



September 6, 2024

New Mexico Oil Conservation Division

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

**Re: Closure Request
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 this *Closure Request* as a follow-up to the *Remediation Work Plan* (Work Plan) submitted to the New Mexico Oil Conservation Division (NMOCD) on January 8, 2024, and approved by NMOCD on March 13, 2024. This *Closure Request* documents excavation, soil sampling, and liner installation activities performed at the Jalmat Yates Unit #188 (Site) to address impacts to soil resulting from a release of crude oil and produced water. Based on the remediation activities completed as outlined in the approved *Work Plan*, Maverick is submitting this *Closure Request*, describing remediation that has occurred and requesting closure for Incident Number NAPP2235373931.

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 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 CHARACTERIZATION 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).

Maverick Permian, LLC
Remediation Work Plan
Jalmat Yates Unit #188

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 was determined to be greater than 105 feet below ground surface (bgs) based on the nearest groundwater well/soil boring data. A soil boring (DTW-01) 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)

Maverick Permian, LLC
Remediation Work Plan
Jalmat Yates Unit #188

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

Maverick Permian, LLC
Remediation Work Plan
Jalmat Yates Unit #188

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.

Based on the delineation data, a *Work Plan* was submitted to the NMOCD proposing excavation of the chloride-impacted soil to a depth of 4 feet bgs within the release area and historical pit area. Excavation was proposed to proceed laterally until sidewall samples confirmed all COC concentrations were compliant with the reclamation requirements in the top four feet. Sidewall samples were proposed to be collected at a frequency of every 200 square feet and floor samples at a frequency of every 500 square feet. Additionally, per private landowner request, a clay liner would be installed over the historical pit at a depth of 4 feet bgs within the open excavation, prior to backfilling. The proposed excavation and liner extent are presented on Figure 3. The *Work Plan* was approved by NMOCD on March 13, 2024.

EXCAVATION ACTIVITIES

During July and August 2024, Ensolum personnel were at the Site to oversee excavation of impacted soil as outlined in the approved *Work Plan*. To direct excavation activities, soil was field screened for VOCs and chloride. Excavation activities were performed utilizing a track-mounted backhoe and transport vehicles. The excavation was completed to depths ranging from 4 feet to 5 feet bgs.

Following removal of impacted soil, 5-point composite soil samples were collected every 500 square feet from the floor of the excavation and every 200 square feet from the sidewalls of the excavation. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil samples FS01 through FS41 were collected from the floor of the excavation at depths ranging from 4 feet to 5 feet bgs. Composite soil samples SW01 through SW12 were collected from the sidewalls of the excavation at depths ranging from the ground surface to 4 feet bgs. The excavation soil samples were handled and analyzed following the same procedures as described above. The excavation extent and excavation soil sample locations were mapped utilizing a handheld GPS and are presented on Figure 4.

Laboratory analytical results for the excavation floor samples, collected from the final excavation extent, indicated all COC concentrations were compliant with the Site Closure Criteria. Laboratory analytical results for the excavation sidewall samples, collected from the final excavation extent, indicated all COC concentrations were compliant with the Site Closure Criteria and reclamation requirements. Laboratory analytical results are summarized on Table 1 and the complete laboratory analytical reports are included as Appendix D.

The excavation measured approximately 20,300 square feet in areal extent. A total of approximately 3,900 cubic yards of impacted soil was removed during the excavation activities. The impacted soil was transported and properly disposed of at the R360 Disposal Facility located in Hobbs, New Mexico.

Upon completion of excavation activities and receipt of final laboratory analytical results, a geosynthetic clay liner was installed in the excavation, as requested by the private landowner. The clay liner was installed in the floor of the open excavation at a depth of 4 feet bgs to mitigate future impacts to the subsurface or surface soils. Photographic documentation was completed during the excavation and liner installation activities. A photographic log is included as Appendix B.

Maverick Permian, LLC
Remediation Work Plan
Jalmat Yates Unit #188

RECLAMATION ACTIVITIES

Once the liner installation was complete, the excavation was backfilled with locally procured caliche and topsoil. A representative 5-point composite sample was collected from the topsoil and caliche backfill material. The backfill soil samples were handled and analyzed following the same procedures as described above. Laboratory analytical results for the backfill soil samples confirmed compliance with the NMOCD requirement for the reclaimed area to contain non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg and TPH concentrations less than 100 mg/kg. Laboratory analytical results for the backfill soil samples are summarized on the attached Table 1 and the complete laboratory analytical report is included as Appendix D.

Following backfill activities, the disturbed area was contoured to match the surrounding topography and the surface was prepared for seeding. The disturbed pasture area was seeded on September 6, 2024, with the NMSLO sandy loam sites seed mix at the rate specified in pounds of pure live seed (PLS) per acre.

Common Name (Variety)	PLS/Acre
Galleta grass (Viva, VNS, So.)	2.5
Little Bluestem (Cimarron, Pastura)	2.5
Blue Grama (Hachita, Lovington)	2.0
Sideoats Grama (Vaughn, El Reno)	2.0
Sand Dropseed (VNS, Southern)	1.0

The seed mix was distributed with a drill seeder. Photographs of the reclaimed excavation area are provided in Appendix B.

The Site will be monitored for vegetation growth to ensure that reclamation activities were successful. Focus for this phase will be to prevent erosion and site degradation, and to monitor for and treat invasive and noxious weed species.

- Erosion control of the newly reclaimed areas includes prompt revegetation and contouring of the surface to prevent concentrated surface water flow.
- Annual inspections will take place at the location to assess revegetation progress until vegetation is consistent with local natural vegetation density.
- If necessary, an additional application of the BLM seed mix will be applied.
- Noxious and invasive weeds will be identified and treated by licensed contracted herbicide applicator or mechanically removed.

A *Revegetation Report* will be submitted to the NMOCD once vegetation growth in the reclaimed pasture area has uniform vegetative cover that reflects a life-form ratio of plus or minus fifty percent of pre-disturbance levels and a total percent plant cover of at least seventy percent of pre-disturbance levels, excluding noxious weeds, per NMAC 19.15.29.13 D.(3).

CLOSURE REQUEST

As outlined in the approved *Work Plan*, excavation and liner installation activities were conducted at the Site to address the December 2, 2022, release of crude oil and produced water. Laboratory analytical results for the excavation soil samples, collected from the final excavation extent, indicated all COC concentrations were compliant with the Site Closure Criteria and reclamation requirements, where applicable. Additionally, the release was laterally and vertically delineated to below the most stringent

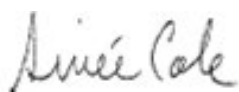
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Remediation Work Plan
Jalmat Yates Unit #188

Table I Closure Criteria. Based on confirmed depth to groundwater greater than 100 feet bgs at the Site, and excavation and soil sampling activities completed as outlined in the approved *Work Plan*, no further remediation is required.

Excavation of impacted soil has mitigated impacts at this Site. Maverick believes the remedial actions completed are protective of human health, the environment, and groundwater and respectfully requests closure for Incident NAPP2235373931.

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

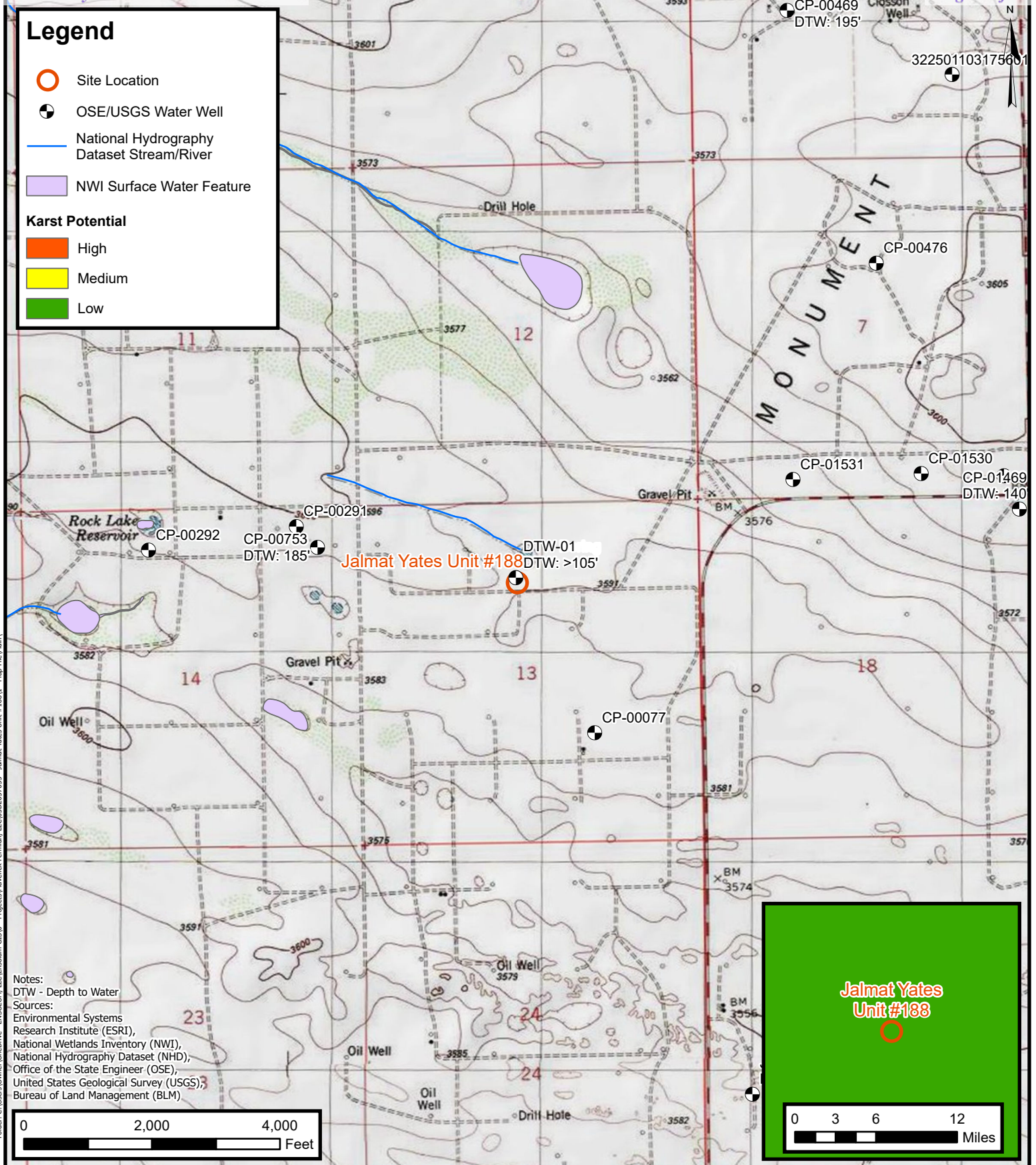
cc: Bryce Wagoner, Maverick Permian, LLC
New Mexico State Land Office
Merchant Livestock Company

Appendices:

Figure 1	Site Receptor Map
Figure 2	Delineation Soil Sample Locations
Figure 3	Proposed Excavation and Liner Extent
Figure 4	Excavation 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	NMOCD Correspondence



FIGURES



Site Receptor Map

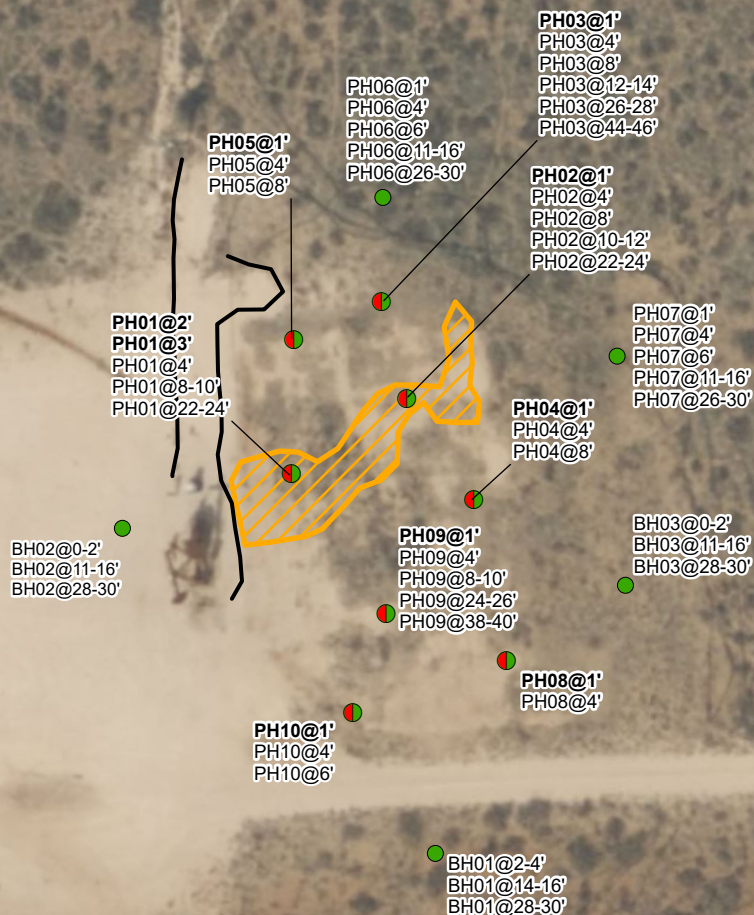
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Jalmat Yates Unit #188
Incident Number: NAPP2235373931
Unit C, Sec 13, T22S, R35E
Lea County, New Mexico

FIGURE

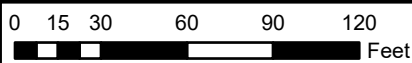
1

Legend

- Delineation Soil Sample in Compliance with Closure Criteria
- Delineation Soil Sample with Concentrations Initially Exceeding Closure Criteria
- Flowline
- Release Extent

**Notes:**

Sample ID @ Depth Below Ground Surface.
 Samples in bold indicate sample exceeded applicable closure criteria.






Sources: Environmental Systems Research Institute (ESRI)

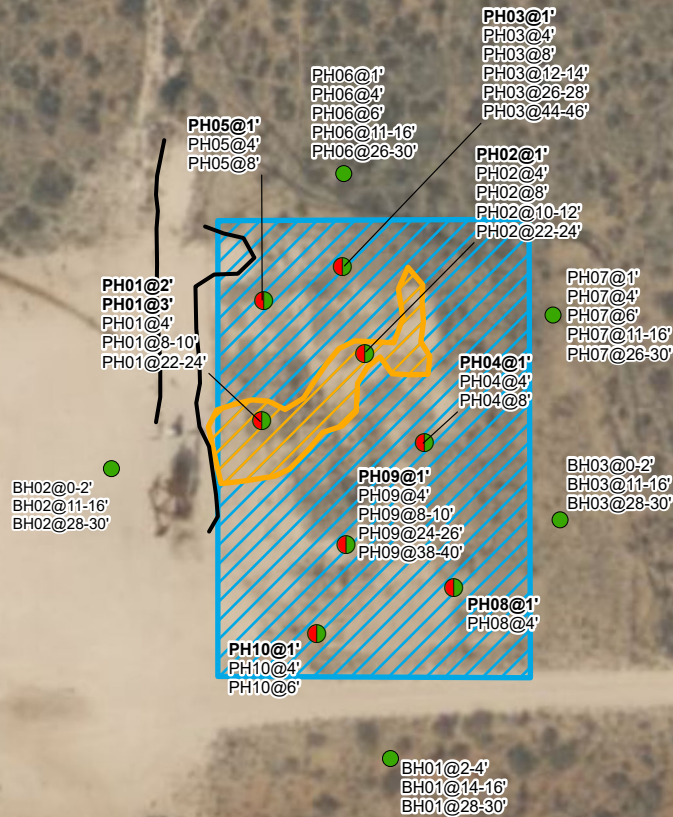
**Delineation Soil Sample Locations**

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

FIGURE**2**

Legend

- Delineation Soil Sample in Compliance with Closure Criteria
- Delineation Soil Sample with Concentrations Previously Exceeding Closure Criteria
-  Flowline
-  Release Extent
-  Proposed Excavation and Liner Extent



0 75 150
Feet

Sources: Environmental Systems Research Institute (ESRI)

Proposed Excavation and Liner Extent

Maverick Permian, LLC
Jalmat Yates Unit #188
Incident Number: NAPP2235373931
Unit C, Sec 13, T22S, R35E, Lea County, New Mexico
NA, New Mexico, 83815

