Client Sample ID: PH07A

Date Collected: 02/23/23 13:00
Date Received: 02/23/23 14:52

Lab Sample ID: 890-4182-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	47633	03/02/23 11:45	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	47785	03/05/23 06:36	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			47956	03/06/23 14:55	AJ	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: Jalmat 188 - Maverick

Job ID: 890-4182-1
SDG: 03D2057055

Client Sample ID: PH07A

Date Collected: 02/23/23 13:00
Date Received: 02/23/23 14:52

Lab Sample ID: 890-4182-4
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			47542	03/01/23 14:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	47331	02/27/23 14:00	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	47385	02/28/23 13:04	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	47347	02/27/23 15:44	KS	EET MID
Soluble	Analysis	300.0		1			47423	02/28/23 15:23	CH	EET MID

Client Sample ID: PH07D

Date Collected: 02/23/23 13:15
Date Received: 02/23/23 14:52

Lab Sample ID: 890-4182-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	47633	03/02/23 11:45	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	47785	03/05/23 07:03	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			47956	03/06/23 14:55	AJ	EET MID
Total/NA	Analysis	8015 NM		1			47542	03/01/23 14:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	47331	02/27/23 14:00	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	47385	02/28/23 13:26	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	47347	02/27/23 15:44	KS	EET MID
Soluble	Analysis	300.0		1			47423	02/28/23 15:29	CH	EET MID

Client Sample ID: PH07F

Date Collected: 02/23/23 13:25
Date Received: 02/23/23 14:52

Lab Sample ID: 890-4182-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	47633	03/02/23 11:45	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	47785	03/05/23 07:31	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			47956	03/06/23 14:55	AJ	EET MID
Total/NA	Analysis	8015 NM		1			47542	03/03/23 12:43	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	47356	02/27/23 16:37	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	47599	03/02/23 10:37	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	47347	02/27/23 15:44	KS	EET MID
Soluble	Analysis	300.0		1			47423	02/28/23 15:35	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: Jalmat 188 - Maverick

Job ID: 890-4182-1
SDG: 03D2057055

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: Jalmat 188 - Maverick

Job ID: 890-4182-1
SDG: 03D2057055

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: Jalmat 188 - Maverick

Job ID: 890-4182-1
SDG: 03D2057055

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-4182-1	PH06A	Solid	02/23/23 12:20	02/23/23 14:52	1'
890-4182-2	PH06D	Solid	02/23/23 12:35	02/23/23 14:52	4'
890-4182-3	PH06F	Solid	02/23/23 12:45	02/23/23 14:52	6'
890-4182-4	PH07A	Solid	02/23/23 13:00	02/23/23 14:52	1'
890-4182-5	PH07D	Solid	02/23/23 13:15	02/23/23 14:52	4'
890-4182-6	PH07F	Solid	02/23/23 13:25	02/23/23 14:52	6'

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

Work Order Comments

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

Project Name:	JAL MAT 188/Maverick	Turn Around	☑ Routine ☐ Rush
Project Number:	03D2057055	Due Date:	
Project Location:	32.395341, -103.32178	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Juliana Falconata		
PO #:			

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Samples Received Intact:	Yes No	Thermometer ID:	TMH-007	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No N/A	Temperature Reading:	3.2	
Total Containers:		Corrected Temperature:	3.0	

ANALYSIS REQUEST

Pres. Code

Parameters: CHLORIDES (EPA: 300.0); TPH (8015); BTEX (8021)

890-4182 Chain of Custody

Preservative Codes

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Sample Comments
PH06A	S	02-23-23	1220	1	G	1	nAPP 2255373931
PH06D			1235	4		1	
PH06F			1245	6		1	
PH07A			1300	1		1	
PH07D			1315	4		1	
PH07F	↓	↓	1325	6	↓	1	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr 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		2-23-23 1452	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4182-1
SDG Number: 03D2057055

Login Number: 4182
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: 890-4182-1
SDG Number: 03D2057055

Login Number: 4182
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 02/27/23 08:59 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 3/9/2023 1:53:35 PM

JOB DESCRIPTION

Jalmat 188
SDG NUMBER 03D2057055

JOB NUMBER

890-4195-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

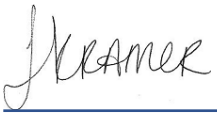
See page two for job notes and contact information.

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: Jalmat 188

Laboratory Job ID: 890-4195-1
SDG: 03D2057055

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: Jalmat 188

Job ID: 890-4195-1
SDG: 03D2057055

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
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: Jalmat 188

Job ID: 890-4195-1
SDG: 03D2057055

Job ID: 890-4195-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-4195-1

Receipt
The samples were received on 2/24/2023 12:40 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 2.0°C

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-48104 and analytical batch 880-48098 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

GC Semi VOA
No 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 880-47514 and analytical batch 880-47591 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: Jalmat 188

Job ID: 890-4195-1
SDG: 03D2057055

Client Sample ID: PH08A

Lab Sample ID: 890-4195-1
Matrix: Solid

Date Collected: 02/24/23 09:15
Date Received: 02/24/23 12:40
Sample Depth: 1

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		03/08/23 09:47	03/08/23 14:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/08/23 09:47	03/08/23 14:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/08/23 09:47	03/08/23 14:41	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/08/23 09:47	03/08/23 14:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/08/23 09:47	03/08/23 14:41	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/08/23 09:47	03/08/23 14:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*60*	*S1-*	*70 - 130*	*03/08/23 09:47*	*03/08/23 14:41*	*1*
1,4-Difluorobenzene (Surr)	*63*	*S1-*	*70 - 130*	*03/08/23 09:47*	*03/08/23 14:41*	*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			03/09/23 14:36	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			03/01/23 16:06	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		02/28/23 16:21	03/01/23 15:17	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/28/23 16:21	03/01/23 15:17	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/28/23 16:21	03/01/23 15:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*123*		*70 - 130*	*02/28/23 16:21*	*03/01/23 15:17*	*1*
o-Terphenyl	*118*		*70 - 130*	*02/28/23 16:21*	*03/01/23 15:17*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**600**	**F1**	5.05		mg/Kg			03/02/23 05:05	1

Client Sample ID: PH08D

Lab Sample ID: 890-4195-2
Matrix: Solid

Date Collected: 02/24/23 09:30
Date Received: 02/24/23 12:40
Sample Depth: 4

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		03/08/23 09:47	03/08/23 15:01	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/08/23 09:47	03/08/23 15:01	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/08/23 09:47	03/08/23 15:01	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/08/23 09:47	03/08/23 15:01	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/08/23 09:47	03/08/23 15:01	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/08/23 09:47	03/08/23 15:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*03/08/23 09:47*	*03/08/23 15:01*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Jalmat 188

Job ID: 890-4195-1
SDG: 03D2057055

Client Sample ID: PH08D

Lab Sample ID: 890-4195-2
Matrix: Solid
Date Collected: 02/24/23 09:30
Date Received: 02/24/23 12:40
Sample Depth: 4

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*03/08/23 09:47*	*03/08/23 15:01*	*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			03/09/23 14:36	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			03/02/23 09:50	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		02/28/23 16:21	03/01/23 16:01	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/28/23 16:21	03/01/23 16:01	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/28/23 16:21	03/01/23 16:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*02/28/23 16:21*	*03/01/23 16:01*	*1*
o-Terphenyl	*104*		*70 - 130*	*02/28/23 16:21*	*03/01/23 16:01*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4810**		50.0	mg/Kg			03/02/23 05:24	10

Client Sample ID: PH09A

Lab Sample ID: 890-4195-3
Matrix: Solid
Date Collected: 02/24/23 10:00
Date Received: 02/24/23 12:40
Sample Depth: 1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		03/08/23 09:47	03/08/23 15:22	1
Toluene	<0.00202	U	0.00202	mg/Kg		03/08/23 09:47	03/08/23 15:22	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		03/08/23 09:47	03/08/23 15:22	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		03/08/23 09:47	03/08/23 15:22	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		03/08/23 09:47	03/08/23 15:22	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		03/08/23 09:47	03/08/23 15:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*03/08/23 09:47*	*03/08/23 15:22*	*1*
1,4-Difluorobenzene (Surr)	*80*		*70 - 130*	*03/08/23 09:47*	*03/08/23 15:22*	*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			03/09/23 14:36	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			03/02/23 09:50	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: Jalmat 188

Job ID: 890-4195-1
SDG: 03D2057055

Client Sample ID: PH09A

Lab Sample ID: 890-4195-3
Matrix: Solid
Date Collected: 02/24/23 10:00
Date Received: 02/24/23 12:40
Sample Depth: 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		02/28/23 16:21	03/01/23 16:22	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/28/23 16:21	03/01/23 16:22	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/28/23 16:21	03/01/23 16:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*114*		*70 - 130*	*02/28/23 16:21*	*03/01/23 16:22*	*1*
o-Terphenyl	*110*		*70 - 130*	*02/28/23 16:21*	*03/01/23 16:22*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3870**		25.0		mg/Kg			03/02/23 05:30	5

Client Sample ID: PH09D

Lab Sample ID: 890-4195-4
Matrix: Solid
Date Collected: 02/24/23 10:15
Date Received: 02/24/23 12:40
Sample Depth: 4

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/08/23 09:47	03/08/23 15:43	1
Toluene	**0.00209**		0.00199		mg/Kg		03/08/23 09:47	03/08/23 15:43	1
Ethylbenzene	**0.00722**		0.00199		mg/Kg		03/08/23 09:47	03/08/23 15:43	1
m-Xylene & p-Xylene	**0.0319**		0.00398		mg/Kg		03/08/23 09:47	03/08/23 15:43	1
o-Xylene	**0.0146**		0.00199		mg/Kg		03/08/23 09:47	03/08/23 15:43	1
Xylenes, Total	**0.0465**		0.00398		mg/Kg		03/08/23 09:47	03/08/23 15:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*03/08/23 09:47*	*03/08/23 15:43*	*1*
1,4-Difluorobenzene (Surr)	*83*		*70 - 130*	*03/08/23 09:47*	*03/08/23 15:43*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0558**		0.00398		mg/Kg			03/09/23 14:36	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**572**		50.0		mg/Kg			03/02/23 09:50	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	**54.2**		50.0		mg/Kg		02/28/23 16:21	03/01/23 16:43	1
Diesel Range Organics (Over C10-C28)	**518**		50.0		mg/Kg		02/28/23 16:21	03/01/23 16:43	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/28/23 16:21	03/01/23 16:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*108*		*70 - 130*	*02/28/23 16:21*	*03/01/23 16:43*	*1*
o-Terphenyl	*103*		*70 - 130*	*02/28/23 16:21*	*03/01/23 16:43*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Jalmat 188