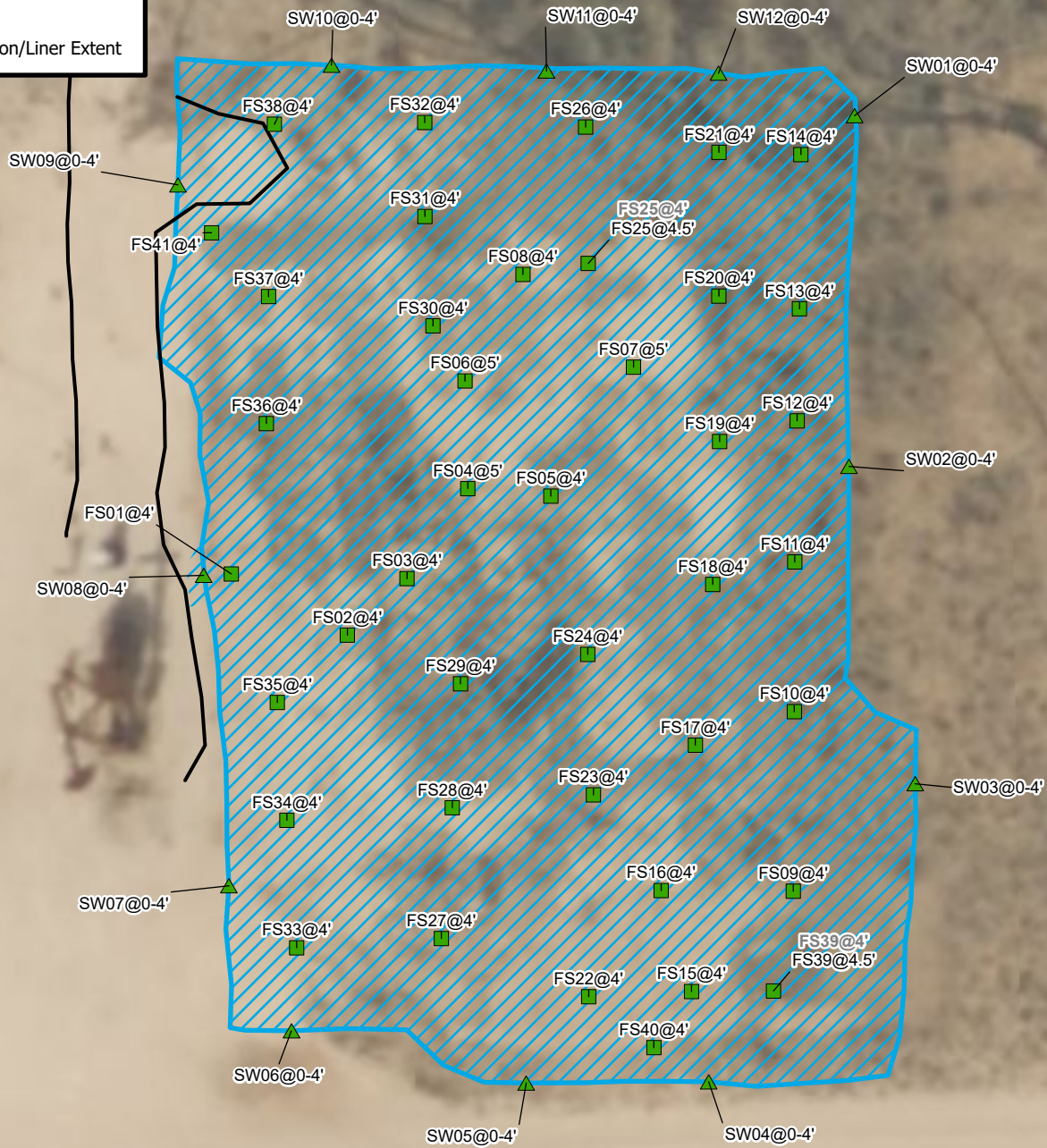
FIGURE

3



Legend

- Confirmation Floor Sample in Compliance with Closure Criteria
- ▲ Confirmation Sidewall Sample in Compliance with Closure Criteria
- Flowline
- ▨ Excavation/Liner Extent



Sources: Environmental Systems Research Institute (ESRI)

**Excavation Soil Sample Locations**

Maverick Permian, LLC
Jalmat Yates Unit #188
Incident Number: NAPP2235373931
Unit C, Sec 13, T22S, R35E, Lea County, New Mexico
NA, New Mexico, 83815

FIGURE**4**



TABLES



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



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
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



TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
 Jalmat Yates Unit #188
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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
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
Excavation Floor Soil Samples										
FS01	7/29/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	2,320
FS02	7/29/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	1,470
FS03	7/29/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	784
FS04	7/29/2024	5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	3,280
FS05	7/29/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	3,120
FS06	7/29/2024	5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	7,700
FS07	7/29/2024	5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	3,520
FS08	7/29/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	5,600
FS09	8/7/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	3,840
FS10	8/7/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	6,400



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
FS11	8/7/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	14,200
FS12	8/7/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	11,400
FS13	8/7/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	5,460
FS14	8/7/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	304
FS15	8/7/2024	4	<0.050	<0.300	<10.0	149.0	22.6	149.0	171.6	16,400
FS16	8/7/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	3,640
FS17	8/7/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	6,660
FS18	8/7/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	14,600
FS19	8/7/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	14,200
FS20	8/7/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	17,200
FS21	8/7/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	704
FS22	8/7/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	7,600
FS23	8/7/2024	4	<0.050	<0.300	<10.0	62.0	<10.0	62.0	62.0	2,680
FS24	8/7/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	512
FS25	8/7/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	24,000
FS25	8/15/2024	4.5	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	5,680
FS26	8/7/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	2,800
FS27	8/7/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	1,730
FS28	8/7/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	2,320
FS29	8/7/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	2,530
FS30	8/7/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	10,400



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
FS31	8/7/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	6,260
FS32	8/7/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	2,640
FS33	8/7/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	224
FS34	8/7/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	1,120
FS35	8/7/2024	4	<0.050	<0.300	12.0	<10.0	<10.0	12.0	12.0	3,680
FS36	8/7/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	6,320
FS37	8/7/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	5,520
FS38	8/7/2024	4	<0.050	<0.300	13.5	<10.0	<10.0	13.5	13.5	2,440
FS39	8/7/2024	4	<0.050	1.00	38.1	523	124	561	685	20,400
FS39	8/15/2024	4.5	<0.050	<0.300	<10.0	22.9	<10.0	22.9	22.9	6,560
FS40	8/15/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	5,440
FS41	8/15/2024	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	8,240
Excavation Sidewall Soil Samples										
SW01*	8/7/2024	0 - 4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	192
SW02*	8/12/2024	0 - 4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	272
SW03*	8/15/2024	0 - 4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0
SW04*	8/15/2024	0 - 4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	192
SW05*	8/15/2024	0 - 4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	304
SW06*	8/12/2024	0 - 4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	240
SW07*	8/7/2024	0 - 4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	5,720
SW07*	8/15/2024	0 - 4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0



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
SW08*	8/12/2024	0 - 4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	144
SW09*	8/15/2024	0 - 4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	320
SW10*	8/7/2024	0 - 4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	480
SW11*	8/12/2024	0 - 4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	160
SW12*	8/7/2024	0 - 4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	128
Backfill Soil Samples										
Topsoil	8/22/2024	-	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
Caliche	8/22/2024	-	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	112

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.



APPENDIX A

Referenced Well Records

								Sample Name: DTW-01		Date: 12/7/23	
LITHOLOGIC / SOIL SAMPLING LOG								Site Name: Jalmat 188			
								Incident Number: NAPP2235373931			
								Job Number: 03D2057055			
Coordinates: 32.395757, -103.321849								Logged By: Ronni Hayes		Method: Air rotary	
Hole Diameter: 6"								Total Depth: 105'			
Comments: Soil boring was advanced to a total depth of 105' bgs. No water was observed in the soil boring after 72 hours.											
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 Emilio, NM 88231

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

a. 1/4 1/4 NE 1/4 NE 1/4 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 ☒ shallow ☐ artesian. Depth to water upon completion of well 185 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

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

Section 3. RECORD OF CASING

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

Section 4. RECORD OF MUDDING AND CEMENTING

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

Section 5. PLUGGING RECORD

Plugging Contractor _____
 Address _____
 Plugging Method _____
 Date Well Plugged _____
 Plugging approved by: _____

State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
<u>1</u>			
<u>2</u>			
<u>3</u>			
<u>4</u>			

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

[illegible]

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STATE ENGINEER OFFICE
ROSWELL, NEW MEXICO

Driller

Released to Imaging: 9/12/2024 1:52:49 PM



APPENDIX B

Photographic Log

**Photographic Log**

Maverick Permian, LLC

Jalmat Yates Unit #188

NAPP2235373931



Photograph 1 Date: 12-19-2022
Description: Soil staining during initial site visit
View: North



Photograph 2 Date: 1-9-2023
Description: Delineation activities-backhoe
View: East



Photograph 3 Date: 12-7-2023
Description: Delineation activities-air rotary
View: East



Photograph 4 Date: 12-8-2023
Description: Delineation activities-air rotary
View: South



Photographic Log

Maverick Permian, LLC

Jalmat Yates Unit #188

NAPP2235373931



Photograph 5

Date: 08-02-2024

Description: Excavation activities

View: South



Photograph 6

Date: 08-02-2024

Description: Excavation activities

View: Southwest



Photograph 7

Date: 08-02-2024

Description: Excavation activities

View: West



Photograph 8

Date: 08-22-2024

Description: Clay liner installation

View: West



Photographic Log

Maverick Permian, LLC

Jalmat Yates Unit #188

NAPP2235373931



Photograph 9

Date: 08-22-2024

Description: Clay liner installation

View: Northeast



Photograph 10

Date: 09-06-2024

Description: Backfilled excavation

View: Northeast



Photograph 11

Date: 09-06-2024

Description: Backfilled excavation and seeding activities

View: Northwest



Photograph 12

Date: 09-06-2024


Description: Backfilled excavation and seeding activities


View: Northeast





APPENDIX C


Lithologic Soil Sampling Logs


								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			


								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			
Dry	1,590	1.4	-	PH02	1	0	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			
Dry	1,422	1.3	-	PH03	1	0	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			


<div></div>								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											


								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			


								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			


								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.			

								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					
Dry	2872	0.3	N	PH09	1	0	SP-SM	(1-4') SAND, poorly graded sand with silt, very fine					
Dry	3,533	0.3	N			1		to fine grained, medium to dark brown, strong					
Dry	8013	4.9	N			2		odor 2-4' bgs					
Damp	15,876	415	N	PH09	4	3	SAA	Visible indication of a historical pit at 4' bgs.					
Dry	7,829	-	N			4							
						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			

								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	BH01	2-4	0-2	SM	SAND, silty sand with gravel, fine grained, medium brown, no odor, dry			
Dry	156	--	N			SAA					
Dry	<156	--	N			CCHE	CALICHE, sandy caliche, fine to coarse grained, med brown, drv, no odor				
Dry	<156	--	N			SAA	SAA				
Dry	<156	--	N	BH01	14-16	8-10	SM	SAND, silty sand, very fine to medium grained, med to dark brown, no odor, dry			
Dry	<156	--	N			SAA	SAA				
Dry	<156	--	N			SAA	SAA				
Dry	<156	--	N			SM	SAND, silty sand with gravel, fine to medium grained, reddish tan, no odor, dry				
Dry	<156	--	N	BH01	28-30	16-18	SM	SAND, silty sand, very fine to medium grained, no odor, dry, reddish brown			
Dry	<156	--	N			SAA	SAA				
Dry	<156	--	N			SAA	SAA				
Dry	<156	--	N			SAA	SAA				
Dry	<156	--	N	BH01	28-30	22-24	SAA	SAA			
Dry	<156	--	N			SM	SAND, silty sand, very fine, no odor, dry, medium grained				
Dry	<156	--	N			SAA	SAA				
Dry	<156	--	N			SM	SAND, silty sand, very fine to medium grained, no odor, drv, tan				
TD at 30' bgs											

								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			



APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation



Environment Testing

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

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

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

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Surrogate Summary	18
QC Sample Results	20
QC Association Summary	25
Lab Chronicle	29
Certification Summary	34
Method Summary	35
Sample Summary	36
Chain of Custody	37
Receipt Checklists	39

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

Definitions/Glossary

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

Job ID: 890-3814-1
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
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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

Lab Sample ID: 890-3814-1

Date Collected: 01/09/23 11:00

Matrix: Solid

Date Received: 01/10/23 09:05

Sample Depth: 2

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
Oil 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

Lab Sample ID: 890-3814-2

Date Collected: 01/09/23 11:05

Matrix: Solid

Date Received: 01/10/23 09:05

Sample Depth: 3

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

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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: PH01

Lab Sample ID: 890-3814-2

Date Collected: 01/09/23 11:05

Matrix: Solid

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
Oil 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

Date Collected: 01/09/23 11:10

Matrix: Solid

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

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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: PH01

Lab Sample ID: 890-3814-3

Date Collected: 01/09/23 11:10

Matrix: Solid

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
Oil 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

Date Collected: 01/09/23 12:30

Matrix: Solid

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
Oil 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

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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: PH02

Lab Sample ID: 890-3814-4

Date Collected: 01/09/23 12:30

Matrix: Solid

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

Date Collected: 01/09/23 12:35

Matrix: Solid

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	
Oil 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

Date Collected: 01/09/23 12:40

Matrix: Solid

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
Oil 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

Date Collected: 01/09/23 13:35

Matrix: Solid

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

Date Collected: 01/09/23 13:35

Matrix: Solid

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
Oil 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

Date Collected: 01/09/23 13:40

Matrix: Solid

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

Date Collected: 01/09/23 13:40

Matrix: Solid

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
Oil 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

Date Collected: 01/09/23 13:45

Matrix: Solid

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
Oil 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

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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
Date Collected: 01/09/23 13:45
Date Received: 01/10/23 09:05
Sample Depth: 8

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

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
Date Collected: 01/09/23 13:50
Date Received: 01/10/23 09:05
Sample Depth: 1

Lab Sample ID: 890-3814-10
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 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
Oil 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

Lab Sample ID: 890-3814-11

Date Collected: 01/09/23 13:55

Matrix: Solid

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 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
Oil 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

Lab Sample ID: 890-3814-12

Date Collected: 01/09/23 14:00

Matrix: Solid

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 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

Date Collected: 01/09/23 14:00

Matrix: Solid

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
Oil 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

Date Collected: 01/09/23 14:30

Matrix: Solid

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

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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: PH05

Lab Sample ID: 890-3814-13

Date Collected: 01/09/23 14:30

Matrix: Solid

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
Oil 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

Date Collected: 01/09/23 14:35

Matrix: Solid

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
Oil 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

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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: PH05

Lab Sample ID: 890-3814-14

Date Collected: 01/09/23 14:35

Matrix: Solid

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

Date Collected: 01/09/23 14:40

Matrix: Solid

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	
Oil 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

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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)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (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					Client Sample ID: Method Blank				
Matrix: Solid					Prep Type: Total/NA				
Analysis Batch: 43877					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						Client Sample ID: Lab Control Sample			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 43877						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						Client Sample ID: Lab Control Sample Dup				
Matrix: Solid						Prep Type: Total/NA				
Analysis Batch: 43877						Prep Batch: 43747				
Analyte		Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	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						Client Sample ID: PH01			
Matrix: Solid						Prep Type: Total/NA			
Analysis Batch: 43877						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

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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
Oil 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

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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

	LCS	LCS	
Surrogate	%Recovery	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

	LCSD	LCSD	
Surrogate	%Recovery	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		

	MS	MS	
Surrogate	%Recovery	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

	MSD	MSD	
Surrogate	%Recovery	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								

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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	

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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

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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	

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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

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Lab Chronicle

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

Job ID: 890-3814-1
SDG: Lea

Client Sample ID: PH01

Lab Sample ID: 890-3814-1

Date Collected: 01/09/23 11:00

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			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

Lab Sample ID: 890-3814-2

Date Collected: 01/09/23 11:05

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 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

Lab Sample ID: 890-3814-3

Date Collected: 01/09/23 11:10

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 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

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	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

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Lab Chronicle

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

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

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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

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Lab Chronicle

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

Job ID: 890-3814-1
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

Eurofins Carlsbad

Lab Chronicle

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

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
Project/Site: JALMAT YATES UNIT #188

Job ID: 890-3814-1
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

- 1
- 2
- 3
- 4
- 5
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Method Summary

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

Job ID: 890-3814-1
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

- 1
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- 14



Environment Testing
Xenco

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

Chain of Custody

Work Order No.:

www.xenco.com Page 1 of 2

Project Manager:	Hadlie Green	Bill to: (if different)	Kalet 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:	432-557-8885	Email:	kiennings@ensolum.com, hgreen@ensolum.com

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

Project Name:		Jalmat Yates Unit #188		Turn Around		Pres. Code		ANALYSIS REQUEST										Preservative Codes	
Project Number:		03D2057055		<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush												None: NO		DI Water: H ₂ O	
Project Location:		Lea		Due Date:												Cool: Cool		MeOH: Me	
Sampler's Name:		Peter Van Patten		TAT starts the day received by the lab. if received by 4:30pm												HCL: HC		HNO ₃ : HN	
PO #:																H ₂ SO ₄ : H ₂		NaOH: Na	
SAMPLE RECEIPT		Temp Blank:		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Thermometer ID:		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Wet Ice:		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				H ₃ PO ₄ : HP			
Samples Received Intact:		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Correction Factor:		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No										NaHSO ₄ : NABIS			
Cooler Custody Seals:		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Temperature Reading:		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No										Na ₂ S ₂ O ₃ : NASO ₃			
Sample Custody Seals:		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Corrected Temperature:		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No										Zn Acetate+NaOH: Zn			
Total Containers:																NaOH+Ascorbic Acid: SAPC			

[illegible]

Circle Method(s) and Metal(s) to be analyzed	200.7 / 6010	200.8 / 6020:	
Total	200.7 / 6010	200.8 / 6020:	
8RCRA	13PPM	Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn
TCLP / SPLP 6010: 8RCRA	Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U		Hg: 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 <i>Pet Lin Patton</i>	<i>Dee Gup</i>	1-16-93 905	2		
3			4		
5			6		