Job ID: 890-4195-1
SDG: 03D2057055

Client Sample ID: PH09D

Lab Sample ID: 890-4195-4
Matrix: Solid
Date Collected: 02/24/23 10:15
Date Received: 02/24/23 12:40
Sample Depth: 4

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18400		248		mg/Kg			03/02/23 05:36	50

Client Sample ID: PH10A

Lab Sample ID: 890-4195-5
Matrix: Solid
Date Collected: 02/24/23 10:30
Date Received: 02/24/23 12:40
Sample Depth: 1

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		03/08/23 09:47	03/08/23 17:49	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/08/23 09:47	03/08/23 17:49	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/08/23 09:47	03/08/23 17:49	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/08/23 09:47	03/08/23 17:49	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/08/23 09:47	03/08/23 17:49	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/08/23 09:47	03/08/23 17:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*47*	*S1-*	*70 - 130*	*03/08/23 09:47*	*03/08/23 17:49*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*03/08/23 09:47*	*03/08/23 17:49*	*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			03/09/23 14:36	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			03/02/23 09:50	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		02/28/23 16:21	03/01/23 17:06	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/28/23 16:21	03/01/23 17:06	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/28/23 16:21	03/01/23 17:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*02/28/23 16:21*	*03/01/23 17:06*	*1*
o-Terphenyl	*105*		*70 - 130*	*02/28/23 16:21*	*03/01/23 17:06*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	618		4.97		mg/Kg			03/02/23 05:42	1

Client Sample Results

Client: Ensolum
Project/Site: Jalmat 188

Job ID: 890-4195-1
SDG: 03D2057055

Client Sample ID: PH10D

Date Collected: 02/24/23 10:50
Date Received: 02/24/23 12:40
Sample Depth: 4

Lab Sample ID: 890-4195-6

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		03/08/23 09:47	03/08/23 18:10	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/08/23 09:47	03/08/23 18:10	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/08/23 09:47	03/08/23 18:10	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/08/23 09:47	03/08/23 18:10	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/08/23 09:47	03/08/23 18:10	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/08/23 09:47	03/08/23 18:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*03/08/23 09:47*	*03/08/23 18:10*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*03/08/23 09:47*	*03/08/23 18:10*	*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			03/09/23 14:36	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			03/02/23 09:50	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		02/28/23 16:21	03/01/23 17:27	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/28/23 16:21	03/01/23 17:27	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/28/23 16:21	03/01/23 17:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*02/28/23 16:21*	*03/01/23 17:27*	*1*
o-Terphenyl	*100*		*70 - 130*	*02/28/23 16:21*	*03/01/23 17:27*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2660**		25.3		mg/Kg			03/02/23 06:01	5

Client Sample ID: PH10F

Date Collected: 02/24/23 11:00
Date Received: 02/24/23 12:40
Sample Depth: 6

Lab Sample ID: 890-4195-7

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		03/08/23 09:47	03/08/23 18:31	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/08/23 09:47	03/08/23 18:31	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/08/23 09:47	03/08/23 18:31	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/08/23 09:47	03/08/23 18:31	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/08/23 09:47	03/08/23 18:31	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/08/23 09:47	03/08/23 18:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*03/08/23 09:47*	*03/08/23 18:31*	*1*

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Client Sample Results

Client: Ensolum
Project/Site: Jalmat 188

Job ID: 890-4195-1
SDG: 03D2057055

Client Sample ID: PH10F

Date Collected: 02/24/23 11:00
Date Received: 02/24/23 12:40
Sample Depth: 6

Lab Sample ID: 890-4195-7

Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*78*		*70 - 130*	*03/08/23 09:47*	*03/08/23 18:31*	*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			03/09/23 14:36	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			03/02/23 09:50	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		02/28/23 16:21	03/01/23 17:48	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/28/23 16:21	03/01/23 17:48	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/28/23 16:21	03/01/23 17:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*02/28/23 16:21*	*03/01/23 17:48*	*1*
o-Terphenyl	*98*		*70 - 130*	*02/28/23 16:21*	*03/01/23 17:48*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4180**		24.9		mg/Kg			03/02/23 06:07	5

Surrogate Summary

Client: Ensolum
Project/Site: Jalmat 188

Job ID: 890-4195-1
SDG: 03D2057055

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)
880-25192-A-7-C MS	Matrix Spike	46 S1-	87
880-25192-A-7-D MSD	Matrix Spike Duplicate	42 S1-	75
890-4195-1	PH08A	60 S1-	63 S1-
890-4195-2	PH08D	111	104
890-4195-3	PH09A	104	80
890-4195-4	PH09D	100	83
890-4195-5	PH10A	47 S1-	101
890-4195-6	PH10D	107	95
890-4195-7	PH10F	107	78
LCS 880-48104/1-A	Lab Control Sample	93	94
LCSD 880-48104/2-A	Lab Control Sample Dup	95	91
MB 880-48104/5-A	Method Blank	87	90

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)
880-25235-A-61-H MS	Matrix Spike	135 S1+	117
880-25235-A-61-I MSD	Matrix Spike Duplicate	126	110
890-4195-1	PH08A	123	118
890-4195-2	PH08D	107	104
890-4195-3	PH09A	114	110
890-4195-4	PH09D	108	103
890-4195-5	PH10A	107	105
890-4195-6	PH10D	102	100
890-4195-7	PH10F	100	98
LCS 880-47472/2-A	Lab Control Sample	112	102
LCSD 880-47472/3-A	Lab Control Sample Dup	123	113
MB 880-47472/1-A	Method Blank	131 S1+	127

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Jalmat 188

Job ID: 890-4195-1
SDG: 03D2057055

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-48104/5-A
Matrix: Solid
Analysis Batch: 48098

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 48104

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/08/23 09:47	03/08/23 12:14	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/08/23 09:47	03/08/23 12:14	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/08/23 09:47	03/08/23 12:14	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/08/23 09:47	03/08/23 12:14	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/08/23 09:47	03/08/23 12:14	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/08/23 09:47	03/08/23 12:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*	*03/08/23 09:47*	*03/08/23 12:14*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*03/08/23 09:47*	*03/08/23 12:14*	*1*

Lab Sample ID: LCS 880-48104/1-A
Matrix: Solid
Analysis Batch: 48098

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 48104

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09481		mg/Kg		95	70 - 130		
Toluene			0.100	0.09602		mg/Kg		96	70 - 130		
Ethylbenzene			0.100	0.09528		mg/Kg		95	70 - 130		
m-Xylene & p-Xylene			0.200	0.1960		mg/Kg		98	70 - 130		
o-Xylene			0.100	0.09761		mg/Kg		98	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*

Lab Sample ID: LCSD 880-48104/2-A
Matrix: Solid
Analysis Batch: 48098

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 48104

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09710		mg/Kg		97	70 - 130	2	35
Toluene			0.100	0.09753		mg/Kg		98	70 - 130	2	35
Ethylbenzene			0.100	0.09558		mg/Kg		96	70 - 130	0	35
m-Xylene & p-Xylene			0.200	0.1947		mg/Kg		97	70 - 130	1	35
o-Xylene			0.100	0.09685		mg/Kg		97	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*

Lab Sample ID: 880-25192-A-7-C MS
Matrix: Solid
Analysis Batch: 48098

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 48104

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00201	U F2 F1	0.100	0.07627		mg/Kg		75	70 - 130		
Toluene	<0.00201	U F2 F1	0.100	0.07278		mg/Kg		72	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: Jalmat 188

Job ID: 890-4195-1
SDG: 03D2057055

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

Lab Sample ID: 880-25192-A-7-C MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 48098 — **Prep Batch: 48104**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U F1	0.100	0.05618	F1	mg/Kg		56	70 - 130
m-Xylene & p-Xylene	<0.00402	U F1	0.200	0.09163	F1	mg/Kg		46	70 - 130
o-Xylene	<0.00201	U F2 F1	0.100	0.04968	F1	mg/Kg		49	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*46*	*S1-*	*70 - 130*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*

Lab Sample ID: 880-25192-A-7-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 48098 — **Prep Batch: 48104**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U F2 F1	0.0996	0.04566	F2 F1	mg/Kg		45	70 - 130	50	35
Toluene	<0.00201	U F2 F1	0.0996	0.04942	F2 F1	mg/Kg		49	70 - 130	38	35
Ethylbenzene	<0.00201	U F1	0.0996	0.04194	F1	mg/Kg		42	70 - 130	29	35
m-Xylene & p-Xylene	<0.00402	U F1	0.199	0.06707	F1	mg/Kg		34	70 - 130	31	35
o-Xylene	<0.00201	U F2 F1	0.0996	0.03337	F2 F1	mg/Kg		33	70 - 130	39	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*42*	*S1-*	*70 - 130*
1,4-Difluorobenzene (Surr)	*75*		*70 - 130*

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

Lab Sample ID: MB 880-47472/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 47505 — **Prep Batch: 47472**

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		02/28/23 16:21	03/01/23 08:46	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/28/23 16:21	03/01/23 08:46	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/28/23 16:21	03/01/23 08:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*131*	*S1+*	*70 - 130*	*02/28/23 16:21*	*03/01/23 08:46*	*1*
o-Terphenyl	*127*		*70 - 130*	*02/28/23 16:21*	*03/01/23 08:46*	*1*

Lab Sample ID: LCS 880-47472/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 47505 — **Prep Batch: 47472**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	842.5		mg/Kg		84	70 - 130
Diesel Range Organics (Over C10-C28)	1000	983.6		mg/Kg		98	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: Jalmat 188

Job ID: 890-4195-1
SDG: 03D2057055

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

Lab Sample ID: LCS 880-47472/2-A
Matrix: Solid
Analysis Batch: 47505

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 47472

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	112		70 - 130
o-Terphenyl	102		70 - 130

Lab Sample ID: LCSD 880-47472/3-A
Matrix: Solid
Analysis Batch: 47505

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 47472

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	915.9		mg/Kg		92	70 - 130	8	20
Diesel Range Organics (Over C10-C28)			1000	1096		mg/Kg		110	70 - 130	11	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	123		70 - 130
o-Terphenyl	113		70 - 130

Lab Sample ID: 880-25235-A-61-H MS
Matrix: Solid
Analysis Batch: 47505

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 47472

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1132		mg/Kg		110	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	999	879.8		mg/Kg		86	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	135	S1+	70 - 130
o-Terphenyl	117		70 - 130