Environment Testing
Xenco

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

Chain of Custody

Work Order No.:

www.xenco.com Page 2 of 2

Project Manager:	Hadlie Green	Bill to: (if different)	Katei Jennings
Company Name:	Ensolum, LLC	Company Name:	Ensolum, LLC
Address:	601 N Marientfeld St Suite 400	Address:	601 N Marientfeld St Suite 400
City, State ZIP:	Midland, TX 79701	City, State ZIP:	Midland, TX 79701
Phone:	432-557-8895	Email:	kjennings@ensolum.com, hgaren@ensolum.com

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

Project Name:						Jalmat Yates Unit #188								Turn Around																									
Project Number:						03D2057055								<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush			Pres. Code																						
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		Thermometer ID:		Wet Ice:		Yes		No																					
Samples Received Intact:						Yes		No				Correction Factor:																											
Cooler Custody Seals:						Yes		No		N/A																													
Sample Custody Seals:						Yes		No		N/A		Temperature Reading:																											
Total Containers:												Corrected Temperature:																											
																				ANALYSIS REQUEST										Preservative Codes									
RIDES (EPA : 300.0)																														None: NO DI Water: H ₂ O									
015)																														Cool: Cool MeOH: Me									
8021)																														HCL: HC HNO ₃ : HN									
																														H ₂ SO ₄ : H ₂ NaOH: Na									
																														H ₃ PO ₄ : HP									
																														NaHSO ₄ : NABIS									
																														Na ₂ S ₂ O ₃ : NASO ₃									
																														Zn Acetate+NaOH: Zn									
																														NaOH +Ascorbic Acid: SAPC									

[illegible]

Total	200.7 / 6010	200.8 / 6020:
Circle Method(s) and Metal(s)	to be analyzed	
	8RCRA TCLP / SPLP 6010:	AI Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$95.00 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 Rite	CR	2			
3		4			
5		6			

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

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 Source: Eurofins Midland

List Number: 2

List Creation: 01/11/23 11:43 AM

Creator: Teel, Brianna

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	



Environment Testing

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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

Eurofins Carlsbad**Job Notes**

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

Authorization

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

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

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Surrogate Summary	11
QC Sample Results	12
QC Association Summary	18
Lab Chronicle	21
Certification Summary	23
Method Summary	24
Sample Summary	25
Chain of Custody	26
Receipt Checklists	27

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

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

Case Narrative

Client: Ensolum
Project/Site: 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 not re-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

Lab Sample ID: 890-4182-1

Date Collected: 02/23/23 12:20

Matrix: Solid

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	<0.00200	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
Oil 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

Lab Sample ID: 890-4182-2

Date Collected: 02/23/23 12:35

Matrix: Solid

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	<0.00200	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

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Client Sample Results

Client: Ensolum
Project/Site: Jalmat 188 - Maverick

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

Client Sample ID: PH06D

Lab Sample ID: 890-4182-2

Date Collected: 02/23/23 12:35

Matrix: Solid

Date Received: 02/23/23 14:52

Sample Depth: 4'

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
Oil 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

Lab Sample ID: 890-4182-3

Date Collected: 02/23/23 12:45

Matrix: Solid

Date Received: 02/23/23 14:52

Sample Depth: 6'

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

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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

Date Collected: 02/23/23 12:45

Matrix: Solid

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	
Oil 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

Date Collected: 02/23/23 13:00

Matrix: Solid

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	
Oil 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	

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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

Date Collected: 02/23/23 13:00

Matrix: Solid

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

Date Collected: 02/23/23 13:15

Matrix: Solid

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
Oil 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

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Client Sample Results

Client: Ensolum
Project/Site: Jalmat 188 - Maverick

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

Client Sample ID: PH07F

Lab Sample ID: 890-4182-6

Date Collected: 02/23/23 13:25

Matrix: Solid

Date Received: 02/23/23 14:52

Sample Depth: 6'

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
Oil 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						Client Sample ID: Method Blank		
Matrix: Solid						Prep Type: Total/NA		
Analysis Batch: 47785						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						Client Sample ID: Method Blank		
Matrix: Solid						Prep Type: Total/NA		
Analysis Batch: 47785						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						Client Sample ID: Lab Control Sample		
Matrix: Solid						Prep Type: Total/NA		
Analysis Batch: 47785						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						Client Sample ID: Lab Control Sample Dup				
Matrix: Solid						Prep Type: Total/NA				
Analysis Batch: 47785						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	

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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		RPD
							Limits		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		Limits
	%Recovery	Qualifier	
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		Limits
	%Recovery	Qualifier	
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		RPD
									Limits		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		Limits
	%Recovery	Qualifier	
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		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
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	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/27/23 14:00	02/28/23 08:39	1
Oil 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	MB	Limits			Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier						
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	LCS	Unit	D	%Rec	%Rec	
		Result	Qualifier				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	LCS				Limits	
		%Recovery	Qualifier					
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	LCSD	Unit	D	%Rec	%Rec	RPD	Limit
		Result	Qualifier				Limits		
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	LCSD				Limits		
		%Recovery	Qualifier						
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	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec	
	Result	Qualifier		Result	Qualifier				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	MS	Limits						Limits	
	%Recovery	Qualifier								
1-Chlorooctane	101		70 - 130						70 - 130	
o-Terphenyl	97		70 - 130						70 - 130	

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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: 890-4182-1 MSD

Matrix: Solid

Analysis Batch: 47385

Client Sample ID: PH06A

Prep Type: Total/NA

Prep Batch: 47331

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	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

Matrix: Solid

Analysis Batch: 47599

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 47356

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
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
Oil 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	MB	Limits			Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier						
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

Matrix: Solid

Analysis Batch: 47599

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 47356

	Spike	LCS Result	LCS Qualifier	D	%Rec Limits
Analyte	Added				
Gasoline Range Organics (GRO)-C6-C10	1000	1047			105 70 - 130
Diesel Range Organics (Over C10-C28)	1000	1126			113 70 - 130
	LCS %Recovery	LCS Qualifier	Limits		
Surrogate					
1-Chlorooctane	109		70 - 130		
o-Terphenyl	108		70 - 130		

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec	RPD	RPD
							Limits		Limits
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

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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: LCSD 880-47356/3-A

Matrix: Solid

Analysis Batch: 47599

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 47356

	LCSD	LCSD	
Surrogate	%Recovery	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

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%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	%Recovery	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

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	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	%Recovery	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

	MB	MB								
Analyte	Result	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

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

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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				Client Sample ID: Lab Control Sample Dup							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 47423											
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				Client Sample ID: PH07F							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 47423											
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				Client Sample ID: PH07F							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 47423											
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	

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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	

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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

Lab Sample ID: 890-4182-1

Date Collected: 02/23/23 12:20

Matrix: Solid

Date Received: 02/23/23 14:52

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

Lab Sample ID: 890-4182-2

Date Collected: 02/23/23 12:35

Matrix: Solid

Date Received: 02/23/23 14:52

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

Lab Sample ID: 890-4182-3

Date Collected: 02/23/23 12:45

Matrix: Solid

Date Received: 02/23/23 14:52

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

Lab Sample ID: 890-4182-4

Date Collected: 02/23/23 13:00

Matrix: Solid

Date Received: 02/23/23 14:52

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

Eurofins Carlsbad

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

1
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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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Environment Testing
Xenco

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

Chain of Custody

Work Order No: _____

www.xenco.com Page _____ of _____

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

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

Project Name:	ALUMAT 18811000000000000000	Turn Around	<input type="checkbox"/> Routine <input type="checkbox"/> Rush	Prk. Code	
Project Number:	03D057055	Due Date:			
Project Location:	82395541, 108, 82, 178	TAT starts the day received by the lab, if received by 4:30pm			
Sampler's Name:	JULIANA PACHECO				
PO #:					
SAMPLE RECEIPT					
Samples Received Intact:	Yes	No	Temp Blank:	Yes	No
Cooler Custody Seals:	Yes	No	Thermometer ID:		
Sample Custody Seals:	Yes	No	Correction Factor:		
Total Containers:			Temperature Reading:		
			Corrected Temperature:		
Parameters					
CHLORIDES (EPA: 300.0)					
TPH (8015)					
BTEX (8021)					
ANALYSIS REQUEST					
PRESERVATIVE CODES					
None: NO					
Cool: Cool					
HCL: HC					
H ₂ SO ₄ : H ₂					
H ₃ PO ₄ : HP					
NaHSO ₄ : NABIS					
Na ₂ S ₂ O ₃ : NaSO ₃					
Zn Acetate+NaOH: Zn					
NaOH+Ascorbic Acid: SACP					
Sample Comments					



890-4182 Chain of Custody

1007 1053 1393

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)	Preservative Codes	Sample Comments
PH06A	S	02-23-73	1220	1	A	1					
PH06D			1235	4		1					
PH06F			1245	6		1					
PH07A			1300	6		1					
PH07D			1315	4		1					
PH07E			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 Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed	TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	Hg: 1631 / 245.1 / 7470 / 7471		

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		02/23/73 1450			

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4182-1

SDG Number: 03D2057055

Login Number: 4182

List Source: Eurofins Carlsbad

List Number: 1

Creator: Stutzman, Amanda

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	



Environment Testing

- 1
- 2
- 3
- 4
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- 14

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



Eurofins Carlsbad**Job Notes**

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

Authorization

Generated
3/9/2023 1:53:35 PM

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

Cover Page	1
Table of Contents	3
Definitions/Glossary	4
Case Narrative	5
Client Sample Results	6
Surrogate Summary	12
QC Sample Results	13
QC Association Summary	17
Lab Chronicle	20
Certification Summary	23
Method Summary	24
Sample Summary	25
Chain of Custody	26
Receipt Checklists	27

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

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

Case Narrative

Client: Ensolum
Project/Site: Jalmat 188

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

Job ID: 890-4195-1

Laboratory: Eurofins Carlsbad

Narrative	Job Narrative 890-4195-1
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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

Date Collected: 02/24/23 09:15

Matrix: Solid

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
Oil 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

Date Collected: 02/24/23 09:30

Matrix: Solid

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

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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

Date Collected: 02/24/23 09:30

Matrix: Solid

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
Oil 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

Date Collected: 02/24/23 10:00

Matrix: Solid

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

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Client Sample Results

Client: Ensolum
Project/Site: Jalmat 188

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

Client Sample ID: PH09A
Date Collected: 02/24/23 10:00
Date Received: 02/24/23 12:40
Sample Depth: 1

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

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		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	
Oil 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
Date Collected: 02/24/23 10:15
Date Received: 02/24/23 12:40
Sample Depth: 4

Lab Sample ID: 890-4195-4
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 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	
Oil 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	

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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

Date Collected: 02/24/23 10:15

Matrix: Solid

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

Date Collected: 02/24/23 10:30

Matrix: Solid

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
Oil 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

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Client Sample Results

Client: Ensolum
Project/Site: Jalmat 188

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

Client Sample ID: PH10D

Lab Sample ID: 890-4195-6

Date Collected: 02/24/23 10:50

Matrix: Solid

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	<0.00200	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
Oil 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

Lab Sample ID: 890-4195-7

Date Collected: 02/24/23 11:00

Matrix: Solid

Date Received: 02/24/23 12:40

Sample Depth: 6

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

Lab Sample ID: 890-4195-7

Date Collected: 02/24/23 11:00

Matrix: Solid

Date Received: 02/24/23 12:40

Sample Depth: 6

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
Oil 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				Client Sample ID: Method Blank				
Matrix: Solid				Prep Type: Total/NA				
Analysis Batch: 48098				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				Client Sample ID: Lab Control Sample				
Matrix: Solid				Prep Type: Total/NA				
Analysis Batch: 48098				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					Client Sample ID: Lab Control Sample Dup						
Matrix: Solid					Prep Type: Total/NA						
Analysis Batch: 48098					Prep Batch: 48104						
Analyte			Spike	LCSD	LCSD	Unit	D	%Rec	%Rec	RPD	RPD
			Added	Result	Qualifier			Limits	Limits	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
			LCSD	LCSD							
Surrogate		%Recovery	Qualifier	Limits							
4-Bromofluorobenzene (Surr)		95		70 - 130							
1,4-Difluorobenzene (Surr)		91		70 - 130							

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				
	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%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		

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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
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
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
Matrix: Solid
Analysis Batch: 48098

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
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
Matrix: Solid
Analysis Batch: 47505

Client Sample ID: Method Blank
Prep Type: Total/NA
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
Oil 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					
1-Chlorooctane	131	S1+	70 - 130					
o-Terphenyl	127		70 - 130					

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

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

	LCS	LCS	
Surrogate	%Recovery	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

	LCSD	LCSD	
Surrogate	%Recovery	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

	MS	MS	
Surrogate	%Recovery	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

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

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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	

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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

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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

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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

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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

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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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Environment Testing
Xenco

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

Chain of Custody

Work Order No: _____


www.xenco.com

Page _____

of _____

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

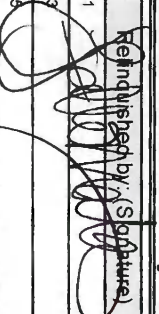
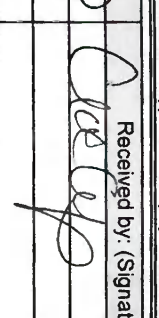
Program: <input type="checkbox"/> UST/ST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>	
State of Project:	
Reporting: Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST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

Project Name:	Project 188	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	Pres. Code	
Project Number:	18075-705	Due Date:			
Project Location:	32.345541-108.3502	TAT starts the day received by the lab, if received by 4:30pm			
Sample's Name:	Juliana F. Adams				
PO #:					
SAMPLE RECEIPT		Temp Blank: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Wet Ice: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Parameters	
Samples Received Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Thermometer ID:	1100003		
Cooler Custody Seals:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Correction Factor:	1.0-0.0		
Sample Custody Seals:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Temperature Reading:	2.0		
Total Containers:		Corrected Temperature:	2.0		
		CHLORIDES (EPA: 300.0)			
		TPH (8015)			
		BTEX (8021)			
					
		800-4195 Chain of Custody			
		ANALYSIS REQUEST			
		Preservative Codes			
		None: NO	DI Water: H ₂ O		
		Cool: Cool	MeOH: Me		
		HCL: HC	HNO ₃ : HN		
		H ₂ SO ₄ : H ₂	NaOH: Na		
		H ₃ PO ₄ : HP			
		NaHSO ₄ : NABIS			
		Na ₂ S ₂ O ₃ : NaSO ₃			
		Zn Acetate+NaOH: Zn			
		NaOH+Ascorbic Acid: SAPC			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab Comp	# of Cont	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)	ANALYSIS REQUEST	Preservative Codes	Sample Comments
PHD8A	S	02-24-23	0915	1'	G	1						NAAP 223537894
PHD8D	S		0930	4'		1						
PH09A	S		1000	1'		1						
PH09D	S		1015	4'		1						
PH10A	S		1030	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 SiO₂ Na Sr Ti Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631 / 245.1 / 7470 / 7471

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		02-23-23 10:40			

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 Source: Eurofins Midland

List Number: 2

List Creation: 02/28/23 11:19 AM

Creator: Teel, Brianna

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	



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 accredited 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,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



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

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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
 Reported: 12/13/2023
 Project Name: JALMAT 188
 Project Number: 03D2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 12/07/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Dionica Hinojos

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

BTX 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 BTX	<0.300	0.300	12/11/2023	ND					

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

Chloride, SM4500CI-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

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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
 Reported: 12/13/2023
 Project Name: JALMAT 188
 Project Number: 03D2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 12/07/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Dionica Hinojos

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, SM4500CI-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
 Reported: 12/13/2023
 Project Name: JALMAT 188
 Project Number: 03D2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 12/07/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Dionica Hinojos

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, SM4500CI-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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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
 Reported: 12/13/2023
 Project Name: JALMAT 188
 Project Number: 03D2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 12/07/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Dionica Hinojos

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



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Analytical Results For:

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

Received: 12/08/2023
 Reported: 12/13/2023
 Project Name: JALMAT 188
 Project Number: 03D2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 12/07/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Dionica Hinojos

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



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Analytical Results For:

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

Received: 12/08/2023
 Reported: 12/13/2023
 Project Name: JALMAT 188
 Project Number: 03D2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 12/07/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Dionica Hinojos

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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Analytical Results For:

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

Received: 12/08/2023
 Reported: 12/13/2023
 Project Name: JALMAT 188
 Project Number: 03D2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 12/07/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Dionica Hinojos

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

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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
 Reported: 12/13/2023
 Project Name: JALMAT 188
 Project Number: 03D2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 12/07/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Dionica Hinojos

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

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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
 Reported: 12/13/2023
 Project Name: JALMAT 188
 Project Number: 03D2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 12/07/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Dionica Hinojos

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

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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
 Reported: 12/13/2023
 Project Name: JALMAT 188
 Project Number: 03D2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 12/08/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Dionica Hinojos

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

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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
 Reported: 12/13/2023
 Project Name: JALMAT 188
 Project Number: 03D2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 12/08/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Dionica Hinojos

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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Celey D. Keene, Lab Director/Quality Manager



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
 Reported: 12/13/2023
 Project Name: JALMAT 188
 Project Number: 03D2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 12/08/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Dionica Hinojos

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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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
 Reported: 12/13/2023
 Project Name: JALMAT 188
 Project Number: 03D2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 12/08/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Dionica Hinojos

Sample ID: BH 02 @ 11-16' (H236592-15)

BTX 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 BTX	<0.300	0.300	12/11/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 71.5-134

Chloride, SM4500CI-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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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
 Reported: 12/13/2023
 Project Name: JALMAT 188
 Project Number: 03D2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 12/08/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Dionica Hinojos

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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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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Analytical Results For:

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

Received: 12/08/2023
 Reported: 12/13/2023
 Project Name: JALMAT 188
 Project Number: 03D2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 12/08/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Dionica Hinojos

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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Analytical Results For:

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

Received: 12/08/2023
 Reported: 12/13/2023
 Project Name: JALMAT 188
 Project Number: 03D2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 12/08/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Dionica Hinojos

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, SM4500CI-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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Analytical Results For:

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

Received: 12/08/2023
 Reported: 12/13/2023
 Project Name: JALMAT 188
 Project Number: 03D2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 12/08/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Dionica Hinojos

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



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
 Reported: 12/13/2023
 Project Name: JALMAT 188
 Project Number: 03D2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 12/08/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Dionica Hinojos

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

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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
 Reported: 12/13/2023
 Project Name: JALMAT 188
 Project Number: 03D2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 12/08/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Dionica Hinojos

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, SM4500CI-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

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Celey D. Keene, Lab Director/Quality Manager



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
 Reported: 12/13/2023
 Project Name: JALMAT 188
 Project Number: 03D2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 12/08/2023
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Dionica Hinojos

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, SM4500CI-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

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Celey D. Keene, Lab Director/Quality Manager



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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

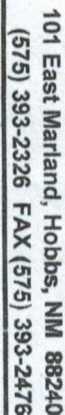
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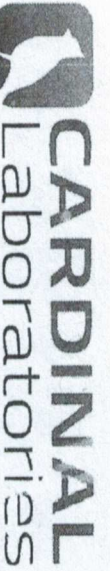
A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



1 of 3

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com



101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

2 of 3

BILL TO

ANALYSIS REQUEST

Company Name: Ensdlum LLC

Project Manager: Free Cole

Address: 3122 National Parks Hwy

City: Carlsbad State: NM Zip: 88220

Phone #: 720-384-7665 Fax #: _____

Project #: 63D2057055 Project Owner: Maverick

Project Name: Salmit 188

Project Location: 32.345541, -103.321776

Sampler Name: Ron Hayes

FOR LAB USE ONLY

H0365702
Lab I.D.