Lab Sample ID: 880-25235-A-61-I MSD
Matrix: Solid
Analysis Batch: 47505

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 47472

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	1062		mg/Kg		103	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	826.9		mg/Kg		81	70 - 130	6	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	126		70 - 130
o-Terphenyl	110		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Jalmat 188

Job ID: 890-4195-1
SDG: 03D2057055

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-47514/1-A
Matrix: Solid
Analysis Batch: 47591

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			03/02/23 04:47	1

Lab Sample ID: LCS 880-47514/2-A
Matrix: Solid
Analysis Batch: 47591

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	252.3		mg/Kg		101	90 - 110		

Lab Sample ID: LCSD 880-47514/3-A
Matrix: Solid
Analysis Batch: 47591

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	250.4		mg/Kg		100	90 - 110	1	20

Lab Sample ID: 890-4195-1 MS
Matrix: Solid
Analysis Batch: 47591

Client Sample ID: PH08A
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	600	F1	253	940.8	F1	mg/Kg		135	90 - 110		

Lab Sample ID: 890-4195-1 MSD
Matrix: Solid
Analysis Batch: 47591

Client Sample ID: PH08A
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	600	F1	253	935.9	F1	mg/Kg		133	90 - 110	1	20

QC Association Summary

Client: Ensolum
Project/Site: Jalmat 188

Job ID: 890-4195-1
SDG: 03D2057055

GC VOA

Analysis Batch: 48098

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4195-1	PH08A	Total/NA	Solid	8021B	48104
890-4195-2	PH08D	Total/NA	Solid	8021B	48104
890-4195-3	PH09A	Total/NA	Solid	8021B	48104
890-4195-4	PH09D	Total/NA	Solid	8021B	48104
890-4195-5	PH10A	Total/NA	Solid	8021B	48104
890-4195-6	PH10D	Total/NA	Solid	8021B	48104
890-4195-7	PH10F	Total/NA	Solid	8021B	48104
MB 880-48104/5-A	Method Blank	Total/NA	Solid	8021B	48104
LCS 880-48104/1-A	Lab Control Sample	Total/NA	Solid	8021B	48104
LCSD 880-48104/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	48104
880-25192-A-7-C MS	Matrix Spike	Total/NA	Solid	8021B	48104
880-25192-A-7-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	48104

Prep Batch: 48104

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4195-1	PH08A	Total/NA	Solid	5035	
890-4195-2	PH08D	Total/NA	Solid	5035	
890-4195-3	PH09A	Total/NA	Solid	5035	
890-4195-4	PH09D	Total/NA	Solid	5035	
890-4195-5	PH10A	Total/NA	Solid	5035	
890-4195-6	PH10D	Total/NA	Solid	5035	
890-4195-7	PH10F	Total/NA	Solid	5035	
MB 880-48104/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-48104/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-48104/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-25192-A-7-C MS	Matrix Spike	Total/NA	Solid	5035	
880-25192-A-7-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 48231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4195-1	PH08A	Total/NA	Solid	Total BTEX	
890-4195-2	PH08D	Total/NA	Solid	Total BTEX	
890-4195-3	PH09A	Total/NA	Solid	Total BTEX	
890-4195-4	PH09D	Total/NA	Solid	Total BTEX	
890-4195-5	PH10A	Total/NA	Solid	Total BTEX	
890-4195-6	PH10D	Total/NA	Solid	Total BTEX	
890-4195-7	PH10F	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 47472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4195-1	PH08A	Total/NA	Solid	8015NM Prep	
890-4195-2	PH08D	Total/NA	Solid	8015NM Prep	
890-4195-3	PH09A	Total/NA	Solid	8015NM Prep	
890-4195-4	PH09D	Total/NA	Solid	8015NM Prep	
890-4195-5	PH10A	Total/NA	Solid	8015NM Prep	
890-4195-6	PH10D	Total/NA	Solid	8015NM Prep	
890-4195-7	PH10F	Total/NA	Solid	8015NM Prep	
MB 880-47472/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-47472/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Ensolum
Project/Site: Jalmat 188

Job ID: 890-4195-1
SDG: 03D2057055

GC Semi VOA (Continued)

Prep Batch: 47472 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-47472/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-25235-A-61-H MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-25235-A-61-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 47505

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4195-1	PH08A	Total/NA	Solid	8015B NM	47472
890-4195-2	PH08D	Total/NA	Solid	8015B NM	47472
890-4195-3	PH09A	Total/NA	Solid	8015B NM	47472
890-4195-4	PH09D	Total/NA	Solid	8015B NM	47472
890-4195-5	PH10A	Total/NA	Solid	8015B NM	47472
890-4195-6	PH10D	Total/NA	Solid	8015B NM	47472
890-4195-7	PH10F	Total/NA	Solid	8015B NM	47472
MB 880-47472/1-A	Method Blank	Total/NA	Solid	8015B NM	47472
LCS 880-47472/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	47472
LCSD 880-47472/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	47472
880-25235-A-61-H MS	Matrix Spike	Total/NA	Solid	8015B NM	47472
880-25235-A-61-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	47472

Analysis Batch: 47573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4195-1	PH08A	Total/NA	Solid	8015 NM	
890-4195-2	PH08D	Total/NA	Solid	8015 NM	
890-4195-3	PH09A	Total/NA	Solid	8015 NM	
890-4195-4	PH09D	Total/NA	Solid	8015 NM	
890-4195-5	PH10A	Total/NA	Solid	8015 NM	
890-4195-6	PH10D	Total/NA	Solid	8015 NM	
890-4195-7	PH10F	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 47514

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4195-1	PH08A	Soluble	Solid	DI Leach	
890-4195-2	PH08D	Soluble	Solid	DI Leach	
890-4195-3	PH09A	Soluble	Solid	DI Leach	
890-4195-4	PH09D	Soluble	Solid	DI Leach	
890-4195-5	PH10A	Soluble	Solid	DI Leach	
890-4195-6	PH10D	Soluble	Solid	DI Leach	
890-4195-7	PH10F	Soluble	Solid	DI Leach	
MB 880-47514/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-47514/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-47514/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4195-1 MS	PH08A	Soluble	Solid	DI Leach	
890-4195-1 MSD	PH08A	Soluble	Solid	DI Leach	

Analysis Batch: 47591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4195-1	PH08A	Soluble	Solid	300.0	47514
890-4195-2	PH08D	Soluble	Solid	300.0	47514
890-4195-3	PH09A	Soluble	Solid	300.0	47514

QC Association Summary

Client: Ensolum
Project/Site: Jalmat 188

Job ID: 890-4195-1
SDG: 03D2057055

HPLC/IC (Continued)

Analysis Batch: 47591 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4195-4	PH09D	Soluble	Solid	300.0	47514
890-4195-5	PH10A	Soluble	Solid	300.0	47514
890-4195-6	PH10D	Soluble	Solid	300.0	47514
890-4195-7	PH10F	Soluble	Solid	300.0	47514
MB 880-47514/1-A	Method Blank	Soluble	Solid	300.0	47514
LCS 880-47514/2-A	Lab Control Sample	Soluble	Solid	300.0	47514
LCSD 880-47514/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	47514
890-4195-1 MS	PH08A	Soluble	Solid	300.0	47514
890-4195-1 MSD	PH08A	Soluble	Solid	300.0	47514

Lab Chronicle

Client: Ensolum
Project/Site: Jalmat 188

Job ID: 890-4195-1
SDG: 03D2057055

Client Sample ID: PH08A
Date Collected: 02/24/23 09:15
Date Received: 02/24/23 12:40

Lab Sample ID: 890-4195-1
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	48104	03/08/23 09:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	48098	03/08/23 14:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			48231	03/09/23 14:36	AJ	EET MID
Total/NA	Analysis	8015 NM		1			47573	03/01/23 16:06	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	47472	02/28/23 16:21	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	47505	03/01/23 15:17	AJ	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	47514	03/01/23 10:34	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	47591	03/02/23 05:05	CH	EET MID

Client Sample ID: PH08D
Date Collected: 02/24/23 09:30
Date Received: 02/24/23 12:40

Lab Sample ID: 890-4195-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	48104	03/08/23 09:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	48098	03/08/23 15:01	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			48231	03/09/23 14:36	AJ	EET MID
Total/NA	Analysis	8015 NM		1			47573	03/02/23 09:50	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	47472	02/28/23 16:21	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	47505	03/01/23 16:01	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	47514	03/01/23 10:34	KS	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	47591	03/02/23 05:24	CH	EET MID

Client Sample ID: PH09A
Date Collected: 02/24/23 10:00
Date Received: 02/24/23 12:40

Lab Sample ID: 890-4195-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	48104	03/08/23 09:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	48098	03/08/23 15:22	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			48231	03/09/23 14:36	AJ	EET MID
Total/NA	Analysis	8015 NM		1			47573	03/02/23 09:50	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	47472	02/28/23 16:21	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	47505	03/01/23 16:22	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	47514	03/01/23 10:34	KS	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	47591	03/02/23 05:30	CH	EET MID

Client Sample ID: PH09D
Date Collected: 02/24/23 10:15
Date Received: 02/24/23 12:40

Lab Sample ID: 890-4195-4
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			5.02 g	5 mL	48104	03/08/23 09:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	48098	03/08/23 15:43	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			48231	03/09/23 14:36	AJ	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: Jalmat 188

Job ID: 890-4195-1
SDG: 03D2057055

Client Sample ID: PH09D
Date Collected: 02/24/23 10:15
Date Received: 02/24/23 12:40

Lab Sample ID: 890-4195-4
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			47573	03/02/23 09:50	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	47472	02/28/23 16:21	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	47505	03/01/23 16:43	AJ	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	47514	03/01/23 10:34	KS	EET MID
Soluble	Analysis	300.0		50	50 mL	50 mL	47591	03/02/23 05:36	CH	EET MID

Client Sample ID: PH10A
Date Collected: 02/24/23 10:30
Date Received: 02/24/23 12:40

Lab Sample ID: 890-4195-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	48104	03/08/23 09:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	48098	03/08/23 17:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			48231	03/09/23 14:36	AJ	EET MID
Total/NA	Analysis	8015 NM		1			47573	03/02/23 09:50	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	47472	02/28/23 16:21	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	47505	03/01/23 17:06	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	47514	03/01/23 10:34	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	47591	03/02/23 05:42	CH	EET MID

Client Sample ID: PH10D
Date Collected: 02/24/23 10:50
Date Received: 02/24/23 12:40