Sample I.D.

FOR LAB USE ONLY	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX					DATE	TIME	ANALYSIS REQUEST				
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE			BTEX	TPH	CI-		
	BH01 @ 2-11'	G	1			X			12/8/23	0854	X	X	X		
	BH01 @ 14-16'									0905					
	BH01 @ 28-30'									0930					
	BH02 @ 0-2'									0947					
	BH02 @ 11-16'									0953					
	BH02 @ 28-30'									0956					
	BH03 @ 0-2'									1048					
	BH03 @ 11-16'									1052					
	BH03 @ 28-30'									1056					
	BH07 @ 11-16'									1250					

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Relinquished By: _____ Date: 12-10-23 Time: _____

Received By: _____

Relinquished By: _____ Date: 12-10-23 Time: _____

Received By: _____

Delivered By: (Circle One)

Observed Temp. °C 5.8°C

Corrected Temp. °C #140

Sample Condition

Intact ☒ Yes ☐ No

Cool ☒ Yes ☐ No

Checked By: _____

Turnaround Time: _____

Standard ☒ Rush ☐

Bacteria (only) Sample Condition

Cool Intact ☒ Yes ☐ No

Observed Temp. °C

Corrected Temp. °C

REMARKS: ACE@ensdlum.com

Verbal Result: ☐ Yes ☐ No Add'l Phone #: _____

All Results are emailed. Please provide Email address: _____

FORM-006 R 3-4 07/11/23

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Laboratorias

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(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

3 of 3

Company Name: Ensslin, LLC Project Manager: Aree Cole Address: 3122 National Parks Hwy City: Carlisle, PA State: NM Zip: 88220 Phone #: 720 384 7305 Fax #: Project #: 0302057055 Project Owner: Marich Project Name: Walnut 188 Project Location: 32.34541, -103.321776 Sample Name: Romm, Hayes FOR LAB USE ONLY				P.O. #: Company: Attn: Address: City: State: Zip: Phone #: Fax #:			
Sample I.D. H230592 Lab I.D. 21 PH07 @ 26-30' 8A PH06 @ 11-16' 03 PH04 @ 26-30'				BILL TO ANALYSIS REQUEST			
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. Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.				Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #: All Results are emailed. Please provide Email address: acole@ensslin.com			
Relinquished By: [Signature] Date: 12-6-23 Received By: [Signature] Date: 12-6-23 Relinquished By: [Signature] Date: 12-6-23 Received By: [Signature] Date: 12-6-23				REMARKS: PH07 PH06 PH04			
Delivered By: (Circle One) Observed Temp. °C: 5.0 Corrected Temp. °C: 4.140 Sampler - UPS - Bus - Other: Sample Condition: <input checked="" type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> No CHECKED BY: [Signature] (Initials) Turnaround Time: Standard: <input type="checkbox"/> Rush <input checked="" type="checkbox"/> Bacteria (only) Sample Condition: <input type="checkbox"/> Cool <input type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> No Observed Temp. °C: Corrected Temp. °C:				DATE TIME 12/8/23 1257 1323 1327 BTEx TPH CI-			



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

August 20, 2024

AIMEE COLE

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: JALMAT YATES UNIT #188

Enclosed are the results of analyses for samples received by the laboratory on 08/15/24 15:31.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. 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 accredited 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,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



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: 08/15/2024
 Reported: 08/20/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/15/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: SW 03 0-4 (H244975-01)

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	08/16/2024	ND	2.09	104	2.00	7.88	
Toluene*	<0.050	0.050	08/16/2024	ND	2.11	106	2.00	7.21	
Ethylbenzene*	<0.050	0.050	08/16/2024	ND	2.11	105	2.00	6.72	
Total Xylenes*	<0.150	0.150	08/16/2024	ND	6.55	109	6.00	6.41	
Total BTEX	<0.300	0.300	08/16/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 112 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	08/19/2024	ND	416	104	400	0.00	

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	08/17/2024	ND	230	115	200	13.2	
DRO >C10-C28*	<10.0	10.0	08/17/2024	ND	223	111	200	13.0	
EXT DRO >C28-C36	<10.0	10.0	08/17/2024	ND					

Surrogate: 1-Chlorooctane 74.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 82.6 % 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: 08/15/2024
 Reported: 08/20/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/15/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: SW 04 0-4 (H244975-02)

BTX 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	08/16/2024	ND	2.09	104	2.00	7.88		
Toluene*	<0.050	0.050	08/16/2024	ND	2.11	106	2.00	7.21		
Ethylbenzene*	<0.050	0.050	08/16/2024	ND	2.11	105	2.00	6.72		
Total Xylenes*	<0.150	0.150	08/16/2024	ND	6.55	109	6.00	6.41		
Total BTX	<0.300	0.300	08/16/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	192	16.0	08/19/2024	ND	416	104	400	0.00		

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	08/20/2024	ND	213	106	200	1.31	
DRO >C10-C28*	<10.0	10.0	08/20/2024	ND	194	97.0	200	3.52	
EXT DRO >C28-C36	<10.0	10.0	08/20/2024	ND					

Surrogate: 1-Chlorooctane 86.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 99.6 % 49.1-148

Cardinal Laboratories

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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: 08/15/2024
 Reported: 08/20/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/15/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: SW 09 0-4 (H244975-03)

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	08/16/2024	ND	2.09	104	2.00	7.88		
Toluene*	<0.050	0.050	08/16/2024	ND	2.11	106	2.00	7.21		
Ethylbenzene*	<0.050	0.050	08/16/2024	ND	2.11	105	2.00	6.72		
Total Xylenes*	<0.150	0.150	08/16/2024	ND	6.55	109	6.00	6.41		
Total BTEx	<0.300	0.300	08/16/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	320	16.0	08/19/2024	ND	416	104	400	0.00		

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	08/19/2024	ND	213	106	200	1.31	
DRO >C10-C28*	<10.0	10.0	08/19/2024	ND	194	97.0	200	3.52	
EXT DRO >C28-C36	<10.0	10.0	08/19/2024	ND					

Surrogate: 1-Chlorooctane 80.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 82.1 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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: 08/15/2024
 Reported: 08/20/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/15/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: SW 07 0-4 (H244975-04)

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	08/16/2024	ND	2.09	104	2.00	7.88		
Toluene*	<0.050	0.050	08/16/2024	ND	2.11	106	2.00	7.21		
Ethylbenzene*	<0.050	0.050	08/16/2024	ND	2.11	105	2.00	6.72		
Total Xylenes*	<0.150	0.150	08/16/2024	ND	6.55	109	6.00	6.41		
Total BTEx	<0.300	0.300	08/16/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 111 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	08/19/2024	ND	416	104	400	0.00		

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	08/19/2024	ND	213	106	200	1.31	
DRO >C10-C28*	<10.0	10.0	08/19/2024	ND	194	97.0	200	3.52	
EXT DRO >C28-C36	<10.0	10.0	08/19/2024	ND					

Surrogate: 1-Chlorooctane 85.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 90.0 % 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: 08/15/2024
 Reported: 08/20/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/15/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: SW 05 0-4 (H244975-05)

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	08/16/2024	ND	2.09	104	2.00	7.88		
Toluene*	<0.050	0.050	08/16/2024	ND	2.11	106	2.00	7.21		
Ethylbenzene*	<0.050	0.050	08/16/2024	ND	2.11	105	2.00	6.72		
Total Xylenes*	<0.150	0.150	08/16/2024	ND	6.55	109	6.00	6.41		
Total BTEX	<0.300	0.300	08/16/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 113 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	304	16.0	08/19/2024	ND	416	104	400	0.00		

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	08/19/2024	ND	213	106	200	1.31	
DRO >C10-C28*	<10.0	10.0	08/19/2024	ND	194	97.0	200	3.52	
EXT DRO >C28-C36	<10.0	10.0	08/19/2024	ND					

Surrogate: 1-Chlorooctane 82.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 87.2 % 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: 08/15/2024
 Reported: 08/20/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/15/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 40 4 (H244975-06)

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	08/16/2024	ND	2.09	104	2.00	7.88		
Toluene*	<0.050	0.050	08/16/2024	ND	2.11	106	2.00	7.21		
Ethylbenzene*	<0.050	0.050	08/16/2024	ND	2.11	105	2.00	6.72		
Total Xylenes*	<0.150	0.150	08/16/2024	ND	6.55	109	6.00	6.41		
Total BTEX	<0.300	0.300	08/16/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 112 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	5440	16.0	08/19/2024	ND	416	104	400	0.00		

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	08/19/2024	ND	213	106	200	1.31	
DRO >C10-C28*	<10.0	10.0	08/19/2024	ND	194	97.0	200	3.52	
EXT DRO >C28-C36	<10.0	10.0	08/19/2024	ND					

Surrogate: 1-Chlorooctane 80.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 84.6 % 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: 08/15/2024
 Reported: 08/20/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/15/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 41 4 (H244975-07)

BTX 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	08/16/2024	ND	2.09	104	2.00	7.88	
Toluene*	<0.050	0.050	08/16/2024	ND	2.11	106	2.00	7.21	
Ethylbenzene*	<0.050	0.050	08/16/2024	ND	2.11	105	2.00	6.72	
Total Xylenes*	<0.150	0.150	08/16/2024	ND	6.55	109	6.00	6.41	
Total BTX	<0.300	0.300	08/16/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 112 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	8240	16.0	08/19/2024	ND	416	104	400	0.00		

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	08/19/2024	ND	213	106	200	1.31	
DRO >C10-C28*	<10.0	10.0	08/19/2024	ND	194	97.0	200	3.52	
EXT DRO >C28-C36	<10.0	10.0	08/19/2024	ND					

Surrogate: 1-Chlorooctane 77.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 81.2 % 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: 08/15/2024
 Reported: 08/20/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/15/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 25 4.5 (H244975-08)

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	08/16/2024	ND	2.09	104	2.00	7.88		
Toluene*	<0.050	0.050	08/16/2024	ND	2.11	106	2.00	7.21		
Ethylbenzene*	<0.050	0.050	08/16/2024	ND	2.11	105	2.00	6.72		
Total Xylenes*	<0.150	0.150	08/16/2024	ND	6.55	109	6.00	6.41		
Total BTEX	<0.300	0.300	08/16/2024	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	5680	16.0	08/16/2024	ND	432	108	400	7.69	QM-07	

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	08/19/2024	ND	213	106	200	1.31	
DRO >C10-C28*	<10.0	10.0	08/19/2024	ND	194	97.0	200	3.52	
EXT DRO >C28-C36	<10.0	10.0	08/19/2024	ND					

Surrogate: 1-Chlorooctane 75.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 79.4 % 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: 08/15/2024
 Reported: 08/20/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/15/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 39 4.5 (H244975-09)

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	08/16/2024	ND	2.09	104	2.00	7.88		
Toluene*	<0.050	0.050	08/16/2024	ND	2.11	106	2.00	7.21		
Ethylbenzene*	<0.050	0.050	08/16/2024	ND	2.11	105	2.00	6.72		
Total Xylenes*	<0.150	0.150	08/16/2024	ND	6.55	109	6.00	6.41		
Total BTEX	<0.300	0.300	08/16/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 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	6560	16.0	08/16/2024	ND	432	108	400	7.69		

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	08/19/2024	ND	213	106	200	1.31	
DRO >C10-C28*	22.9	10.0	08/19/2024	ND	194	97.0	200	3.52	
EXT DRO >C28-C36	<10.0	10.0	08/19/2024	ND					

Surrogate: 1-Chlorooctane 73.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 77.1 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

- QR-03 The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- 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

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager

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

August 16, 2024

AIMEE COLE

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: JALMAT YATES UNIT #188

Enclosed are the results of analyses for samples received by the laboratory on 08/07/24 15:56.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. 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/ga/lab_accred_certif.html.

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

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

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

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



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

Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SW 01 0-4	H244774-01	Soil	07-Aug-24 09:40	07-Aug-24 15:56
SW 07 0-4	H244774-02	Soil	07-Aug-24 10:00	07-Aug-24 15:56
SW 10 0-4	H244774-03	Soil	07-Aug-24 10:18	07-Aug-24 15:56
SW 12 0-4	H244774-04	Soil	07-Aug-24 10:27	07-Aug-24 15:56
FS 39 4	H244774-05	Soil	07-Aug-24 12:07	07-Aug-24 15:56
FS 09 4	H244774-06	Soil	07-Aug-24 12:11	07-Aug-24 15:56
FS 10 4	H244774-07	Soil	07-Aug-24 12:13	07-Aug-24 15:56
FS 11 4	H244774-08	Soil	07-Aug-24 12:15	07-Aug-24 15:56
FS 12 4	H244774-09	Soil	07-Aug-24 12:19	07-Aug-24 15:56
FS 13 4	H244774-10	Soil	07-Aug-24 12:22	07-Aug-24 15:56
FS 14 4	H244774-11	Soil	07-Aug-24 12:24	07-Aug-24 15:56
FS 15 4	H244774-12	Soil	07-Aug-24 12:07	07-Aug-24 15:56
FS 16 4	H244774-13	Soil	07-Aug-24 12:09	07-Aug-24 15:56
FS 17 4	H244774-14	Soil	07-Aug-24 12:11	07-Aug-24 15:56
FS 18 4	H244774-15	Soil	07-Aug-24 12:12	07-Aug-24 15:56
FS 19 4	H244774-16	Soil	07-Aug-24 12:13	07-Aug-24 15:56
FS 20 4	H244774-17	Soil	07-Aug-24 12:15	07-Aug-24 15:56
FS 21 4	H244774-18	Soil	07-Aug-24 12:16	07-Aug-24 15:56
FS 22 4	H244774-19	Soil	07-Aug-24 12:20	07-Aug-24 15:56
FS 23 4	H244774-20	Soil	07-Aug-24 12:21	07-Aug-24 15:56
FS 24 4	H244774-21	Soil	07-Aug-24 12:23	07-Aug-24 15:56
FS 25 4	H244774-22	Soil	07-Aug-24 12:27	07-Aug-24 15:56
FS 26 4	H244774-23	Soil	07-Aug-24 12:29	07-Aug-24 15:56
FS 27 4	H244774-24	Soil	07-Aug-24 12:27	07-Aug-24 15:56
FS 28 4	H244774-25	Soil	07-Aug-24 12:31	07-Aug-24 15:56
FS 29 4	H244774-26	Soil	07-Aug-24 12:32	07-Aug-24 15:56
FS 30 4	H244774-27	Soil	07-Aug-24 12:32	07-Aug-24 15:56

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

FS 31	4	H244774-28	Soil	07-Aug-24 12:34	07-Aug-24 15:56
FS 32	4	H244774-29	Soil	07-Aug-24 12:37	07-Aug-24 15:56
FS 33	4	H244774-30	Soil	07-Aug-24 12:34	07-Aug-24 15:56
FS 34	4	H244774-31	Soil	07-Aug-24 12:35	07-Aug-24 15:56
FS 35	4	H244774-32	Soil	07-Aug-24 12:37	07-Aug-24 15:56
FS 36	4	H244774-33	Soil	07-Aug-24 12:38	07-Aug-24 15:56
FS 37	4	H244774-34	Soil	07-Aug-24 12:39	07-Aug-24 15:56
FS 38	4	H244774-35	Soil	07-Aug-24 12:40	07-Aug-24 15:56

08/16/24 - Client changed the sample ID on -05 (see COC). This is the revised report and will replace the one sent on 08/13/24.