Lab Sample ID: 890-4195-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	48104	03/08/23 09:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	48098	03/08/23 18:10	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			48231	03/09/23 14:36	AJ	EET MID
Total/NA	Analysis	8015 NM		1			47573	03/02/23 09:50	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	47472	02/28/23 16:21	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	47505	03/01/23 17:27	AJ	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	47514	03/01/23 10:34	KS	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	47591	03/02/23 06:01	CH	EET MID

Client Sample ID: PH10F
Date Collected: 02/24/23 11:00
Date Received: 02/24/23 12:40

Lab Sample ID: 890-4195-7
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	48104	03/08/23 09:47	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	48098	03/08/23 18:31	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			48231	03/09/23 14:36	AJ	EET MID
Total/NA	Analysis	8015 NM		1			47573	03/02/23 09:50	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	47472	02/28/23 16:21	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	47505	03/01/23 17:48	AJ	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: Jalmat 188

Job ID: 890-4195-1
SDG: 03D2057055

Client Sample ID: PH10F
Date Collected: 02/24/23 11:00
Date Received: 02/24/23 12:40

Lab Sample ID: 890-4195-7
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			5.03 g	50 mL	47514	03/01/23 10:34	KS	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	47591	03/02/23 06:07	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: Jalmat 188

Job ID: 890-4195-1
SDG: 03D2057055

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: Jalmat 188

Job ID: 890-4195-1
SDG: 03D2057055

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: Jalmat 188

Job ID: 890-4195-1
SDG: 03D2057055

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-4195-1	PH08A	Solid	02/24/23 09:15	02/24/23 12:40	1
890-4195-2	PH08D	Solid	02/24/23 09:30	02/24/23 12:40	4
890-4195-3	PH09A	Solid	02/24/23 10:00	02/24/23 12:40	1
890-4195-4	PH09D	Solid	02/24/23 10:15	02/24/23 12:40	4
890-4195-5	PH10A	Solid	02/24/23 10:30	02/24/23 12:40	1
890-4195-6	PH10D	Solid	02/24/23 10:50	02/24/23 12:40	4
890-4195-7	PH10F	Solid	02/24/23 11:00	02/24/23 12:40	6

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

Work Order Comments

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

Project Name:	Jalmat 188	Turn Around	
Project Number:	1RP2057055	☑ Routine ☐ Rush	
Project Location:	32.39554, -103.3802	Due Date:	
Sampler's Name:	Julianna Falcomata	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:	~~NM007~~
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	2.2
Total Containers:		Corrected Temperature:	2.0

Preservative Codes

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

890-4195 Chain of Custody

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)	Sample Comments
PH08A	S	02-24-23	0915	1'	G	1					NAPP2235373981
PH08D	S		0930	4'		1					
PH09A	S		1000	1'		1					
PH09D	S		1015	4'		1					
PH10A	S		1050	1'		1					
PH10D	S		1050	4'		1					
PH10F	S	↓	1100	6'	↓	1					

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr 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		Ice Up	2.24.23 1240			
3				4		
5				6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4195-1
SDG Number: 03D2057055

Login Number: 4195
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: 890-4195-1
SDG Number: 03D2057055

Login Number: 4195
List Number: 2
Creator: Teel, Brianna

List Source: Eurofins Midland
List Creation: 02/28/23 11:19 AM

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

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

December 13, 2023

AIMEE COLE

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: JALMAT 188

Enclosed are the results of analyses for samples received by the laboratory on 12/08/23 16:06.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENSOLUM
AIMEE COLE
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	12/08/2023	Sampling Date:	12/07/2023
Reported:	12/13/2023	Sampling Type:	Soil
Project Name:	JALMAT 188	Sampling Condition:	Cool & Intact
Project Number:	03D2057055	Sample Received By:	Dionica Hinojos
Project Location:	MAVERICK 32.395541,-103.321776		

Sample ID: PH 01 @ 8-10' (H236592-01)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/11/2023	ND	2.29	114	2.00	2.19	
Toluene*	<0.050	0.050	12/11/2023	ND	2.26	113	2.00	2.38	
Ethylbenzene*	<0.050	0.050	12/11/2023	ND	2.23	111	2.00	1.90	
Total Xylenes*	<0.150	0.150	12/11/2023	ND	7.04	117	6.00	1.56	
Total BTEX	<0.300	0.300	12/11/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**6900**	16.0	12/11/2023	ND	432	108	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/11/2023	ND	202	101	200	1.43	
DRO >C10-C28*	<10.0	10.0	12/11/2023	ND	209	104	200	0.577	
EXT DRO >C28-C36	<10.0	10.0	12/11/2023	ND					

Surrogate: 1-Chlorooctane *84.9 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *94.4 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENSOLUM
AIMEE COLE
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	12/08/2023	Sampling Date:	12/07/2023
Reported:	12/13/2023	Sampling Type:	Soil
Project Name:	JALMAT 188	Sampling Condition:	Cool & Intact
Project Number:	03D2057055	Sample Received By:	Dionica Hinojos
Project Location:	MAVERICK 32.395541,-103.321776		

Sample ID: PH 01 @ 22-24' (H236592-02)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/11/2023	ND	2.29	114	2.00	2.19	
Toluene*	<0.050	0.050	12/11/2023	ND	2.26	113	2.00	2.38	
Ethylbenzene*	<0.050	0.050	12/11/2023	ND	2.23	111	2.00	1.90	
Total Xylenes*	<0.150	0.150	12/11/2023	ND	7.04	117	6.00	1.56	
Total BTEX	<0.300	0.300	12/11/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**528**	16.0	12/11/2023	ND	432	108	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/11/2023	ND	202	101	200	1.43	
DRO >C10-C28*	<10.0	10.0	12/11/2023	ND	209	104	200	0.577	
EXT DRO >C28-C36	<10.0	10.0	12/11/2023	ND					

Surrogate: 1-Chlorooctane *83.5 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *93.4 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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Analytical Results For:

ENSOLUM
AIMEE COLE
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	12/08/2023	Sampling Date:	12/07/2023
Reported:	12/13/2023	Sampling Type:	Soil
Project Name:	JALMAT 188	Sampling Condition:	Cool & Intact
Project Number:	03D2057055	Sample Received By:	Dionica Hinojos
Project Location:	MAVERICK 32.395541,-103.321776		

Sample ID: PH 02 @ 10-12' (H236592-03)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/11/2023	ND	2.29	114	2.00	2.19	
Toluene*	<0.050	0.050	12/11/2023	ND	2.26	113	2.00	2.38	
Ethylbenzene*	<0.050	0.050	12/11/2023	ND	2.23	111	2.00	1.90	
Total Xylenes*	<0.150	0.150	12/11/2023	ND	7.04	117	6.00	1.56	
Total BTEX	<0.300	0.300	12/11/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**4000**	16.0	12/11/2023	ND	432	108	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/11/2023	ND	202	101	200	1.43	
DRO >C10-C28*	<10.0	10.0	12/11/2023	ND	209	104	200	0.577	
EXT DRO >C28-C36	<10.0	10.0	12/11/2023	ND					

Surrogate: 1-Chlorooctane *77.8 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *88.4 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

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Analytical Results For:

ENSOLUM
AIMEE COLE
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	12/08/2023	Sampling Date:	12/07/2023
Reported:	12/13/2023	Sampling Type:	Soil
Project Name:	JALMAT 188	Sampling Condition:	Cool & Intact
Project Number:	03D2057055	Sample Received By:	Dionica Hinojos
Project Location:	MAVERICK 32.395541,-103.321776		

Sample ID: PH 02 @ 22-24' (H236592-04)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/11/2023	ND	2.29	114	2.00	2.19	
Toluene*	<0.050	0.050	12/11/2023	ND	2.26	113	2.00	2.38	
Ethylbenzene*	<0.050	0.050	12/11/2023	ND	2.23	111	2.00	1.90	
Total Xylenes*	<0.150	0.150	12/11/2023	ND	7.04	117	6.00	1.56	
Total BTEX	<0.300	0.300	12/11/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *106 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**512**	16.0	12/11/2023	ND	432	108	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/11/2023	ND	202	101	200	1.43	
DRO >C10-C28*	<10.0	10.0	12/11/2023	ND	209	104	200	0.577	
EXT DRO >C28-C36	<10.0	10.0	12/11/2023	ND					

Surrogate: 1-Chlorooctane *81.7 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *89.2 %* *49.1-148*

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Analytical Results For:

ENSOLUM
AIMEE COLE
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	12/08/2023	Sampling Date:	12/07/2023
Reported:	12/13/2023	Sampling Type:	Soil
Project Name:	JALMAT 188	Sampling Condition:	Cool & Intact
Project Number:	03D2057055	Sample Received By:	Dionica Hinojos
Project Location:	MAVERICK 32.395541,-103.321776		

Sample ID: PH 03 @ 12-14' (H236592-05)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/11/2023	ND	2.29	114	2.00	2.19	
Toluene*	<0.050	0.050	12/11/2023	ND	2.26	113	2.00	2.38	
Ethylbenzene*	<0.050	0.050	12/11/2023	ND	2.23	111	2.00	1.90	
Total Xylenes*	<0.150	0.150	12/11/2023	ND	7.04	117	6.00	1.56	
Total BTEX	<0.300	0.300	12/11/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**2240**	16.0	12/11/2023	ND	432	108	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/11/2023	ND	202	101	200	1.43	
DRO >C10-C28*	<10.0	10.0	12/11/2023	ND	209	104	200	0.577	
EXT DRO >C28-C36	<10.0	10.0	12/11/2023	ND					

Surrogate: 1-Chlorooctane *83.4 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *93.2 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENSOLUM
AIMEE COLE
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	12/08/2023	Sampling Date:	12/07/2023
Reported:	12/13/2023	Sampling Type:	Soil
Project Name:	JALMAT 188	Sampling Condition:	Cool & Intact
Project Number:	03D2057055	Sample Received By:	Dionica Hinojos
Project Location:	MAVERICK 32.395541,-103.321776		

Sample ID: PH 03 @ 26-28' (H236592-06)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/11/2023	ND	2.29	114	2.00	2.19	
Toluene*	<0.050	0.050	12/11/2023	ND	2.26	113	2.00	2.38	
Ethylbenzene*	<0.050	0.050	12/11/2023	ND	2.23	111	2.00	1.90	
Total Xylenes*	<0.150	0.150	12/11/2023	ND	7.04	117	6.00	1.56	
Total BTEX	<0.300	0.300	12/11/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *104 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**4240**	16.0	12/11/2023	ND	432	108	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/11/2023	ND	202	101	200	1.43	
DRO >C10-C28*	<10.0	10.0	12/11/2023	ND	209	104	200	0.577	
EXT DRO >C28-C36	<10.0	10.0	12/11/2023	ND					