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

SW 01 0-4
H244774-01 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	192		16.0	mg/kg	4	4080922	AC	09-Aug-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050	0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Toluene*	<0.050	0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Ethylbenzene*	<0.050	0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Total Xylenes*	<0.150	0.150	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Total BTEX	<0.300	0.300	mg/kg	50	4080812	JH	08-Aug-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)	115 %	71.5-134	4080812	JH	08-Aug-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0	10.0	mg/kg	1	4080807	MS	08-Aug-24	8015B	
DRO >C10-C28*	<10.0	10.0	mg/kg	1	4080807	MS	08-Aug-24	8015B	
EXT DRO >C28-C36	<10.0	10.0	mg/kg	1	4080807	MS	08-Aug-24	8015B	

Surrogate: 1-Chlorooctane	81.3 %	48.2-134	4080807	MS	08-Aug-24	8015B	
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Surrogate: 1-Chlorooctadecane	89.5 %	49.1-148	4080807	MS	08-Aug-24	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

SW 07 0-4
H244774-02 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	5720		16.0	mg/kg	4	4080922	AC	09-Aug-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050	0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Toluene*	<0.050	0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Ethylbenzene*	<0.050	0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Total Xylenes*	<0.150	0.150	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Total BTEX	<0.300	0.300	mg/kg	50	4080812	JH	08-Aug-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)	116 %	71.5-134	4080812	JH	08-Aug-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0	10.0	mg/kg	1	4080807	MS	08-Aug-24	8015B	
DRO >C10-C28*	<10.0	10.0	mg/kg	1	4080807	MS	08-Aug-24	8015B	
EXT DRO >C28-C36	<10.0	10.0	mg/kg	1	4080807	MS	08-Aug-24	8015B	

Surrogate: 1-Chlorooctane	77.0 %	48.2-134	4080807	MS	08-Aug-24	8015B	
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Surrogate: 1-Chlorooctadecane	86.2 %	49.1-148	4080807	MS	08-Aug-24	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

SW 10 0-4
H244774-03 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	480		16.0	mg/kg	4	4080922	AC	09-Aug-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4080812	JH	08-Aug-24	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			114 %		71.5-134	4080812	JH	08-Aug-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4080807	MS	08-Aug-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4080807	MS	08-Aug-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4080807	MS	08-Aug-24	8015B	

<i>Surrogate: 1-Chlorooctane</i>			81.0 %		48.2-134	4080807	MS	08-Aug-24	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			91.3 %		49.1-148	4080807	MS	08-Aug-24	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

SW 12 0-4
H244774-04 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	128		16.0	mg/kg	4	4080922	AC	09-Aug-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050	0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Toluene*	<0.050	0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Ethylbenzene*	<0.050	0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Total Xylenes*	<0.150	0.150	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Total BTEX	<0.300	0.300	mg/kg	50	4080812	JH	08-Aug-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)	112 %	71.5-134	4080812	JH	08-Aug-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0	10.0	mg/kg	1	4080807	MS	08-Aug-24	8015B	
DRO >C10-C28*	<10.0	10.0	mg/kg	1	4080807	MS	08-Aug-24	8015B	
EXT DRO >C28-C36	<10.0	10.0	mg/kg	1	4080807	MS	08-Aug-24	8015B	

Surrogate: 1-Chlorooctane	77.5 %	48.2-134	4080807	MS	08-Aug-24	8015B	
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Surrogate: 1-Chlorooctadecane	85.7 %	49.1-148	4080807	MS	08-Aug-24	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

FS 39 4
H244774-05 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	20400		16.0	mg/kg	4	4080947	AC	09-Aug-24	4500-Cl-B	QM-07
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	GC-NC
Ethylbenzene*	0.242		0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Total Xylenes*	0.759		0.150	mg/kg	50	4080812	JH	08-Aug-24	8021B	GC-NC1
Total BTEX	1.00		0.300	mg/kg	50	4080812	JH	08-Aug-24	8021B	GC-NC1

Surrogate: 4-Bromofluorobenzene (PID) 134 % 71.5-134 4080812 JH 08-Aug-24 8021B

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	38.1		10.0	mg/kg	1	4080807	MS	08-Aug-24	8015B	
DRO >C10-C28*	523		10.0	mg/kg	1	4080807	MS	08-Aug-24	8015B	
EXT DRO >C28-C36	124		10.0	mg/kg	1	4080807	MS	08-Aug-24	8015B	

Surrogate: 1-Chlorooctane 88.0 % 48.2-134 4080807 MS 08-Aug-24 8015B

Surrogate: 1-Chlorooctadecane 95.9 % 49.1-148 4080807 MS 08-Aug-24 8015B

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

FS 09 4
H244774-06 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	3840		16.0	mg/kg	4	4080947	AC	09-Aug-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050	0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Toluene*	<0.050	0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Ethylbenzene*	<0.050	0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Total Xylenes*	<0.150	0.150	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Total BTEX	<0.300	0.300	mg/kg	50	4080812	JH	08-Aug-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)	118 %	71.5-134	4080812	JH	08-Aug-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0	10.0	mg/kg	1	4080807	MS	08-Aug-24	8015B	
DRO >C10-C28*	<10.0	10.0	mg/kg	1	4080807	MS	08-Aug-24	8015B	
EXT DRO >C28-C36	<10.0	10.0	mg/kg	1	4080807	MS	08-Aug-24	8015B	

Surrogate: 1-Chlorooctane	75.9 %	48.2-134	4080807	MS	08-Aug-24	8015B	
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Surrogate: 1-Chlorooctadecane	85.4 %	49.1-148	4080807	MS	08-Aug-24	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

FS 10 4
H244774-07 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	6400		16.0	mg/kg	4	4080947	AC	09-Aug-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4080812	JH	08-Aug-24	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			115 %		71.5-134	4080812	JH	08-Aug-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	

<i>Surrogate: 1-Chlorooctane</i>			69.9 %		48.2-134	4080808	ms	08-Aug-24	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			81.6 %		49.1-148	4080808	ms	08-Aug-24	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

FS 11 4
H244774-08 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	14200		16.0	mg/kg	4	4080947	AC	09-Aug-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050	0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Toluene*	<0.050	0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Ethylbenzene*	<0.050	0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Total Xylenes*	<0.150	0.150	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Total BTEX	<0.300	0.300	mg/kg	50	4080812	JH	08-Aug-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)	110 %	71.5-134	4080812	JH	08-Aug-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0	10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	
DRO >C10-C28*	<10.0	10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	
EXT DRO >C28-C36	<10.0	10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	

Surrogate: 1-Chlorooctane	70.7 %	48.2-134	4080808	ms	08-Aug-24	8015B	
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Surrogate: 1-Chlorooctadecane	83.2 %	49.1-148	4080808	ms	08-Aug-24	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

FS 12 4
H244774-09 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	11400		16.0	mg/kg	4	4080947	AC	09-Aug-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050	0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Toluene*	<0.050	0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Ethylbenzene*	<0.050	0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Total Xylenes*	<0.150	0.150	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Total BTEX	<0.300	0.300	mg/kg	50	4080812	JH	08-Aug-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)	112 %	71.5-134	4080812	JH	08-Aug-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0	10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	
DRO >C10-C28*	<10.0	10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	
EXT DRO >C28-C36	<10.0	10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	

Surrogate: 1-Chlorooctane	64.2 %	48.2-134	4080808	ms	08-Aug-24	8015B	
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Surrogate: 1-Chlorooctadecane	74.6 %	49.1-148	4080808	ms	08-Aug-24	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

FS 13 4
H244774-10 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	5460		16.0	mg/kg	4	4080947	AC	09-Aug-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4080812	JH	08-Aug-24	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			114 %		71.5-134	4080812	JH	08-Aug-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	

<i>Surrogate: 1-Chlorooctane</i>			67.4 %		48.2-134	4080808	ms	08-Aug-24	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			78.1 %		49.1-148	4080808	ms	08-Aug-24	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

FS 14 4
H244774-11 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	304		16.0	mg/kg	4	4080947	AC	09-Aug-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050	0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Toluene*	<0.050	0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Ethylbenzene*	<0.050	0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Total Xylenes*	<0.150	0.150	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Total BTEX	<0.300	0.300	mg/kg	50	4080812	JH	08-Aug-24	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>		115 %		71.5-134	4080812	JH	08-Aug-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0	10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	
DRO >C10-C28*	<10.0	10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	
EXT DRO >C28-C36	<10.0	10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	

<i>Surrogate: 1-Chlorooctane</i>		64.2 %		48.2-134	4080808	ms	08-Aug-24	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>		73.9 %		49.1-148	4080808	ms	08-Aug-24	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

FS 15 4
H244774-12 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	16400		16.0	mg/kg	4	4080947	AC	09-Aug-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4080812	JH	08-Aug-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			115 %		71.5-134	4080812	JH	08-Aug-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	
DRO >C10-C28*	149		10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	
EXT DRO >C28-C36	22.6		10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	

Surrogate: 1-Chlorooctane			70.1 %		48.2-134	4080808	ms	08-Aug-24	8015B	
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Surrogate: 1-Chlorooctadecane			87.6 %		49.1-148	4080808	ms	08-Aug-24	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

FS 16 4
H244774-13 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	3640		16.0	mg/kg	4	4080947	AC	09-Aug-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4080812	JH	08-Aug-24	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			113 %		71.5-134	4080812	JH	08-Aug-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	

<i>Surrogate: 1-Chlorooctane</i>			73.6 %		48.2-134	4080808	ms	08-Aug-24	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			85.8 %		49.1-148	4080808	ms	08-Aug-24	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

FS 17 4
H244774-14 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	6660		16.0	mg/kg	4	4080947	AC	09-Aug-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4080812	JH	08-Aug-24	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			111 %		71.5-134	4080812	JH	08-Aug-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	

<i>Surrogate: 1-Chlorooctane</i>			70.6 %		48.2-134	4080808	ms	08-Aug-24	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			81.7 %		49.1-148	4080808	ms	08-Aug-24	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

FS 18 4
H244774-15 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	14600		16.0	mg/kg	4	4080947	AC	09-Aug-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4080812	JH	08-Aug-24	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			111 %		71.5-134	4080812	JH	08-Aug-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	

<i>Surrogate: 1-Chlorooctane</i>			72.8 %		48.2-134	4080808	ms	08-Aug-24	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			84.3 %		49.1-148	4080808	ms	08-Aug-24	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

FS 19 4
H244774-16 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	14200		16.0	mg/kg	4	4080947	AC	09-Aug-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050	0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Toluene*	<0.050	0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Ethylbenzene*	<0.050	0.050	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Total Xylenes*	<0.150	0.150	mg/kg	50	4080812	JH	08-Aug-24	8021B	
Total BTEX	<0.300	0.300	mg/kg	50	4080812	JH	08-Aug-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)		112 %		71.5-134	4080812	JH	08-Aug-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0	10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	
DRO >C10-C28*	<10.0	10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	
EXT DRO >C28-C36	<10.0	10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	

Surrogate: 1-Chlorooctane		66.9 %		48.2-134	4080808	ms	08-Aug-24	8015B	
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Surrogate: 1-Chlorooctadecane		76.8 %		49.1-148	4080808	ms	08-Aug-24	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

FS 20 4
H244774-17 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	17200		16.0	mg/kg	4	4080947	AC	09-Aug-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050	0.050	mg/kg	50	4080812	JH	09-Aug-24	8021B	
Toluene*	<0.050	0.050	mg/kg	50	4080812	JH	09-Aug-24	8021B	
Ethylbenzene*	<0.050	0.050	mg/kg	50	4080812	JH	09-Aug-24	8021B	
Total Xylenes*	<0.150	0.150	mg/kg	50	4080812	JH	09-Aug-24	8021B	
Total BTEX	<0.300	0.300	mg/kg	50	4080812	JH	09-Aug-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)	111 %	71.5-134	4080812	JH	09-Aug-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0	10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	
DRO >C10-C28*	<10.0	10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	
EXT DRO >C28-C36	<10.0	10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	

Surrogate: 1-Chlorooctane	67.6 %	48.2-134	4080808	ms	08-Aug-24	8015B	
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Surrogate: 1-Chlorooctadecane	77.9 %	49.1-148	4080808	ms	08-Aug-24	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

FS 21 4
H244774-18 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	704		16.0	mg/kg	4	4080947	AC	09-Aug-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050	0.050	mg/kg	50	4080812	JH	09-Aug-24	8021B	
Toluene*	<0.050	0.050	mg/kg	50	4080812	JH	09-Aug-24	8021B	
Ethylbenzene*	<0.050	0.050	mg/kg	50	4080812	JH	09-Aug-24	8021B	
Total Xylenes*	<0.150	0.150	mg/kg	50	4080812	JH	09-Aug-24	8021B	
Total BTEX	<0.300	0.300	mg/kg	50	4080812	JH	09-Aug-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)	114 %	71.5-134	4080812	JH	09-Aug-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0	10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	
DRO >C10-C28*	<10.0	10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	
EXT DRO >C28-C36	<10.0	10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	

Surrogate: 1-Chlorooctane	68.6 %	48.2-134	4080808	ms	08-Aug-24	8015B	
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Surrogate: 1-Chlorooctadecane	77.0 %	49.1-148	4080808	ms	08-Aug-24	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

FS 22 4
H244774-19 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	7600		16.0	mg/kg	4	4080947	AC	09-Aug-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4080812	JH	09-Aug-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4080812	JH	09-Aug-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4080812	JH	09-Aug-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4080812	JH	09-Aug-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4080812	JH	09-Aug-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			111 %		71.5-134	4080812	JH	09-Aug-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	

Surrogate: 1-Chlorooctane			76.6 %		48.2-134	4080808	ms	08-Aug-24	8015B	
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Surrogate: 1-Chlorooctadecane			88.7 %		49.1-148	4080808	ms	08-Aug-24	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

FS 23 4
H244774-20 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	2680		16.0	mg/kg	4	4080947	AC	09-Aug-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4080812	JH	09-Aug-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4080812	JH	09-Aug-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4080812	JH	09-Aug-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4080812	JH	09-Aug-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4080812	JH	09-Aug-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			111 %		71.5-134	4080812	JH	09-Aug-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	
DRO >C10-C28*	62.0		10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	

Surrogate: 1-Chlorooctane			69.7 %		48.2-134	4080808	ms	08-Aug-24	8015B	
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Surrogate: 1-Chlorooctadecane			83.3 %		49.1-148	4080808	ms	08-Aug-24	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

FS 24 4
H244774-21 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	512		16.0	mg/kg	4	4080947	AC	09-Aug-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050	0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Toluene*	<0.050	0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Ethylbenzene*	<0.050	0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Total Xylenes*	<0.150	0.150	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Total BTEX	<0.300	0.300	mg/kg	50	4080820	JH	08-Aug-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)	100 %	71.5-134	4080820	JH	08-Aug-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0	10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	
DRO >C10-C28*	<10.0	10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	
EXT DRO >C28-C36	<10.0	10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	

Surrogate: 1-Chlorooctane	74.2 %	48.2-134	4080808	ms	08-Aug-24	8015B	
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Surrogate: 1-Chlorooctadecane	85.6 %	49.1-148	4080808	ms	08-Aug-24	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

FS 25 4
H244774-22 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	24000		16.0	mg/kg	4	4080947	AC	09-Aug-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4080820	JH	08-Aug-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			101 %		71.5-134	4080820	JH	08-Aug-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	

Surrogate: 1-Chlorooctane			68.3 %		48.2-134	4080808	ms	08-Aug-24	8015B	
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Surrogate: 1-Chlorooctadecane			78.0 %		49.1-148	4080808	ms	08-Aug-24	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

FS 26 4
H244774-23 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	2800		16.0	mg/kg	4	4080947	AC	09-Aug-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4080820	JH	08-Aug-24	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			99.7 %		71.5-134	4080820	JH	08-Aug-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	

<i>Surrogate: 1-Chlorooctane</i>			68.1 %		48.2-134	4080808	ms	08-Aug-24	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			76.7 %		49.1-148	4080808	ms	08-Aug-24	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

FS 27 4
H244774-24 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	1730		16.0	mg/kg	4	4080947	AC	09-Aug-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050	0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Toluene*	<0.050	0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Ethylbenzene*	<0.050	0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Total Xylenes*	<0.150	0.150	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Total BTEX	<0.300	0.300	mg/kg	50	4080820	JH	08-Aug-24	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>		100 %		71.5-134	4080820	JH	08-Aug-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0	10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	
DRO >C10-C28*	<10.0	10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	
EXT DRO >C28-C36	<10.0	10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	

<i>Surrogate: 1-Chlorooctane</i>		69.2 %		48.2-134	4080808	ms	08-Aug-24	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>		80.0 %		49.1-148	4080808	ms	08-Aug-24	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

FS 28 4
H244774-25 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	2320		16.0	mg/kg	4	4080934	HM	09-Aug-24	4500-Cl-B	QM-07
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4080820	JH	08-Aug-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID) 100 % 71.5-134 4080820 JH 08-Aug-24 8021B

Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4080808	ms	08-Aug-24	8015B	

Surrogate: 1-Chlorooctane 67.2 % 48.2-134 4080808 ms 08-Aug-24 8015B

Surrogate: 1-Chlorooctadecane 77.5 % 49.1-148 4080808 ms 08-Aug-24 8015B

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

FS 29 4
H244774-26 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	2530		16.0	mg/kg	4	4080934	HM	09-Aug-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4080820	JH	08-Aug-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			101 %		71.5-134	4080820	JH	08-Aug-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4080808	ms	09-Aug-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4080808	ms	09-Aug-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4080808	ms	09-Aug-24	8015B	

Surrogate: 1-Chlorooctane			61.1 %		48.2-134	4080808	ms	09-Aug-24	8015B	
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Surrogate: 1-Chlorooctadecane			71.8 %		49.1-148	4080808	ms	09-Aug-24	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

FS 30 4
H244774-27 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	10400		16.0	mg/kg	4	4080934	HM	09-Aug-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050	0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Toluene*	<0.050	0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Ethylbenzene*	<0.050	0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Total Xylenes*	<0.150	0.150	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Total BTEX	<0.300	0.300	mg/kg	50	4080820	JH	08-Aug-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)	99.4 %	71.5-134	4080820	JH	08-Aug-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0	10.0	mg/kg	1	4080830	MS	08-Aug-24	8015B	
DRO >C10-C28*	<10.0	10.0	mg/kg	1	4080830	MS	08-Aug-24	8015B	
EXT DRO >C28-C36	<10.0	10.0	mg/kg	1	4080830	MS	08-Aug-24	8015B	

Surrogate: 1-Chlorooctane	63.9 %	48.2-134	4080830	MS	08-Aug-24	8015B	
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Surrogate: 1-Chlorooctadecane	76.0 %	49.1-148	4080830	MS	08-Aug-24	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

FS 31 4
H244774-28 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	6260		16.0	mg/kg	4	4080934	HM	09-Aug-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4080820	JH	08-Aug-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			100 %	71.5-134		4080820	JH	08-Aug-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4080830	MS	08-Aug-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4080830	MS	08-Aug-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4080830	MS	08-Aug-24	8015B	

Surrogate: 1-Chlorooctane			71.2 %	48.2-134		4080830	MS	08-Aug-24	8015B	
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Surrogate: 1-Chlorooctadecane			81.3 %	49.1-148		4080830	MS	08-Aug-24	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

FS 32 4
H244774-29 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	2640		16.0	mg/kg	4	4080934	HM	09-Aug-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050		0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Toluene*	<0.050		0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	4080820	JH	08-Aug-24	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			99.3 %		71.5-134	4080820	JH	08-Aug-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0		10.0	mg/kg	1	4080830	MS	08-Aug-24	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	4080830	MS	08-Aug-24	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	4080830	MS	08-Aug-24	8015B	

<i>Surrogate: 1-Chlorooctane</i>			75.4 %		48.2-134	4080830	MS	08-Aug-24	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			86.4 %		49.1-148	4080830	MS	08-Aug-24	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

FS 33 4
H244774-30 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	224		16.0	mg/kg	4	4080934	HM	09-Aug-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050	0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Toluene*	<0.050	0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Ethylbenzene*	<0.050	0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Total Xylenes*	<0.150	0.150	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Total BTEX	<0.300	0.300	mg/kg	50	4080820	JH	08-Aug-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)	99.4 %	71.5-134	4080820	JH	08-Aug-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0	10.0	mg/kg	1	4080830	MS	08-Aug-24	8015B	
DRO >C10-C28*	<10.0	10.0	mg/kg	1	4080830	MS	08-Aug-24	8015B	
EXT DRO >C28-C36	<10.0	10.0	mg/kg	1	4080830	MS	08-Aug-24	8015B	

Surrogate: 1-Chlorooctane	75.1 %	48.2-134	4080830	MS	08-Aug-24	8015B	
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Surrogate: 1-Chlorooctadecane	86.1 %	49.1-148	4080830	MS	08-Aug-24	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

FS 34 4
H244774-31 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	1120		16.0	mg/kg	4	4080934	HM	09-Aug-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050	0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Toluene*	<0.050	0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Ethylbenzene*	<0.050	0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Total Xylenes*	<0.150	0.150	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Total BTEX	<0.300	0.300	mg/kg	50	4080820	JH	08-Aug-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)	99.1 %	71.5-134	4080820	JH	08-Aug-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0	10.0	mg/kg	1	4080830	MS	08-Aug-24	8015B	
DRO >C10-C28*	<10.0	10.0	mg/kg	1	4080830	MS	08-Aug-24	8015B	
EXT DRO >C28-C36	<10.0	10.0	mg/kg	1	4080830	MS	08-Aug-24	8015B	

Surrogate: 1-Chlorooctane	71.5 %	48.2-134	4080830	MS	08-Aug-24	8015B	
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Surrogate: 1-Chlorooctadecane	83.0 %	49.1-148	4080830	MS	08-Aug-24	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

FS 35 4
H244774-32 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	3680		16.0	mg/kg	4	4080934	HM	09-Aug-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050	0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Toluene*	<0.050	0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Ethylbenzene*	<0.050	0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Total Xylenes*	<0.150	0.150	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Total BTEX	<0.300	0.300	mg/kg	50	4080820	JH	08-Aug-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)	99.0 %	71.5-134	4080820	JH	08-Aug-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	12.0	10.0	mg/kg	1	4080830	MS	08-Aug-24	8015B	
DRO >C10-C28*	<10.0	10.0	mg/kg	1	4080830	MS	08-Aug-24	8015B	
EXT DRO >C28-C36	<10.0	10.0	mg/kg	1	4080830	MS	08-Aug-24	8015B	

Surrogate: 1-Chlorooctane	77.3 %	48.2-134	4080830	MS	08-Aug-24	8015B	
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Surrogate: 1-Chlorooctadecane	88.6 %	49.1-148	4080830	MS	08-Aug-24	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

FS 36 4
H244774-33 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	6320		16.0	mg/kg	4	4080934	HM	09-Aug-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050	0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Toluene*	<0.050	0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Ethylbenzene*	<0.050	0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Total Xylenes*	<0.150	0.150	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Total BTEX	<0.300	0.300	mg/kg	50	4080820	JH	08-Aug-24	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>		100 %		71.5-134	4080820	JH	08-Aug-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0	10.0	mg/kg	1	4080830	MS	08-Aug-24	8015B	
DRO >C10-C28*	<10.0	10.0	mg/kg	1	4080830	MS	08-Aug-24	8015B	
EXT DRO >C28-C36	<10.0	10.0	mg/kg	1	4080830	MS	08-Aug-24	8015B	

<i>Surrogate: 1-Chlorooctane</i>		67.8 %		48.2-134	4080830	MS	08-Aug-24	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>		78.4 %		49.1-148	4080830	MS	08-Aug-24	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

FS 37 4
H244774-34 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	5520		16.0	mg/kg	4	4080934	HM	09-Aug-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050	0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Toluene*	<0.050	0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Ethylbenzene*	<0.050	0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Total Xylenes*	<0.150	0.150	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Total BTEX	<0.300	0.300	mg/kg	50	4080820	JH	08-Aug-24	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>		100 %		71.5-134	4080820	JH	08-Aug-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	<10.0	10.0	mg/kg	1	4080830	MS	08-Aug-24	8015B	
DRO >C10-C28*	<10.0	10.0	mg/kg	1	4080830	MS	08-Aug-24	8015B	
EXT DRO >C28-C36	<10.0	10.0	mg/kg	1	4080830	MS	08-Aug-24	8015B	

<i>Surrogate: 1-Chlorooctane</i>		63.1 %		48.2-134	4080830	MS	08-Aug-24	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>		71.5 %		49.1-148	4080830	MS	08-Aug-24	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

FS 38 4
H244774-35 (Soil)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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Cardinal Laboratories**Inorganic Compounds**

Chloride	2440		16.0	mg/kg	4	4080934	HM	09-Aug-24	4500-Cl-B	
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Volatile Organic Compounds by EPA Method 8021

Benzene*	<0.050	0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Toluene*	<0.050	0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Ethylbenzene*	<0.050	0.050	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Total Xylenes*	<0.150	0.150	mg/kg	50	4080820	JH	08-Aug-24	8021B	
Total BTEX	<0.300	0.300	mg/kg	50	4080820	JH	08-Aug-24	8021B	

Surrogate: 4-Bromofluorobenzene (PID)	101 %	71.5-134	4080820	JH	08-Aug-24	8021B	
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Petroleum Hydrocarbons by GC FID

GRO C6-C10*	13.5	10.0	mg/kg	1	4080830	MS	08-Aug-24	8015B	
DRO >C10-C28*	<10.0	10.0	mg/kg	1	4080830	MS	08-Aug-24	8015B	
EXT DRO >C28-C36	<10.0	10.0	mg/kg	1	4080830	MS	08-Aug-24	8015B	

Surrogate: 1-Chlorooctane	79.2 %	48.2-134	4080830	MS	08-Aug-24	8015B	
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Surrogate: 1-Chlorooctadecane	90.4 %	49.1-148	4080830	MS	08-Aug-24	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

Inorganic Compounds - Quality Control**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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Batch 4080922 - 1:4 DI Water**Blank (4080922-BLK1)**

Prepared & Analyzed: 09-Aug-24

Chloride	ND	16.0	mg/kg						
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LCS (4080922-BS1)

Prepared & Analyzed: 09-Aug-24

Chloride	416	16.0	mg/kg	400	104	80-120			
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LCS Dup (4080922-BSD1)

Prepared & Analyzed: 09-Aug-24

Chloride	432	16.0	mg/kg	400	108	80-120	3.77	20	
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Batch 4080934 - 1:4 DI Water**Blank (4080934-BLK1)**

Prepared & Analyzed: 09-Aug-24

Chloride	ND	16.0	mg/kg						
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LCS (4080934-BS1)

Prepared & Analyzed: 09-Aug-24

Chloride	416	16.0	mg/kg	400	104	80-120			
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LCS Dup (4080934-BSD1)

Prepared & Analyzed: 09-Aug-24

Chloride	432	16.0	mg/kg	400	108	80-120	3.77	20	
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Batch 4080947 - 1:4 DI Water**Blank (4080947-BLK1)**

Prepared & Analyzed: 09-Aug-24

Chloride	ND	16.0	mg/kg						
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LCS (4080947-BS1)

Prepared & Analyzed: 09-Aug-24

Chloride	432	16.0	mg/kg	400	108	80-120			
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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:Reported:
16-Aug-24 16:30**Inorganic Compounds - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4080947 - 1:4 DI Water**LCS Dup (4080947-BSD1)**

Prepared & Analyzed: 09-Aug-24

Chloride	432	16.0	mg/kg	400		108	80-120	0.00	20	
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A handwritten signature in cursive script, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

Volatile Organic Compounds by EPA Method 8021 - Quality Control**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4080812 - Volatiles**Blank (4080812-BLK1)**

Prepared & Analyzed: 08-Aug-24

Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.0571		mg/kg	0.0500		114	71.5-134			

LCS (4080812-BS1)

Prepared & Analyzed: 08-Aug-24

Benzene	2.14	0.050	mg/kg	2.00		107	82.8-130			
Toluene	2.30	0.050	mg/kg	2.00		115	86-128			
Ethylbenzene	2.41	0.050	mg/kg	2.00		120	85.9-128			
m,p-Xylene	5.02	0.100	mg/kg	4.00		125	89-129			
o-Xylene	2.36	0.050	mg/kg	2.00		118	86.1-125			
Total Xylenes	7.38	0.150	mg/kg	6.00		123	88.2-128			
Surrogate: 4-Bromofluorobenzene (PID)	0.0557		mg/kg	0.0500		111	71.5-134			

LCS Dup (4080812-BSD1)

Prepared & Analyzed: 08-Aug-24

Benzene	2.13	0.050	mg/kg	2.00		106	82.8-130	0.649	15.8	
Toluene	2.26	0.050	mg/kg	2.00		113	86-128	1.60	15.9	
Ethylbenzene	2.37	0.050	mg/kg	2.00		118	85.9-128	1.87	16	
m,p-Xylene	4.93	0.100	mg/kg	4.00		123	89-129	1.83	16.2	
o-Xylene	2.31	0.050	mg/kg	2.00		116	86.1-125	2.04	16.7	
Total Xylenes	7.24	0.150	mg/kg	6.00		121	88.2-128	1.90	16.3	
Surrogate: 4-Bromofluorobenzene (PID)	0.0554		mg/kg	0.0500		111	71.5-134			

Batch 4080820 - Volatiles**Blank (4080820-BLK1)**

Prepared & Analyzed: 08-Aug-24

Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							

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Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

Volatile Organic Compounds by EPA Method 8021 - Quality Control**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 4080820 - Volatiles**Blank (4080820-BLK1)**

Prepared & Analyzed: 08-Aug-24

Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.0500		mg/kg	0.0500		100	71.5-134			

LCS (4080820-BS1)

Prepared & Analyzed: 08-Aug-24

Benzene	1.95	0.050	mg/kg	2.00		97.5	82.8-130			
Toluene	1.96	0.050	mg/kg	2.00		98.0	86-128			
Ethylbenzene	2.11	0.050	mg/kg	2.00		105	85.9-128			
m,p-Xylene	4.18	0.100	mg/kg	4.00		104	89-129			
o-Xylene	2.04	0.050	mg/kg	2.00		102	86.1-125			
Total Xylenes	6.22	0.150	mg/kg	6.00		104	88.2-128			
Surrogate: 4-Bromofluorobenzene (PID)	0.0501		mg/kg	0.0500		100	71.5-134			

LCS Dup (4080820-BSD1)

Prepared & Analyzed: 08-Aug-24

Benzene	2.04	0.050	mg/kg	2.00		102	82.8-130	4.64	15.8	
Toluene	2.03	0.050	mg/kg	2.00		101	86-128	3.48	15.9	
Ethylbenzene	2.16	0.050	mg/kg	2.00		108	85.9-128	2.38	16	
m,p-Xylene	4.28	0.100	mg/kg	4.00		107	89-129	2.30	16.2	
o-Xylene	2.09	0.050	mg/kg	2.00		104	86.1-125	2.12	16.7	
Total Xylenes	6.36	0.150	mg/kg	6.00		106	88.2-128	2.24	16.3	
Surrogate: 4-Bromofluorobenzene (PID)	0.0499		mg/kg	0.0500		99.8	71.5-134			

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

Petroleum Hydrocarbons by GC FID - Quality Control**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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Batch 4080807 - General Prep - Organics**Blank (4080807-BLK1)**

Prepared & Analyzed: 08-Aug-24

GRO C6-C10	ND	10.0	mg/kg						
DRO >C10-C28	ND	10.0	mg/kg						
EXT DRO >C28-C36	ND	10.0	mg/kg						
Surrogate: 1-Chlorooctane	45.6		mg/kg	50.0		91.3	48.2-134		
Surrogate: 1-Chlorooctadecane	51.8		mg/kg	50.0		104	49.1-148		

LCS (4080807-BS1)

Prepared & Analyzed: 08-Aug-24

GRO C6-C10	218	10.0	mg/kg	200		109	66.4-123		
DRO >C10-C28	227	10.0	mg/kg	200		113	66.5-118		
Total TPH C6-C28	445	10.0	mg/kg	400		111	77.6-123		
Surrogate: 1-Chlorooctane	54.2		mg/kg	50.0		108	48.2-134		
Surrogate: 1-Chlorooctadecane	59.8		mg/kg	50.0		120	49.1-148		

LCS Dup (4080807-BS1)

Prepared & Analyzed: 08-Aug-24

GRO C6-C10	217	10.0	mg/kg	200		109	66.4-123	0.358	17.7
DRO >C10-C28	224	10.0	mg/kg	200		112	66.5-118	1.19	21
Total TPH C6-C28	442	10.0	mg/kg	400		110	77.6-123	0.780	18.5
Surrogate: 1-Chlorooctane	53.2		mg/kg	50.0		106	48.2-134		
Surrogate: 1-Chlorooctadecane	58.1		mg/kg	50.0		116	49.1-148		

Batch 4080808 - General Prep - Organics**Blank (4080808-BLK1)**

Prepared & Analyzed: 08-Aug-24

GRO C6-C10	ND	10.0	mg/kg						
DRO >C10-C28	ND	10.0	mg/kg						
EXT DRO >C28-C36	ND	10.0	mg/kg						
Surrogate: 1-Chlorooctane	40.7		mg/kg	50.0		81.3	48.2-134		
Surrogate: 1-Chlorooctadecane	47.2		mg/kg	50.0		94.4	49.1-148		

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Celey D. Keene, Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

Petroleum Hydrocarbons by GC FID - Quality Control**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	----------------	-----	--------------	-------

Batch 4080808 - General Prep - Organics**LCS (4080808-BS1)**

Prepared & Analyzed: 08-Aug-24

GRO C6-C10	209	10.0	mg/kg	200		105	66.4-123		
DRO >C10-C28	200	10.0	mg/kg	200		100	66.5-118		
Total TPH C6-C28	410	10.0	mg/kg	400		102	77.6-123		
Surrogate: 1-Chlorooctane	47.8		mg/kg	50.0		95.5	48.2-134		
Surrogate: 1-Chlorooctadecane	54.5		mg/kg	50.0		109	49.1-148		

LCS Dup (4080808-BSD1)

Prepared & Analyzed: 08-Aug-24

GRO C6-C10	211	10.0	mg/kg	200		106	66.4-123	0.979	17.7
DRO >C10-C28	202	10.0	mg/kg	200		101	66.5-118	0.738	21
Total TPH C6-C28	413	10.0	mg/kg	400		103	77.6-123	0.861	18.5
Surrogate: 1-Chlorooctane	47.3		mg/kg	50.0		94.6	48.2-134		
Surrogate: 1-Chlorooctadecane	53.3		mg/kg	50.0		107	49.1-148		