Surrogate: 1-Chlorooctane *82.7 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *92.9 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENSOLUM
AIMEE COLE
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	12/08/2023	Sampling Date:	12/07/2023
Reported:	12/13/2023	Sampling Type:	Soil
Project Name:	JALMAT 188	Sampling Condition:	Cool & Intact
Project Number:	03D2057055	Sample Received By:	Dionica Hinojos
Project Location:	MAVERICK 32.395541,-103.321776		

Sample ID: PH 03 @ 44-46' (H236592-07)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/11/2023	ND	2.29	114	2.00	2.19	
Toluene*	<0.050	0.050	12/11/2023	ND	2.26	113	2.00	2.38	
Ethylbenzene*	<0.050	0.050	12/11/2023	ND	2.23	111	2.00	1.90	
Total Xylenes*	<0.150	0.150	12/11/2023	ND	7.04	117	6.00	1.56	
Total BTEX	<0.300	0.300	12/11/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *104 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**368**	16.0	12/11/2023	ND	432	108	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/11/2023	ND	202	101	200	1.43	
DRO >C10-C28*	<10.0	10.0	12/11/2023	ND	209	104	200	0.577	
EXT DRO >C28-C36	<10.0	10.0	12/11/2023	ND					

Surrogate: 1-Chlorooctane *77.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *88.2 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENSOLUM
AIMEE COLE
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	12/08/2023	Sampling Date:	12/07/2023
Reported:	12/13/2023	Sampling Type:	Soil
Project Name:	JALMAT 188	Sampling Condition:	Cool & Intact
Project Number:	03D2057055	Sample Received By:	Dionica Hinojos
Project Location:	MAVERICK 32.395541,-103.321776		

Sample ID: PH 09 @ 8-10' (H236592-08)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/11/2023	ND	2.29	114	2.00	2.19	
Toluene*	<0.050	0.050	12/11/2023	ND	2.26	113	2.00	2.38	
Ethylbenzene*	<0.050	0.050	12/11/2023	ND	2.23	111	2.00	1.90	
Total Xylenes*	<0.150	0.150	12/11/2023	ND	7.04	117	6.00	1.56	
Total BTEX	<0.300	0.300	12/11/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**7200**	16.0	12/11/2023	ND	432	108	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/11/2023	ND	202	101	200	1.43	
DRO >C10-C28*	<10.0	10.0	12/11/2023	ND	209	104	200	0.577	
EXT DRO >C28-C36	<10.0	10.0	12/11/2023	ND					

Surrogate: 1-Chlorooctane *66.5 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *73.0 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENSOLUM
AIMEE COLE
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	12/08/2023	Sampling Date:	12/07/2023
Reported:	12/13/2023	Sampling Type:	Soil
Project Name:	JALMAT 188	Sampling Condition:	Cool & Intact
Project Number:	03D2057055	Sample Received By:	Dionica Hinojos
Project Location:	MAVERICK 32.395541,-103.321776		

Sample ID: PH 09 @ 24-26' (H236592-09)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/11/2023	ND	2.29	114	2.00	2.19	
Toluene*	<0.050	0.050	12/11/2023	ND	2.26	113	2.00	2.38	
Ethylbenzene*	<0.050	0.050	12/11/2023	ND	2.23	111	2.00	1.90	
Total Xylenes*	<0.150	0.150	12/11/2023	ND	7.04	117	6.00	1.56	
Total BTEX	<0.300	0.300	12/11/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *104 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**3600**	16.0	12/11/2023	ND	432	108	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/11/2023	ND	202	101	200	1.43	
DRO >C10-C28*	<10.0	10.0	12/11/2023	ND	209	104	200	0.577	
EXT DRO >C28-C36	<10.0	10.0	12/11/2023	ND					

Surrogate: 1-Chlorooctane *83.8 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *94.1 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENSOLUM
AIMEE COLE
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	12/08/2023	Sampling Date:	12/07/2023
Reported:	12/13/2023	Sampling Type:	Soil
Project Name:	JALMAT 188	Sampling Condition:	Cool & Intact
Project Number:	03D2057055	Sample Received By:	Dionica Hinojos
Project Location:	MAVERICK 32.395541,-103.321776		

Sample ID: PH 09 @ 38-40' (H236592-10)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/11/2023	ND	2.29	114	2.00	2.19	
Toluene*	<0.050	0.050	12/11/2023	ND	2.26	113	2.00	2.38	
Ethylbenzene*	<0.050	0.050	12/11/2023	ND	2.23	111	2.00	1.90	
Total Xylenes*	<0.150	0.150	12/11/2023	ND	7.04	117	6.00	1.56	
Total BTEX	<0.300	0.300	12/11/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**272**	16.0	12/11/2023	ND	432	108	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/11/2023	ND	202	101	200	1.43	
DRO >C10-C28*	<10.0	10.0	12/11/2023	ND	209	104	200	0.577	
EXT DRO >C28-C36	<10.0	10.0	12/11/2023	ND					

Surrogate: 1-Chlorooctane *81.8 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *90.9 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENSOLUM
AIMEE COLE
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	12/08/2023	Sampling Date:	12/08/2023
Reported:	12/13/2023	Sampling Type:	Soil
Project Name:	JALMAT 188	Sampling Condition:	Cool & Intact
Project Number:	03D2057055	Sample Received By:	Dionica Hinojos
Project Location:	MAVERICK 32.395541,-103.321776		

Sample ID: BH 01 @ 2-4' (H236592-11)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/11/2023	ND	2.29	114	2.00	2.19	
Toluene*	<0.050	0.050	12/11/2023	ND	2.26	113	2.00	2.38	
Ethylbenzene*	<0.050	0.050	12/11/2023	ND	2.23	111	2.00	1.90	
Total Xylenes*	<0.150	0.150	12/11/2023	ND	7.04	117	6.00	1.56	
Total BTEX	<0.300	0.300	12/11/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**144**	16.0	12/11/2023	ND	432	108	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/11/2023	ND	202	101	200	1.43	
DRO >C10-C28*	<10.0	10.0	12/11/2023	ND	209	104	200	0.577	
EXT DRO >C28-C36	<10.0	10.0	12/11/2023	ND					

Surrogate: 1-Chlorooctane *84.0 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *90.3 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENSOLUM
AIMEE COLE
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	12/08/2023	Sampling Date:	12/08/2023
Reported:	12/13/2023	Sampling Type:	Soil
Project Name:	JALMAT 188	Sampling Condition:	Cool & Intact
Project Number:	03D2057055	Sample Received By:	Dionica Hinojos
Project Location:	MAVERICK 32.395541,-103.321776		

Sample ID: BH 01 @ 14-16' (H236592-12)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/11/2023	ND	2.29	114	2.00	2.19	
Toluene*	<0.050	0.050	12/11/2023	ND	2.26	113	2.00	2.38	
Ethylbenzene*	<0.050	0.050	12/11/2023	ND	2.23	111	2.00	1.90	
Total Xylenes*	<0.150	0.150	12/11/2023	ND	7.04	117	6.00	1.56	
Total BTEX	<0.300	0.300	12/11/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	12/11/2023	ND	432	108	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/11/2023	ND	202	101	200	1.43	
DRO >C10-C28*	<10.0	10.0	12/11/2023	ND	209	104	200	0.577	
EXT DRO >C28-C36	<10.0	10.0	12/11/2023	ND					

Surrogate: 1-Chlorooctane *78.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *87.9 %* *49.1-148*

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PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENSOLUM
AIMEE COLE
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	12/08/2023	Sampling Date:	12/08/2023
Reported:	12/13/2023	Sampling Type:	Soil
Project Name:	JALMAT 188	Sampling Condition:	Cool & Intact
Project Number:	03D2057055	Sample Received By:	Dionica Hinojos
Project Location:	MAVERICK 32.395541,-103.321776		

Sample ID: BH 01 @ 28-30' (H236592-13)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/11/2023	ND	2.29	114	2.00	2.19	
Toluene*	<0.050	0.050	12/11/2023	ND	2.26	113	2.00	2.38	
Ethylbenzene*	<0.050	0.050	12/11/2023	ND	2.23	111	2.00	1.90	
Total Xylenes*	<0.150	0.150	12/11/2023	ND	7.04	117	6.00	1.56	
Total BTEX	<0.300	0.300	12/11/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	12/11/2023	ND	432	108	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/11/2023	ND	202	101	200	1.43	
DRO >C10-C28*	<10.0	10.0	12/11/2023	ND	209	104	200	0.577	
EXT DRO >C28-C36	<10.0	10.0	12/11/2023	ND					

Surrogate: 1-Chlorooctane *72.5 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *81.1 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENSOLUM
AIMEE COLE
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	12/08/2023	Sampling Date:	12/08/2023
Reported:	12/13/2023	Sampling Type:	Soil
Project Name:	JALMAT 188	Sampling Condition:	Cool & Intact
Project Number:	03D2057055	Sample Received By:	Dionica Hinojos
Project Location:	MAVERICK 32.395541,-103.321776		

Sample ID: BH 02 @ 0-2' (H236592-14)

BTEX 8021B mg/kg Analyzed By: JH/

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/11/2023	ND	2.29	114	2.00	2.19	
Toluene*	<0.050	0.050	12/11/2023	ND	2.26	113	2.00	2.38	
Ethylbenzene*	<0.050	0.050	12/11/2023	ND	2.23	111	2.00	1.90	
Total Xylenes*	<0.150	0.150	12/11/2023	ND	7.04	117	6.00	1.56	
Total BTEX	<0.300	0.300	12/11/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *105 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**176**	16.0	12/11/2023	ND	432	108	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/11/2023	ND	202	101	200	1.43	
DRO >C10-C28*	<10.0	10.0	12/11/2023	ND	209	104	200	0.577	
EXT DRO >C28-C36	<10.0	10.0	12/11/2023	ND					

Surrogate: 1-Chlorooctane *83.7 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *93.5 %* *49.1-148*

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Analytical Results For:

ENSOLUM
AIMEE COLE
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	12/08/2023	Sampling Date:	12/08/2023
Reported:	12/13/2023	Sampling Type:	Soil
Project Name:	JALMAT 188	Sampling Condition:	Cool & Intact
Project Number:	03D2057055	Sample Received By:	Dionica Hinojos
Project Location:	MAVERICK 32.395541,-103.321776		

Sample ID: BH 02 @ 11-16' (H236592-15)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/11/2023	ND	2.19	110	2.00	7.15	
Toluene*	<0.050	0.050	12/11/2023	ND	2.09	104	2.00	12.1	
Ethylbenzene*	<0.050	0.050	12/11/2023	ND	2.18	109	2.00	12.3	
Total Xylenes*	<0.150	0.150	12/11/2023	ND	6.46	108	6.00	12.5	
Total BTEX	<0.300	0.300	12/11/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *111 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**112**	16.0	12/11/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/11/2023	ND	202	101	200	1.43	
DRO >C10-C28*	<10.0	10.0	12/11/2023	ND	209	104	200	0.577	
EXT DRO >C28-C36	<10.0	10.0	12/11/2023	ND					

Surrogate: 1-Chlorooctane *84.2 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *94.5 %* *49.1-148*

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PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENSOLUM
AIMEE COLE
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	12/08/2023	Sampling Date:	12/08/2023
Reported:	12/13/2023	Sampling Type:	Soil
Project Name:	JALMAT 188	Sampling Condition:	Cool & Intact
Project Number:	03D2057055	Sample Received By:	Dionica Hinojos
Project Location:	MAVERICK 32.395541,-103.321776		

Sample ID: BH 02 @ 28-30' (H236592-16)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/11/2023	ND	2.19	110	2.00	7.15	
Toluene*	<0.050	0.050	12/11/2023	ND	2.09	104	2.00	12.1	
Ethylbenzene*	<0.050	0.050	12/11/2023	ND	2.18	109	2.00	12.3	
Total Xylenes*	<0.150	0.150	12/11/2023	ND	6.46	108	6.00	12.5	
Total BTEX	<0.300	0.300	12/11/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.0 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**96.0**	16.0	12/11/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/11/2023	ND	202	101	200	1.43	
DRO >C10-C28*	<10.0	10.0	12/11/2023	ND	209	104	200	0.577	
EXT DRO >C28-C36	<10.0	10.0	12/11/2023	ND					

Surrogate: 1-Chlorooctane *73.9 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *82.7 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENSOLUM
AIMEE COLE
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	12/08/2023	Sampling Date:	12/08/2023
Reported:	12/13/2023	Sampling Type:	Soil
Project Name:	JALMAT 188	Sampling Condition:	Cool & Intact
Project Number:	03D2057055	Sample Received By:	Dionica Hinojos
Project Location:	MAVERICK 32.395541,-103.321776		

Sample ID: BH 03 @ 0-2' (H236592-17)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/11/2023	ND	2.19	110	2.00	7.15	
Toluene*	<0.050	0.050	12/11/2023	ND	2.09	104	2.00	12.1	
Ethylbenzene*	<0.050	0.050	12/11/2023	ND	2.18	109	2.00	12.3	
Total Xylenes*	<0.150	0.150	12/11/2023	ND	6.46	108	6.00	12.5	
Total BTEX	<0.300	0.300	12/11/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *106 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**64.0**	16.0	12/11/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/11/2023	ND	202	101	200	1.43	
DRO >C10-C28*	<10.0	10.0	12/11/2023	ND	209	104	200	0.577	
EXT DRO >C28-C36	<10.0	10.0	12/11/2023	ND					

Surrogate: 1-Chlorooctane *83.0 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *89.3 %* *49.1-148*

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CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENSOLUM
AIMEE COLE
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	12/08/2023	Sampling Date:	12/08/2023
Reported:	12/13/2023	Sampling Type:	Soil
Project Name:	JALMAT 188	Sampling Condition:	Cool & Intact
Project Number:	03D2057055	Sample Received By:	Dionica Hinojos
Project Location:	MAVERICK 32.395541,-103.321776		

Sample ID: BH 03 @ 11-16' (H236592-18)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/11/2023	ND	2.19	110	2.00	7.15	
Toluene*	<0.050	0.050	12/11/2023	ND	2.09	104	2.00	12.1	
Ethylbenzene*	<0.050	0.050	12/11/2023	ND	2.18	109	2.00	12.3	
Total Xylenes*	<0.150	0.150	12/11/2023	ND	6.46	108	6.00	12.5	
Total BTEX	<0.300	0.300	12/11/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *113 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	12/11/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/11/2023	ND	202	101	200	1.43	
DRO >C10-C28*	<10.0	10.0	12/11/2023	ND	209	104	200	0.577	
EXT DRO >C28-C36	<10.0	10.0	12/11/2023	ND					

Surrogate: 1-Chlorooctane *76.1 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *85.6 %* *49.1-148*

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PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENSOLUM
AIMEE COLE
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	12/08/2023	Sampling Date:	12/08/2023
Reported:	12/13/2023	Sampling Type:	Soil
Project Name:	JALMAT 188	Sampling Condition:	Cool & Intact
Project Number:	03D2057055	Sample Received By:	Dionica Hinojos
Project Location:	MAVERICK 32.395541,-103.321776		

Sample ID: BH 03 @ 28-30' (H236592-19)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/11/2023	ND	2.19	110	2.00	7.15	
Toluene*	<0.050	0.050	12/11/2023	ND	2.09	104	2.00	12.1	
Ethylbenzene*	<0.050	0.050	12/11/2023	ND	2.18	109	2.00	12.3	
Total Xylenes*	<0.150	0.150	12/11/2023	ND	6.46	108	6.00	12.5	
Total BTEX	<0.300	0.300	12/11/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *98.7 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	12/11/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/11/2023	ND	190	94.9	200	3.90	
DRO >C10-C28*	<10.0	10.0	12/11/2023	ND	184	92.0	200	4.11	
EXT DRO >C28-C36	<10.0	10.0	12/11/2023	ND					

Surrogate: 1-Chlorooctane *81.8 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *95.9 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENSOLUM
AIMEE COLE
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	12/08/2023	Sampling Date:	12/08/2023
Reported:	12/13/2023	Sampling Type:	Soil
Project Name:	JALMAT 188	Sampling Condition:	Cool & Intact
Project Number:	03D2057055	Sample Received By:	Dionica Hinojos
Project Location:	MAVERICK 32.395541,-103.321776		

Sample ID: PH 07 @ 11-16' (H236592-20)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/11/2023	ND	2.19	110	2.00	7.15	
Toluene*	<0.050	0.050	12/11/2023	ND	2.09	104	2.00	12.1	
Ethylbenzene*	<0.050	0.050	12/11/2023	ND	2.18	109	2.00	12.3	
Total Xylenes*	<0.150	0.150	12/11/2023	ND	6.46	108	6.00	12.5	
Total BTEX	<0.300	0.300	12/11/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *112 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**112**	16.0	12/11/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/11/2023	ND	190	94.9	200	3.90	
DRO >C10-C28*	<10.0	10.0	12/11/2023	ND	184	92.0	200	4.11	
EXT DRO >C28-C36	<10.0	10.0	12/11/2023	ND					

Surrogate: 1-Chlorooctane *81.7 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *93.6 %* *49.1-148*

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENSOLUM
AIMEE COLE
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	12/08/2023	Sampling Date:	12/08/2023
Reported:	12/13/2023	Sampling Type:	Soil
Project Name:	JALMAT 188	Sampling Condition:	Cool & Intact
Project Number:	03D2057055	Sample Received By:	Dionica Hinojos
Project Location:	MAVERICK 32.395541,-103.321776		

Sample ID: PH 07 @ 26-30' (H236592-21)

BTEX 8021B mg/kg **Analyzed By: JH**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/11/2023	ND	2.19	110	2.00	7.15	
Toluene*	<0.050	0.050	12/11/2023	ND	2.09	104	2.00	12.1	
Ethylbenzene*	<0.050	0.050	12/11/2023	ND	2.18	109	2.00	12.3	
Total Xylenes*	<0.150	0.150	12/11/2023	ND	6.46	108	6.00	12.5	
Total BTEX	<0.300	0.300	12/11/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**112**	16.0	12/11/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/11/2023	ND	190	94.9	200	3.90	
DRO >C10-C28*	<10.0	10.0	12/11/2023	ND	184	92.0	200	4.11	
EXT DRO >C28-C36	<10.0	10.0	12/11/2023	ND					

Surrogate: 1-Chlorooctane *72.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *83.5 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENSOLUM
AIMEE COLE
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	12/08/2023	Sampling Date:	12/08/2023
Reported:	12/13/2023	Sampling Type:	Soil
Project Name:	JALMAT 188	Sampling Condition:	Cool & Intact
Project Number:	03D2057055	Sample Received By:	Dionica Hinojos
Project Location:	MAVERICK 32.395541,-103.321776		

Sample ID: PH 06 @ 11-16' (H236592-22)

BTEX 8021B mg/kg **Analyzed By: JH**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/11/2023	ND	2.19	110	2.00	7.15	
Toluene*	<0.050	0.050	12/11/2023	ND	2.09	104	2.00	12.1	
Ethylbenzene*	<0.050	0.050	12/11/2023	ND	2.18	109	2.00	12.3	
Total Xylenes*	<0.150	0.150	12/11/2023	ND	6.46	108	6.00	12.5	
Total BTEX	<0.300	0.300	12/11/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *109 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	12/11/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/11/2023	ND	190	94.9	200	3.90	
DRO >C10-C28*	<10.0	10.0	12/11/2023	ND	184	92.0	200	4.11	
EXT DRO >C28-C36	<10.0	10.0	12/11/2023	ND					

Surrogate: 1-Chlorooctane *84.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *97.1 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ENSOLUM
AIMEE COLE
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220
Fax To:

Received:	12/08/2023	Sampling Date:	12/08/2023
Reported:	12/13/2023	Sampling Type:	Soil
Project Name:	JALMAT 188	Sampling Condition:	Cool & Intact
Project Number:	03D2057055	Sample Received By:	Dionica Hinojos
Project Location:	MAVERICK 32.395541,-103.321776		

Sample ID: PH 06 @ 26-30' (H236592-23)

BTEX 8021B mg/kg Analyzed By: JH

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/11/2023	ND	2.19	110	2.00	7.15	
Toluene*	<0.050	0.050	12/11/2023	ND	2.09	104	2.00	12.1	
Ethylbenzene*	<0.050	0.050	12/11/2023	ND	2.18	109	2.00	12.3	
Total Xylenes*	<0.150	0.150	12/11/2023	ND	6.46	108	6.00	12.5	
Total BTEX	<0.300	0.300	12/11/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *104 %* *71.5-134*