Batch 4080830 - General Prep - Organics**Blank (4080830-BLK1)**

Prepared & Analyzed: 08-Aug-24

GRO C6-C10	ND	10.0	mg/kg						
DRO >C10-C28	ND	10.0	mg/kg						
EXT DRO >C28-C36	ND	10.0	mg/kg						
Surrogate: 1-Chlorooctane	42.1		mg/kg	50.0		84.2	48.2-134		
Surrogate: 1-Chlorooctadecane	48.8		mg/kg	50.0		97.6	49.1-148		

LCS (4080830-BS1)

Prepared & Analyzed: 08-Aug-24

GRO C6-C10	198	10.0	mg/kg	200		99.0	66.4-123		
DRO >C10-C28	194	10.0	mg/kg	200		97.0	66.5-118		
Total TPH C6-C28	392	10.0	mg/kg	400		98.0	77.6-123		
Surrogate: 1-Chlorooctane	49.3		mg/kg	50.0		98.6	48.2-134		
Surrogate: 1-Chlorooctadecane	54.2		mg/kg	50.0		108	49.1-148		

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Celey D. Keene, Lab Director/Quality Manager



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Analytical Results For:

ENSOLUM
3122 NATIONAL PARKS HWY
CARLSBAD NM, 88220

Project: JALMAT YATES UNIT #188
Project Number: 03E2057055
Project Manager: AIMEE COLE
Fax To:

Reported:
16-Aug-24 16:30

Petroleum Hydrocarbons by GC FID - Quality Control**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	--------------------	-------	----------------	------------------	------	----------------	-----	--------------	-------

Batch 4080830 - General Prep - Organics**LCS Dup (4080830-BSD1)**

Prepared & Analyzed: 08-Aug-24

GRO C6-C10	214	10.0	mg/kg	200		107	66.4-123	7.92	17.7	
DRO >C10-C28	212	10.0	mg/kg	200		106	66.5-118	8.94	21	
Total TPH C6-C28	426	10.0	mg/kg	400		107	77.6-123	8.43	18.5	
Surrogate: 1-Chlorooctane	51.2		mg/kg	50.0		102	48.2-134			
Surrogate: 1-Chlorooctadecane	57.0		mg/kg	50.0		114	49.1-148			

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Notes and Definitions

QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
GC-NC1	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are biased high with interfering compounds.
GC-NC	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are reported as ND.
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

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Bill To

ANALYSIS REQUEST

Company Name: Ensolum, LLC
Project Manager: Aimee Cole

Address: 3122 National Parks Hwy
City: Carlsbad

State: NM Zip: 88220

Phone #: (720) 384-7365 Fax #:

Project #: 03E2057055 Project Owner:

Project Name: Talmat Yates Unit #188

Project Location: 32.34554, -103.321776

Sample Name: Mafio Sachis

FOR LAB USE ONLY

Lab I.D. Sample I.D.

Depth (feet)

(G)RAB OR (C)OMP.

CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER :

ACID/BASE:

ICE / COOL

OTHER :

DATE

TIME

BTEX

TPH

Chlorides

1000

1018

1027

1207

1211

1213

1215

1214

1222

1222

1222

1222



101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Ensolum, LLC

Project Manager: Aimee Cole

Address: 3122 National Parks Hwy

City: Carlsbad

Phone #: (720) 384-7365

State: NM Zip: 88220

Project #: 03E2057055

Project Owner:

Project Name: Talmat Yates Unit #188

Project Location: 32.345541, -103.321776

Sample Name: Mario Sanchez

FOR LAB USE ONLY

Lab I.D.

Sample I.D.

Depth (feet)

424474

Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	ANALYSIS REQUEST
11	FS14	4	C	1										8/7/24	12:24	BTEX
12	FS15		C	1											12:07	TPH
13	FS16		C	1											12:09	Chlorides
14	FS17		C	1											12:11	
15	FS18		C	1											12:12	
16	FS19		C	1											12:13	
17	FS20		C	1											12:15	
18	FS21		C	1											12:16	
19	FS22		C	1											12:20	
20	FS23		C	1											12:21	

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Relinquished By:

Date: 8/7/24

Received By:

Relinquished By:

Date: 8/7/24

Received By:

Delivered By: (Circle One)

Sampler - UPS - Bus - Other:

Observed Temp. °C

Corrected Temp. °C

Sample Condition

CHECKED BY: (Initials)

Turnaround Time:

Standard

Bacteria (only) Sample Condition

Corrected Temp. °C

REMARKS: ACOLE@ensolum.com/msrkh3@ensolum.com

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com



101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Ensolum, LLC
Project Manager: Aimee Cole

Address: 3122 National Parks Hwy
City: Carlsbad

State: NM Zip: 88220

Phone #: (720) 384-7365 Fax #:

Project #: 03E2057055 Project Owner:

Project Name: JALMAT YATES UNIT #188

Project Location: 32.39554, -103.321776

Sampler Name: Mario Sackis

FOR LAB USE ONLY

BILL TO

ANALYSIS REQUEST

P.O. #:

Company: Ensolum, LLC

Attn: Aimee Cole

Address:

City:

State:

Zip:

Phone #:

Fax #:

Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV.	SAMPLING																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
					GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :		DATE	TIME																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
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Relinquished By:

Date: 8/7/24

Received By:

Relinquished By:

Date: 8/7/24

Received By:

Relinquished By:

Date: 8/7/24

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Date: 8/7/24

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Date: 8/7/24

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Relinquished By:

Date: 8/7/24

Received By:



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

August 16, 2024

AIMEE COLE

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: JALMAT YATES UNIT #188

Enclosed are the results of analyses for samples received by the laboratory on 08/12/24 11:16.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. 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 accredited 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,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



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: 08/12/2024
 Reported: 08/16/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/12/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: SW02 0-4 (H244849-01)

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	08/13/2024	ND	2.16	108	2.00	2.29	
Toluene*	<0.050	0.050	08/13/2024	ND	2.24	112	2.00	1.42	
Ethylbenzene*	<0.050	0.050	08/13/2024	ND	2.31	115	2.00	1.87	
Total Xylenes*	<0.150	0.150	08/13/2024	ND	6.94	116	6.00	1.96	
Total BTEX	<0.300	0.300	08/13/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 117 % 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	272	16.0	08/14/2024	ND	416	104	400	0.00		

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	08/13/2024	ND	208	104	200	1.63	
DRO >C10-C28*	<10.0	10.0	08/13/2024	ND	198	99.2	200	0.687	
EXT DRO >C28-C36	<10.0	10.0	08/13/2024	ND					

Surrogate: 1-Chlorooctane 88.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 121 % 49.1-148

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Analytical Results For:

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

Received: 08/12/2024
 Reported: 08/16/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/12/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: SW06 0-4 (H244849-02)

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	08/13/2024	ND	2.16	108	2.00	2.29		
Toluene*	<0.050	0.050	08/13/2024	ND	2.24	112	2.00	1.42		
Ethylbenzene*	<0.050	0.050	08/13/2024	ND	2.31	115	2.00	1.87		
Total Xylenes*	<0.150	0.150	08/13/2024	ND	6.94	116	6.00	1.96		
Total BTEx	<0.300	0.300	08/13/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 114 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	240	16.0	08/14/2024	ND	416	104	400	0.00		

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	08/13/2024	ND	208	104	200	1.63	
DRO >C10-C28*	<10.0	10.0	08/13/2024	ND	198	99.2	200	0.687	
EXT DRO >C28-C36	<10.0	10.0	08/13/2024	ND					

Surrogate: 1-Chlorooctane 88.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 116 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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: 08/12/2024
 Reported: 08/16/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/12/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: SW08 0-4 (H244849-03)

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	08/13/2024	ND	2.16	108	2.00	2.29		
Toluene*	<0.050	0.050	08/13/2024	ND	2.24	112	2.00	1.42		
Ethylbenzene*	<0.050	0.050	08/13/2024	ND	2.31	115	2.00	1.87		
Total Xylenes*	<0.150	0.150	08/13/2024	ND	6.94	116	6.00	1.96		
Total BTEX	<0.300	0.300	08/13/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 116 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	144	16.0	08/14/2024	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	08/13/2024	ND	215	108	200	5.23	
DRO >C10-C28*	<10.0	10.0	08/13/2024	ND	210	105	200	7.34	
EXT DRO >C28-C36	<10.0	10.0	08/13/2024	ND					

Surrogate: 1-Chlorooctane 82.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 94.8 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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: 08/12/2024
 Reported: 08/16/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/12/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: SW11 0-4 (H244849-04)

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	08/13/2024	ND	2.16	108	2.00	2.29		
Toluene*	<0.050	0.050	08/13/2024	ND	2.24	112	2.00	1.42		
Ethylbenzene*	<0.050	0.050	08/13/2024	ND	2.31	115	2.00	1.87		
Total Xylenes*	<0.150	0.150	08/13/2024	ND	6.94	116	6.00	1.96		
Total BTEX	<0.300	0.300	08/13/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 117 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	160	16.0	08/14/2024	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	08/13/2024	ND	215	108	200	5.23	
DRO >C10-C28*	<10.0	10.0	08/13/2024	ND	210	105	200	7.34	
EXT DRO >C28-C36	<10.0	10.0	08/13/2024	ND					

Surrogate: 1-Chlorooctane 91.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 103 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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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

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A handwritten signature in cursive script, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Ensolum, LLC

Project Manager: Aimee Cole

Address: 3122 National Parks Hwy

City: Carlsbad

Phone #: (720) 384-7365

Project #: 03E2057055

Project Name: JALMAT Yates Unit #188

Project Location: 3A, 395541, -103.321776

Sampler Name: Mario Sanchez

Bill To

ANALYSIS REQUEST

P.O. #:

Company: Aimee Cole

Attn: Ensolum, LLC

Address:

City:

State: Zip:

Phone #:

Fax #:

FOR LAB USE ONLY

Lab I.D. Sample I.D.

Depth (feet)

1244844

SW03
SW06
SW08
SW11

0-4
0-4
0-4
0-4

(G)RAB OR (C)OMP.
CONTAINERS
GROUNDWATER
WASTEWATER
SOIL
OIL
SLUDGE
OTHER :
ACID/BASE:
ICE / COOL
OTHER :

DATE TIME
8/12/24 0905
0908
0938
0954

BTEX
TPH
Chlorides

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Relinquished By:

Date: 8/12/24

Received By:

Relinquished By:

Date: 8/12/24

Received By:

Delivered By: (Circle One)

Sampler - UPS - Bus - Other:

Observed Temp. °C

Corrected Temp. °C

Sample Condition

Cool Intact

CHECKED BY: (Initials)

Turnaround Time:

Standard

Rush

Bacteria (only)

Cool Intact

Sample Condition

Observed Temp. °C

Corrected Temp. °C

Verbal Result: ☐ Yes ☐ No Add'l Phone #:

All Results are emailed. Please provide Email address:

REMARKS: acole@ensolum.com / msarkis@ensolum.com

* Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com



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

August 13, 2024

AIMEE COLE

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: JALMAT YATES UNIT #188

Enclosed are the results of analyses for samples received by the laboratory on 08/07/24 15:56.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. 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 accredited 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,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive, flowing style.

Celey D. Keene

Lab Director/Quality Manager



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: 08/07/2024
 Reported: 08/13/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/07/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: SW 01 0-4 (H244774-01)

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	08/08/2024	ND	2.14	107	2.00	0.649	
Toluene*	<0.050	0.050	08/08/2024	ND	2.30	115	2.00	1.60	
Ethylbenzene*	<0.050	0.050	08/08/2024	ND	2.41	120	2.00	1.87	
Total Xylenes*	<0.150	0.150	08/08/2024	ND	7.38	123	6.00	1.90	
Total BTEX	<0.300	0.300	08/08/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 115 % 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	192	16.0	08/09/2024	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	08/08/2024	ND	218	109	200	0.358	
DRO >C10-C28*	<10.0	10.0	08/08/2024	ND	227	113	200	1.19	
EXT DRO >C28-C36	<10.0	10.0	08/08/2024	ND					

Surrogate: 1-Chlorooctane 81.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 89.5 % 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: 08/07/2024
 Reported: 08/13/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/07/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: SW 07 0-4 (H244774-02)

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	08/08/2024	ND	2.14	107	2.00	0.649		
Toluene*	<0.050	0.050	08/08/2024	ND	2.30	115	2.00	1.60		
Ethylbenzene*	<0.050	0.050	08/08/2024	ND	2.41	120	2.00	1.87		
Total Xylenes*	<0.150	0.150	08/08/2024	ND	7.38	123	6.00	1.90		
Total BTEX	<0.300	0.300	08/08/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 116 % 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	5720	16.0	08/09/2024	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	08/08/2024	ND	218	109	200	0.358	
DRO >C10-C28*	<10.0	10.0	08/08/2024	ND	227	113	200	1.19	
EXT DRO >C28-C36	<10.0	10.0	08/08/2024	ND					

Surrogate: 1-Chlorooctane 77.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 86.2 % 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: 08/07/2024
 Reported: 08/13/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/07/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: SW 10 0-4 (H244774-03)

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	08/08/2024	ND	2.14	107	2.00	0.649		
Toluene*	<0.050	0.050	08/08/2024	ND	2.30	115	2.00	1.60		
Ethylbenzene*	<0.050	0.050	08/08/2024	ND	2.41	120	2.00	1.87		
Total Xylenes*	<0.150	0.150	08/08/2024	ND	7.38	123	6.00	1.90		
Total BTEX	<0.300	0.300	08/08/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 114 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	480	16.0	08/09/2024	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	08/08/2024	ND	218	109	200	0.358	
DRO >C10-C28*	<10.0	10.0	08/08/2024	ND	227	113	200	1.19	
EXT DRO >C28-C36	<10.0	10.0	08/08/2024	ND					

Surrogate: 1-Chlorooctane 81.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 91.3 % 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: 08/07/2024
 Reported: 08/13/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/07/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: SW 12 0-4 (H244774-04)

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	08/08/2024	ND	2.14	107	2.00	0.649		
Toluene*	<0.050	0.050	08/08/2024	ND	2.30	115	2.00	1.60		
Ethylbenzene*	<0.050	0.050	08/08/2024	ND	2.41	120	2.00	1.87		
Total Xylenes*	<0.150	0.150	08/08/2024	ND	7.38	123	6.00	1.90		
Total BTEX	<0.300	0.300	08/08/2024	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	128	16.0	08/09/2024	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	08/08/2024	ND	218	109	200	0.358	
DRO >C10-C28*	<10.0	10.0	08/08/2024	ND	227	113	200	1.19	
EXT DRO >C28-C36	<10.0	10.0	08/08/2024	ND					

Surrogate: 1-Chlorooctane 77.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 85.7 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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: 08/07/2024
 Reported: 08/13/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/07/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 08 4 (H244774-05)

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	08/08/2024	ND	2.14	107	2.00	0.649	
Toluene*	<0.050	0.050	08/08/2024	ND	2.30	115	2.00	1.60	GC-NC
Ethylbenzene*	0.242	0.050	08/08/2024	ND	2.41	120	2.00	1.87	
Total Xylenes*	0.759	0.150	08/08/2024	ND	7.38	123	6.00	1.90	GC-NC1
Total BTEX	1.00	0.300	08/08/2024	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID) 134 % 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	20400	16.0	08/09/2024	ND	432	108	400	0.00	QM-07	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	38.1	10.0	08/08/2024	ND	218	109	200	0.358	
DRO >C10-C28*	523	10.0	08/08/2024	ND	227	113	200	1.19	
EXT DRO >C28-C36	124	10.0	08/08/2024	ND					

Surrogate: 1-Chlorooctane 88.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 95.9 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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: 08/07/2024
 Reported: 08/13/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/07/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 09 4 (H244774-06)

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	08/08/2024	ND	2.14	107	2.00	0.649		
Toluene*	<0.050	0.050	08/08/2024	ND	2.30	115	2.00	1.60		
Ethylbenzene*	<0.050	0.050	08/08/2024	ND	2.41	120	2.00	1.87		
Total Xylenes*	<0.150	0.150	08/08/2024	ND	7.38	123	6.00	1.90		
Total BTEX	<0.300	0.300	08/08/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 118 % 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	3840	16.0	08/09/2024	ND	432	108	400	0.00		

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	08/08/2024	ND	218	109	200	0.358	
DRO >C10-C28*	<10.0	10.0	08/08/2024	ND	227	113	200	1.19	
EXT DRO >C28-C36	<10.0	10.0	08/08/2024	ND					

Surrogate: 1-Chlorooctane 75.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 85.4 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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: 08/07/2024
 Reported: 08/13/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/07/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 10 4 (H244774-07)

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	08/08/2024	ND	2.14	107	2.00	0.649		
Toluene*	<0.050	0.050	08/08/2024	ND	2.30	115	2.00	1.60		
Ethylbenzene*	<0.050	0.050	08/08/2024	ND	2.41	120	2.00	1.87		
Total Xylenes*	<0.150	0.150	08/08/2024	ND	7.38	123	6.00	1.90		
Total BTEX	<0.300	0.300	08/08/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 115 % 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	6400	16.0	08/09/2024	ND	432	108	400	0.00		

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	08/08/2024	ND	209	105	200	0.979	
DRO >C10-C28*	<10.0	10.0	08/08/2024	ND	200	100	200	0.738	
EXT DRO >C28-C36	<10.0	10.0	08/08/2024	ND					