Chloride, SM4500Cl-B mg/kg Analyzed By: AC

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**80.0**	16.0	12/11/2023	ND	416	104	400	3.77	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/11/2023	ND	190	94.9	200	3.90	
DRO >C10-C28*	<10.0	10.0	12/11/2023	ND	184	92.0	200	4.11	
EXT DRO >C28-C36	<10.0	10.0	12/11/2023	ND					

Surrogate: 1-Chlorooctane *83.3 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *96.3 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

1 of 3

Company Name:	Ensdum LLC	**BILL TO** P.O. #:	
Project Manager:	Alree Cole	Company:	
Address:	3122 National Parks Hwy	Attn:	
City:	Carlsbad	State: NM Zip: 88220	Address:
Phone #:	720-384-7365	Fax #:	City:
Project #:	03D2057055	Project Owner: Maverick	State: Zip:
Project Name:	Jalmat 188		Phone #:
Project Location:	32.395541, -103.321776		Fax #:
Sampler Name:	Ronni Hayes		

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	BTEX	TPH	Cl-
H236592 1	PH01 @ 8-10'	G	1			X					X		12/7/23	1604	X	X	X
2	PH01 @ 22-24'													1032			
3	PH02 @ 10-12'													1056			
4	PH02 @ 22-24'													1132			
5	PH03 @ 12-14'													1336			
6	PH03 @ 26-28'													1409			
7	PH03 @ 44-46'													1427			
8	PH04 @ 8-10'													1436			
9	PH04 @ ~~22-24'~~ 24-26'													1454			
10	PH04 @ 38-40'													1523			

Relinquished By:	Date: 12-8-23	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
	Time: 16:06		All Results are emailed. Please provide Email address: acole@ensdum.com
Relinquished By:	Date:	Received By:	REMARKS:
	Time:		

Delivered By: (Circle One)	Observed Temp. °C 5.8	Sample Condition Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	CHECKED BY: (Initials)	Turnaround Time: ☒ Standard ☐ Rush
Sampler - UPS - Bus - Other:	Corrected Temp. °C #140			Thermometer ID #140 Correction Factor 0°C

Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No Observed Temp. °C ____ Corrected Temp. °C ____

FORM-006 R 3.4 07/11/23

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CARDINAL Laboratories

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF CUSTODY AND ANALYSIS REQUEST

2 of 3

Company Name:	Ensdum LLC	**BILL TO** P.O. #:	
Project Manager:	Aimee Cole	Company:	
Address:	3122 National Parks Hwy	Attn:	
City:	Carlsbad State: NM Zip: 88220	Address:	
Phone #:	720-384-7865 Fax #:	City:	
Project #:	03D2057055 Project Owner: Maverick	State: Zip:	
Project Name:	Jalmat 188	Phone #:	
Project Location:	32.395541, -103.321776	Fax #:	
Sampler Name:	Ronn Hayes		

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	BTEX	TPH	Cl-
H236992 11	BH01 @ 2-4'	G	1			X					X		12/8/23	0854	X	X	X
12	BH01 @ 14-16'													0905			
13	BH01 @ 28-30'													0930			
14	BH02 @ 0-2'													0947			
15	BH02 @ 11-16'													0953			
16	BH02 @ 28-30'													0956			
17	BH03 @ 0-2'													1048			
18	BH03 @ 11-16'													1052			
19	BH03 @ 28-30'													1056			
20	BH07 @ 11-16'													1250			

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequental damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date: 12-6-23	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
	Time: 14:06		All Results are emailed. Please provide Email address: acole@ensdum.com
Relinquished By:	Date:	Received By:	REMARKS:
	Time:		

Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C 5.8°C	Sample Condition Cool: Yes / No Intact: Yes / No	CHECKED BY: (Initials) OA	Turnaround Time: Standard ☒ Rush ☐
	Corrected Temp. °C #1140			Thermometer ID #140 Correction Factor 0°C

Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No Observed Temp. °C Corrected Temp. °C

FORM-006 R 3.4 07/11/23

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CARDINAL Laboratories

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF CUSTODY AND ANALYSIS REQUEST

3 of 3

		BILL TO	
Company Name:	Ensolum, LLC	P.O. #:	
Project Manager:	Ashee Cole	Company:	
Address:	3122 National Parks Hwy	Attn:	
City:	Carlsbad State: NM Zip: 88220	Address:	
Phone #:	720 384 7365 Fax #:	City:	
Project #:	03D2057055 Project Owner: Maverick	State: Zip:	
Project Name:	Talmat 188	Phone #:	
Project Location:	32.395541, -103.321776	Fax #:	
Sampler Name:	Ronni Hayes		

FOR LAB USE ONLY Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	BTEX	TPH	Cl-
H236592																	
21	PH07 @ 26-30'	G	1			X					X		12/8/23	1257	X	X	X
22	PH06 @ 11-16'	↓	↓			↓					↓		↓	1323	↓	↓	↓
23	PH06 @ 26-30'												↓	1327			

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:	Date: 12.6.23	Received By:	Verbal Result: ☐ Yes ☐ No Add'l Phone #:
	Time: 16:06		All Results are emailed. Please provide Email address: acole@ensolum.com
Relinquished By:	Date:	Received By:	REMARKS:
	Time:		

Delivered By: (Circle One)	Observed Temp. °C 5.8	Sample Condition Cool / Intact	CHECKED BY: (Initials)	Turnaround Time: Standard ☑ Rush ☐
Sampler - UPS - Bus - Other:	Corrected Temp. °C #140	☑ Yes ☑ Yes ☐ No ☐ No	DH	Thermometer ID #140 Correction Factor 0°C

Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No Observed Temp. °C Corrected Temp. °C

FORM-006 R 3.4 07/11/23

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APPENDIX E

Reclamation Plan

RECLAMATION PLAN

The release occurred in a reclaimed area of the well pad and as such, a reclamation requirement of 600 mg/kg chloride and 100 mg/kg TPH was applied to the top 4 feet of the reclaimed area that was impacted by the release per 19.15.29.13.D (1)) NMAC for the top 4 feet of areas that will be reclaimed following remediation. The following Reclamation Plan addresses reclamation of the disturbed area:

- The excavation will be backfilled with locally sourced caliche and topsoil to match surrounding grade. Approximately 1 foot of topsoil will be placed on top of the caliche to support vegetative growth within the disturbed area;
- Soil in the vicinity of the release includes: fine silty sand and fine sandy loam;
- The backfilled areas will be seeded utilizing a weed-free seed mix designed by the NMSLO to meet reclamation standards for this region, which will be: Sandy Loam (SL) seed mixture as described in the NMSLO *Revegetation Guidelines Handbook for Southeastern New Mexico*, dated 2018;
- The seed mixture will be distributed with either a push broadcaster seed spreader, tractor operated broadcast seed spreader, and/or drill seeding method(s);
- Application of the seed mixutre will be at a coverage of 10 pounds of seeds per acre of reclaimed pasture with distribution by a drilling method or 20 pounds of seeds per acre of reclaimed pasture with distribution by a broadcast method;
- If necessary, erosion control management will potentially include:
    - The placement of waddles in areas with a propensity for high run off rates;
    - Straw cover if high winds are anticipated to support moisture retention and limit wind from blowing seeds away before they have had time to germinate; and/or
    - Other erosional control best management practices (BMP) as necessary to support timely and healthy regrowth of vegetation in disturbed areas;
- Seeding is anticipated to be completed in the fall when temperatures and precipitation is most conducive for vegetation growth. In general, seeding should occur approximately one month after the last frost in the spring up until approximately one month prior to the first fall frost. NMSLO has recognized the optimal time to seed is between July and early September, which will be adhered to for this Site;
- Annual inspections (at a minimum), will take place at the location until revegetation is consistent with local natural vegetation density. The Site will be inspected the following spring/fall to assess the success of regrowth. If necessary, an additional application of the NMSLO-approved pure live seed mixture will be applied as well as any needed BMPs will be installed to support growth and limit erosion.

Upon completion of revegetation, a copy of the C-103 submitted to NMOCD will also be submitted to NMSLO for final inspection and release.

ENSOLUM

APPENDIX F

NMOCD Notifications

From: Enviro, OCD, EMNRD
To: Kalei Jennings
Cc: Bratcher, Michael, EMNRD; Nobui, Jennifer, EMNRD
Subject: RE: [EXTERNAL] Maverick- Sampling Notification (Week of 01/09/2023)
Date: Thursday, January 5, 2023 8:50:25 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: Wednesday, January 4, 2023 5:08 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Hadlie Green <hgreen@ensolum.com>; Josh Adams <jadams@ensolum.com>
Subject: [EXTERNAL] Maverick- Sampling Notification (Week of 01/09/2023)

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

All,

Maverick Natural Resources (Maverick) plans to complete final sampling activities at the following sites the week of January 9, 2023.

- Oxy State F-1 / NAPP2235375291
- Jalmat 188 / NAPP2235373931
- Baish B Battery / NAPP2235372941

- MCA Battery #4 / NAPP2235376218
- VGEU 30-01 / NAPP2200643457
- EVGSAU Satellite 5 / NAPP2213957732

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] Maverick- Sampling Notification (Week of 01/16/2023)
Date: Thursday, January 12, 2023 7:33:41 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: Wednesday, January 11, 2023 5:25 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Subject: [EXTERNAL] Maverick- Sampling Notification (Week of 01/16/2023)

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

All,

Maverick Natural Resources (Maverick) plans to complete final sampling activities at the following sites the week of January 16, 2023.

- Oxy State F-1 / NAPP2235375291
- Jalmat 188 / NAPP2235373931
- Jalmat 170 / NAPP2233946698
- MCA 151 / NAPP2235377174

- EVGSAU 2418-001 / NAPP2231954757
- Buckeye 43-01 / NAPP2230752440
- Leamex 018 / NAPP2234158858
-

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] Maverick- Sampling Notification (Week of 02/20/2023)
Date: Friday, February 17, 2023 7:23:46 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, February 16, 2023 11:28 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Bryce Wagoner <Bryce.Wagoner@mavresources.com>
Subject: [EXTERNAL] Maverick- Sampling Notification (Week of 02/20/2023)

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

All,

Maverick Permian, LLC (Maverick) plans to complete final sampling activities at the following sites the week of February 20, 2023.

- Cone Jalmat South Satellite Header / NAPP2301881992
- Leamex 018/ NAPP2234158858
- MCA 351/ NAPP2302035947

- Jalmat 188 / NAPP2235373931
- Baish B Battery/ NAPP2235372941

Thank you,

Kalei Jennings
Senior Scientist
817-683-2503
Ensolum, LLC

From: Wells, Shelly, EMNRD
To: Aimee Cole
Cc: Velez, Nelson, EMNRD; Bratcher, Michael, EMNRD
Subject: RE: [EXTERNAL] Maverick Permian, LLC - Sampling Notification (Week of 12/4/2023)
Date: Wednesday, November 29, 2023 1:52:15 PM
Attachments: image001.png
image002.png
image003.png
image004.png

[**EXTERNAL EMAIL**]

Good afternoon Aimee,

The OCD has received your notification. 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.

Thank you,

Shelly

Shelly Wells * Environmental Specialist-Advanced
Environmental Bureau
EMNRD-Oil Conservation Division
1220 S. St. Francis Drive|Santa Fe, NM 87505
(505)469-7520|Shelly.Wells@emnrd.nm.gov
http://www.emnrd.state.nm.us/OCD/

From: Aimee Cole <acole@ensolum.com>
Sent: Wednesday, November 29, 2023 2:41 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Subject: [EXTERNAL] Maverick Permian, LLC - Sampling Notification (Week of 12/4/2023)

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Maverick Permian, LLC plans to complete sampling activities at the following sites the week of December 4th, 2023.

- Jalmat 188 / NAPP2235373931
  - Sampling Dates: 12/6/2023 – 12/8/2023 (between 9:00 am and 3:00 pm MT)
- Elvis Injection Line / NAPP2213642290
  - Sampling Dates: 12/4/2023 – 12/8/2023 (between 9:00 am and 3:00 pm MT)

Thank you,

Aimee Cole
Senior Managing Scientist
720-384-7365
Ensolum, LLC

ENSOLUM

APPENDIX G
Form 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	NAPP2235373931
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: Maverick Permian, LLC	OGRID: 331199
Contact Name: Bryce Wagoner	Contact Telephone: 928-241-1862
Contact email: Bryce.Wagoner@mavresources.com	Incident # *(assigned by OCD)*
Contact mailing address: 1410 NW County Road Hobbs, NM 88240	

Location of Release Source

Latitude 32.395541 Longitude -103.32178

(NAD 83 in decimal degrees to 5 decimal places)

Site Name Jalmat Yates Unit #188	Site Type
Date Release Discovered December 2, 2022	API# *(if applicable)* *30-025-37580*

Unit Letter	Section	Township	Range	County
C	13	22S	35E	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 bbls	Volume Recovered (bbls) 0
☒ Produced Water	Volume Released (bbls) 5 bbls	Volume Recovered (bbls) 0
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☐ Yes ☒ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release
The release was caused by flowline due to possible inner corrosion. The release occurred off pad. The source of the release has been stopped and the impacted area has been secured. Initial response and removal of saturated soil from the release area has been completed.

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Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2235373931
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Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

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

☒ The source of the release has been stopped.
☒ The impacted area has been secured to protect human health and the environment.
☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: ____Bryce Wagoner_____ Title: ___Permian HSE Specialist II_____

Signature: _____ Date: __1/19/2022_____

email: _____Bryce.Wagoner@mavresources.com____ Telephone: ___928-241-1862_____

OCD Only

Received by: _____ Date: _____

Pooled Fluids on the Surface										
	Length (ft.)	Width (ft.)	Depth (in)	# of Boundaries *edges of pool where depth is 0 . don't count shared boundaries*	Oil-Water Ratio (%)	Pooled Area (ft^2)	Estimated Average Depth (ft.)	Pooled Volume (bbl.)	Volume of Oil in Subsurface (bbl.)	Volume of Water in Subsurface (bbl.)
Rectangle A	20.0	15.0	2.0	4.0	0.30	300.0	0.0	2.2	0.67	1.56
Rectangle B	20.0	15.0	2.0	4.0	0.30	300.0	0.0	2.2	0.67	1.56
Rectangle C	10.0	6.0	2.00	4.00	0.30	60.000	0.042	0.445	0.02	0.31
Rectangle D						0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle E						0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
							Total Volume (bbls):	**4.90**	**1.35**	**3.43**

Subsurface Fluids										
	Length (ft.)	Width (ft.)	Depth (in.)	Saturation (%) **10% in consolidated sediments after rain to 50% in sand with no precipitation*	Oil-Water Ratio (%)	Area (ft^2)	Volume (bbl.)	Estimated Volume in Subsurface (bbl.)	Volume of Oil in Subsurface (bbl.)	Volume of Water in Subsurface (bbl.)
Rectangle A	15.0	10.0	2.0	0.2	0.30	150.0	4.5	0.9	0.27	0.6
Rectangle B	10.0	5.0	2.0	0.2	0.30	50.0	1.5	0.3	0.09	0.2
Rectangle C				0.2	0.30	0.0	0.0	0.0	0.00	0.0
Rectangle D						0.0	0.0	0.0	0.00	0.0
Rectangle E						0.0	0.0	0.0	0.00	0.0
Rectangle F						0.0	0.0	0.0	0.00	0.0
Rectangle G						0.0	0.0	0.0	0.00	0.0
Rectangle H						0.0	0.0	0.0	0.00	0.0
Rectangle I						0.0	0.0	0.0	0.00	0.0
Rectangle J						0.0	0.0	0.0	0.00	0.0
							Total Volume (bbls):	**1.19**	**0.36**	**0.83**

TOTAL RELEASE VOLUME (bbls):	**6.1**

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2235373931
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	>100 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☒ Yes ☐ No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: ***Each of the following items must be included in the report.***

☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
☒ Field data
☒ Data table of soil contaminant concentration data
☒ Depth to water determination
☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
☒ Boring or excavation logs
☒ Photographs including date and GIS information
☒ Topographic/Aerial maps
☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

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State of New Mexico
Oil Conservation Division

Incident ID	NAPP2235373931
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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: Bryce Wagoner Title: Permian HSE Specialist II

Signature: Date: 1/08/2024

email: Bryce.Wagoner@mavresources.com Telephone: 928-241-1862

OCD Only

Received by: Date:

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2235373931
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: ***Each of the following items must be included in the plan.***

☒ Detailed description of proposed remediation technique
☒ Scaled sitemap with GPS coordinates showing delineation points
☒ Estimated volume of material to be remediated
☒ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
☒ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: ***Each of the following items must be confirmed as part of any request for deferral of remediation.***

☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.

☐ Extents of contamination must be fully delineated.

☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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: Bryce Wagoner Title: Permian HSE Specialist II

Signature: _____ Date: 1/08/2024

email: BryceWagoner@mavresources.com Telephone: 928-241-1862

OCD Only

Received by: _____ Date: _____

☐ Approved ☒ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: Michael Buchanan Date: 03/13/2024

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

QUESTIONS

Action 301733

QUESTIONS

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 301733
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2235373931**
Incident Name	**NAPP2235373931 JALMAT YATES UNIT #188 @ 30-025-37580**
Incident Type	**Other**
Incident Status	**Remediation Plan Received**
Incident Well	**[30-025-37580] JALMAT FIELD YATES SAND UNIT #188**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	JALMAT YATES UNIT #188
Date Release Discovered	12/02/2022
Surface Owner	Private

Incident Details	
Please answer all the questions in this group.	
Incident Type	Other
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	Cause: Corrosion | Flow Line - Production | Crude Oil | Released: 1 BBL | Recovered: 0 BBL | Lost: 1 BBL.
Produced Water Released (bbls) Details	Cause: Corrosion | Flow Line - Production | Produced Water | Released: 5 BBL | Recovered: 0 BBL | Lost: 5 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	*Not answered.*
Natural Gas Vented (Mcf) Details	*Not answered.*
Natural Gas Flared (Mcf) Details	*Not answered.*
Other Released Details	*Not answered.*
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	*Not answered.*

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QUESTIONS (continued)

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 301733
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	**No, according to supplied volumes this does not appear to be a "gas only" report.**
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	**No**
Reasons why this would be considered a submission for a notification of a major release	*Unavailable.*
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

Initial Response	
The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.	
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	*Not answered.*
Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

I hereby agree and sign off to the above statement	Name: Aimee Cole Email: acole@ensolum.com Date: 01/09/2024

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QUESTIONS (continued)

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 301733
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Site Characterization	
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 100 and 500 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between ½ and 1 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Greater than 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between ½ and 1 (mi.)
Any other fresh water well or spring	Between ½ and 1 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between ½ and 1 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Greater than 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	Yes

Remediation Plan	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	18400
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	572
GRO+DRO (EPA SW-846 Method 8015M)	572
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
On what estimated date will the remediation commence	01/09/2023
On what date will (or did) the final sampling or liner inspection occur	12/08/2023
On what date will (or was) the remediation complete(d)	12/08/2023
What is the estimated surface area (in square feet) that will be reclaimed	20000
What is the estimated volume (in cubic yards) that will be reclaimed	3000
What is the estimated surface area (in square feet) that will be remediated	20000
What is the estimated volume (in cubic yards) that will be remediated	3000
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.	
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 301733
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
(Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for **off-site** disposal	R360 Artesia LLC LANDFARM [fEEM0112340644]
OR which OCD approved well (API) will be used for **off-site** disposal	*Not answered.*
OR is the **off-site** disposal site, to be used, out-of-state	*Not answered.*
OR is the **off-site** disposal site, to be used, an NMED facility	*Not answered.*
(Ex Situ) Excavation and **on-site** remediation (i.e. On-Site Land Farms)	No
(In Situ) Soil Vapor Extraction	No
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	No
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	No
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	No
Ground Water Abatement pursuant to 19.15.30 NMAC	No
OTHER (Non-listed remedial process)	No
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Aimee Cole Email: acole@ensolum.com Date: 01/09/2024
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 301733
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Deferral Requests Only	
Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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QUESTIONS (continued)

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 301733
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	**301763**
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	**01/09/2023**
What was the (estimated) number of samples that were to be gathered	**50**
What was the sampling surface area in square feet	**20000**

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.	
Requesting a remediation closure approval with this submission	No

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

CONDITIONS

Action 301733

CONDITIONS

Operator:	OGRID:
Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	331199
	Action Number: 301733
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	The Remediation Plan is Conditionally Approved. Boreholes drilled to determine DTW are required to be open for a minimum of 72 hours. All samples must be analyzed for all constituents listed in Table I of 19.15.29.12 NMAC. Floor confirmation samples should be delineated/excavated to meet closure criteria standards for site assessment/characterization/proven depth to water determination. Sidewall samples should be delineated/excavated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release. Confirmation samples should be collected every 200 ft2. All off pad areas must meet reclamation standards set forth in the OCD Spill Rule. The work will need to occur in 90 days after the work plan has been reviewed.	3/13/2024