Surrogate: 1-Chlorooctane 69.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 81.6 % 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: 08/07/2024
 Reported: 08/13/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/07/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 11 4 (H244774-08)

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	08/08/2024	ND	2.14	107	2.00	0.649		
Toluene*	<0.050	0.050	08/08/2024	ND	2.30	115	2.00	1.60		
Ethylbenzene*	<0.050	0.050	08/08/2024	ND	2.41	120	2.00	1.87		
Total Xylenes*	<0.150	0.150	08/08/2024	ND	7.38	123	6.00	1.90		
Total BTEX	<0.300	0.300	08/08/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 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	14200	16.0	08/09/2024	ND	432	108	400	0.00		

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	08/08/2024	ND	209	105	200	0.979	
DRO >C10-C28*	<10.0	10.0	08/08/2024	ND	200	100	200	0.738	
EXT DRO >C28-C36	<10.0	10.0	08/08/2024	ND					

Surrogate: 1-Chlorooctane 70.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 83.2 % 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: 08/07/2024
 Reported: 08/13/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/07/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 12 4 (H244774-09)

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	08/08/2024	ND	2.14	107	2.00	0.649		
Toluene*	<0.050	0.050	08/08/2024	ND	2.30	115	2.00	1.60		
Ethylbenzene*	<0.050	0.050	08/08/2024	ND	2.41	120	2.00	1.87		
Total Xylenes*	<0.150	0.150	08/08/2024	ND	7.38	123	6.00	1.90		
Total BTEX	<0.300	0.300	08/08/2024	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	11400	16.0	08/09/2024	ND	432	108	400	0.00		

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	08/08/2024	ND	209	105	200	0.979	
DRO >C10-C28*	<10.0	10.0	08/08/2024	ND	200	100	200	0.738	
EXT DRO >C28-C36	<10.0	10.0	08/08/2024	ND					

Surrogate: 1-Chlorooctane 64.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 74.6 % 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: 08/07/2024
 Reported: 08/13/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/07/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 13 4 (H244774-10)

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	08/08/2024	ND	2.14	107	2.00	0.649		
Toluene*	<0.050	0.050	08/08/2024	ND	2.30	115	2.00	1.60		
Ethylbenzene*	<0.050	0.050	08/08/2024	ND	2.41	120	2.00	1.87		
Total Xylenes*	<0.150	0.150	08/08/2024	ND	7.38	123	6.00	1.90		
Total BTEx	<0.300	0.300	08/08/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 114 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	5460	16.0	08/09/2024	ND	432	108	400	0.00		

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	08/08/2024	ND	209	105	200	0.979	
DRO >C10-C28*	<10.0	10.0	08/08/2024	ND	200	100	200	0.738	
EXT DRO >C28-C36	<10.0	10.0	08/08/2024	ND					

Surrogate: 1-Chlorooctane 67.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 78.1 % 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: 08/07/2024
 Reported: 08/13/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/07/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 14 4 (H244774-11)

BTX 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	08/08/2024	ND	2.14	107	2.00	0.649	
Toluene*	<0.050	0.050	08/08/2024	ND	2.30	115	2.00	1.60	
Ethylbenzene*	<0.050	0.050	08/08/2024	ND	2.41	120	2.00	1.87	
Total Xylenes*	<0.150	0.150	08/08/2024	ND	7.38	123	6.00	1.90	
Total BTX	<0.300	0.300	08/08/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 115 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	304	16.0	08/09/2024	ND	432	108	400	0.00		

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	08/08/2024	ND	209	105	200	0.979	
DRO >C10-C28*	<10.0	10.0	08/08/2024	ND	200	100	200	0.738	
EXT DRO >C28-C36	<10.0	10.0	08/08/2024	ND					

Surrogate: 1-Chlorooctane 64.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 73.9 % 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: 08/07/2024
 Reported: 08/13/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/07/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 15 4 (H244774-12)

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	08/08/2024	ND	2.14	107	2.00	0.649		
Toluene*	<0.050	0.050	08/08/2024	ND	2.30	115	2.00	1.60		
Ethylbenzene*	<0.050	0.050	08/08/2024	ND	2.41	120	2.00	1.87		
Total Xylenes*	<0.150	0.150	08/08/2024	ND	7.38	123	6.00	1.90		
Total BTEX	<0.300	0.300	08/08/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 115 % 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	16400	16.0	08/09/2024	ND	432	108	400	0.00		

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	08/08/2024	ND	209	105	200	0.979	
DRO >C10-C28*	149	10.0	08/08/2024	ND	200	100	200	0.738	
EXT DRO >C28-C36	22.6	10.0	08/08/2024	ND					

Surrogate: 1-Chlorooctane 70.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 87.6 % 49.1-148

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Analytical Results For:

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

Received: 08/07/2024
 Reported: 08/13/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/07/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 16 4 (H244774-13)

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	08/08/2024	ND	2.14	107	2.00	0.649		
Toluene*	<0.050	0.050	08/08/2024	ND	2.30	115	2.00	1.60		
Ethylbenzene*	<0.050	0.050	08/08/2024	ND	2.41	120	2.00	1.87		
Total Xylenes*	<0.150	0.150	08/08/2024	ND	7.38	123	6.00	1.90		
Total BTEX	<0.300	0.300	08/08/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 113 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	3640	16.0	08/09/2024	ND	432	108	400	0.00		

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	08/08/2024	ND	209	105	200	0.979	
DRO >C10-C28*	<10.0	10.0	08/08/2024	ND	200	100	200	0.738	
EXT DRO >C28-C36	<10.0	10.0	08/08/2024	ND					

Surrogate: 1-Chlorooctane 73.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 85.8 % 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: 08/07/2024
 Reported: 08/13/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/07/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 17 4 (H244774-14)

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	08/08/2024	ND	2.14	107	2.00	0.649		
Toluene*	<0.050	0.050	08/08/2024	ND	2.30	115	2.00	1.60		
Ethylbenzene*	<0.050	0.050	08/08/2024	ND	2.41	120	2.00	1.87		
Total Xylenes*	<0.150	0.150	08/08/2024	ND	7.38	123	6.00	1.90		
Total BTEX	<0.300	0.300	08/08/2024	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	6660	16.0	08/09/2024	ND	432	108	400	0.00		

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	08/08/2024	ND	209	105	200	0.979	
DRO >C10-C28*	<10.0	10.0	08/08/2024	ND	200	100	200	0.738	
EXT DRO >C28-C36	<10.0	10.0	08/08/2024	ND					

Surrogate: 1-Chlorooctane 70.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 81.7 % 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: 08/07/2024
 Reported: 08/13/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/07/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 18 4 (H244774-15)

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	08/08/2024	ND	2.14	107	2.00	0.649		
Toluene*	<0.050	0.050	08/08/2024	ND	2.30	115	2.00	1.60		
Ethylbenzene*	<0.050	0.050	08/08/2024	ND	2.41	120	2.00	1.87		
Total Xylenes*	<0.150	0.150	08/08/2024	ND	7.38	123	6.00	1.90		
Total BTEX	<0.300	0.300	08/08/2024	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	14600	16.0	08/09/2024	ND	432	108	400	0.00		

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	08/08/2024	ND	209	105	200	0.979	
DRO >C10-C28*	<10.0	10.0	08/08/2024	ND	200	100	200	0.738	
EXT DRO >C28-C36	<10.0	10.0	08/08/2024	ND					

Surrogate: 1-Chlorooctane 72.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 84.3 % 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: 08/07/2024
 Reported: 08/13/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/07/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 19 4 (H244774-16)

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	08/08/2024	ND	2.14	107	2.00	0.649		
Toluene*	<0.050	0.050	08/08/2024	ND	2.30	115	2.00	1.60		
Ethylbenzene*	<0.050	0.050	08/08/2024	ND	2.41	120	2.00	1.87		
Total Xylenes*	<0.150	0.150	08/08/2024	ND	7.38	123	6.00	1.90		
Total BTEX	<0.300	0.300	08/08/2024	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	14200	16.0	08/09/2024	ND	432	108	400	0.00	

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	08/08/2024	ND	209	105	200	0.979	
DRO >C10-C28*	<10.0	10.0	08/08/2024	ND	200	100	200	0.738	
EXT DRO >C28-C36	<10.0	10.0	08/08/2024	ND					

Surrogate: 1-Chlorooctane 66.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 76.8 % 49.1-148

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Analytical Results For:

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

Received: 08/07/2024
 Reported: 08/13/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/07/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 20 4 (H244774-17)

BTX 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	08/09/2024	ND	2.14	107	2.00	0.649	
Toluene*	<0.050	0.050	08/09/2024	ND	2.30	115	2.00	1.60	
Ethylbenzene*	<0.050	0.050	08/09/2024	ND	2.41	120	2.00	1.87	
Total Xylenes*	<0.150	0.150	08/09/2024	ND	7.38	123	6.00	1.90	
Total BTEX	<0.300	0.300	08/09/2024	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	17200	16.0	08/09/2024	ND	432	108	400	0.00		

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	08/08/2024	ND	209	105	200	0.979	
DRO >C10-C28*	<10.0	10.0	08/08/2024	ND	200	100	200	0.738	
EXT DRO >C28-C36	<10.0	10.0	08/08/2024	ND					

Surrogate: 1-Chlorooctane 67.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 77.9 % 49.1-148

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Analytical Results For:

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

Received: 08/07/2024
 Reported: 08/13/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/07/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 21 4 (H244774-18)

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	08/09/2024	ND	2.14	107	2.00	0.649		
Toluene*	<0.050	0.050	08/09/2024	ND	2.30	115	2.00	1.60		
Ethylbenzene*	<0.050	0.050	08/09/2024	ND	2.41	120	2.00	1.87		
Total Xylenes*	<0.150	0.150	08/09/2024	ND	7.38	123	6.00	1.90		
Total BTEX	<0.300	0.300	08/09/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 114 % 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	704	16.0	08/09/2024	ND	432	108	400	0.00		

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	08/08/2024	ND	209	105	200	0.979	
DRO >C10-C28*	<10.0	10.0	08/08/2024	ND	200	100	200	0.738	
EXT DRO >C28-C36	<10.0	10.0	08/08/2024	ND					

Surrogate: 1-Chlorooctane 68.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 77.0 % 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: 08/07/2024
 Reported: 08/13/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/07/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 22 4 (H244774-19)

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	08/09/2024	ND	2.14	107	2.00	0.649		
Toluene*	<0.050	0.050	08/09/2024	ND	2.30	115	2.00	1.60		
Ethylbenzene*	<0.050	0.050	08/09/2024	ND	2.41	120	2.00	1.87		
Total Xylenes*	<0.150	0.150	08/09/2024	ND	7.38	123	6.00	1.90		
Total BTEX	<0.300	0.300	08/09/2024	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	7600	16.0	08/09/2024	ND	432	108	400	0.00		

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	08/08/2024	ND	209	105	200	0.979	
DRO >C10-C28*	<10.0	10.0	08/08/2024	ND	200	100	200	0.738	
EXT DRO >C28-C36	<10.0	10.0	08/08/2024	ND					

Surrogate: 1-Chlorooctane 76.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 88.7 % 49.1-148

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Analytical Results For:

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

Received: 08/07/2024
 Reported: 08/13/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/07/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 23 4 (H244774-20)

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	08/09/2024	ND	2.14	107	2.00	0.649		
Toluene*	<0.050	0.050	08/09/2024	ND	2.30	115	2.00	1.60		
Ethylbenzene*	<0.050	0.050	08/09/2024	ND	2.41	120	2.00	1.87		
Total Xylenes*	<0.150	0.150	08/09/2024	ND	7.38	123	6.00	1.90		
Total BTEX	<0.300	0.300	08/09/2024	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	2680	16.0	08/09/2024	ND	432	108	400	0.00		

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	08/08/2024	ND	209	105	200	0.979	
DRO >C10-C28*	62.0	10.0	08/08/2024	ND	200	100	200	0.738	
EXT DRO >C28-C36	<10.0	10.0	08/08/2024	ND					

Surrogate: 1-Chlorooctane 69.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 83.3 % 49.1-148

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Analytical Results For:

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

Received: 08/07/2024
 Reported: 08/13/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/07/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 24 4 (H244774-21)

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	08/08/2024	ND	1.95	97.5	2.00	4.64		
Toluene*	<0.050	0.050	08/08/2024	ND	1.96	98.0	2.00	3.48		
Ethylbenzene*	<0.050	0.050	08/08/2024	ND	2.11	105	2.00	2.38		
Total Xylenes*	<0.150	0.150	08/08/2024	ND	6.22	104	6.00	2.24		
Total BTEX	<0.300	0.300	08/08/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 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	512	16.0	08/09/2024	ND	432	108	400	0.00		

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	08/08/2024	ND	209	105	200	0.979	
DRO >C10-C28*	<10.0	10.0	08/08/2024	ND	200	100	200	0.738	
EXT DRO >C28-C36	<10.0	10.0	08/08/2024	ND					

Surrogate: 1-Chlorooctane 74.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 85.6 % 49.1-148

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Analytical Results For:

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

Received: 08/07/2024
 Reported: 08/13/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/07/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 25 4 (H244774-22)

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	08/08/2024	ND	1.95	97.5	2.00	4.64		
Toluene*	<0.050	0.050	08/08/2024	ND	1.96	98.0	2.00	3.48		
Ethylbenzene*	<0.050	0.050	08/08/2024	ND	2.11	105	2.00	2.38		
Total Xylenes*	<0.150	0.150	08/08/2024	ND	6.22	104	6.00	2.24		
Total BTEX	<0.300	0.300	08/08/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	24000	16.0	08/09/2024	ND	432	108	400	0.00		

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	08/08/2024	ND	209	105	200	0.979	
DRO >C10-C28*	<10.0	10.0	08/08/2024	ND	200	100	200	0.738	
EXT DRO >C28-C36	<10.0	10.0	08/08/2024	ND					

Surrogate: 1-Chlorooctane 68.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 78.0 % 49.1-148

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Analytical Results For:

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

Received: 08/07/2024
 Reported: 08/13/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/07/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 26 4 (H244774-23)

BTX 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	08/08/2024	ND	1.95	97.5	2.00	4.64		
Toluene*	<0.050	0.050	08/08/2024	ND	1.96	98.0	2.00	3.48		
Ethylbenzene*	<0.050	0.050	08/08/2024	ND	2.11	105	2.00	2.38		
Total Xylenes*	<0.150	0.150	08/08/2024	ND	6.22	104	6.00	2.24		
Total BTX	<0.300	0.300	08/08/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.7 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2800	16.0	08/09/2024	ND	432	108	400	0.00		

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	08/08/2024	ND	209	105	200	0.979	
DRO >C10-C28*	<10.0	10.0	08/08/2024	ND	200	100	200	0.738	
EXT DRO >C28-C36	<10.0	10.0	08/08/2024	ND					

Surrogate: 1-Chlorooctane 68.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 76.7 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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: 08/07/2024
 Reported: 08/13/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/07/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 27 4 (H244774-24)

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	08/08/2024	ND	1.95	97.5	2.00	4.64		
Toluene*	<0.050	0.050	08/08/2024	ND	1.96	98.0	2.00	3.48		
Ethylbenzene*	<0.050	0.050	08/08/2024	ND	2.11	105	2.00	2.38		
Total Xylenes*	<0.150	0.150	08/08/2024	ND	6.22	104	6.00	2.24		
Total BTEX	<0.300	0.300	08/08/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 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	1730	16.0	08/09/2024	ND	432	108	400	0.00		

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	08/08/2024	ND	209	105	200	0.979	
DRO >C10-C28*	<10.0	10.0	08/08/2024	ND	200	100	200	0.738	
EXT DRO >C28-C36	<10.0	10.0	08/08/2024	ND					

Surrogate: 1-Chlorooctane 69.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 80.0 % 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: 08/07/2024
 Reported: 08/13/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/07/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 28 4 (H244774-25)

BTX 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	08/08/2024	ND	1.95	97.5	2.00	4.64		
Toluene*	<0.050	0.050	08/08/2024	ND	1.96	98.0	2.00	3.48		
Ethylbenzene*	<0.050	0.050	08/08/2024	ND	2.11	105	2.00	2.38		
Total Xylenes*	<0.150	0.150	08/08/2024	ND	6.22	104	6.00	2.24		
Total BTX	<0.300	0.300	08/08/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2320	16.0	08/09/2024	ND	416	104	400	3.77	QM-07	

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	08/08/2024	ND	209	105	200	0.979	
DRO >C10-C28*	<10.0	10.0	08/08/2024	ND	200	100	200	0.738	
EXT DRO >C28-C36	<10.0	10.0	08/08/2024	ND					

Surrogate: 1-Chlorooctane 67.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 77.5 % 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: 08/07/2024
 Reported: 08/13/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/07/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 29 4 (H244774-26)

BTX 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	08/08/2024	ND	1.95	97.5	2.00	4.64		
Toluene*	<0.050	0.050	08/08/2024	ND	1.96	98.0	2.00	3.48		
Ethylbenzene*	<0.050	0.050	08/08/2024	ND	2.11	105	2.00	2.38		
Total Xylenes*	<0.150	0.150	08/08/2024	ND	6.22	104	6.00	2.24		
Total BTX	<0.300	0.300	08/08/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2530	16.0	08/09/2024	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	08/09/2024	ND	209	105	200	0.979	
DRO >C10-C28*	<10.0	10.0	08/09/2024	ND	200	100	200	0.738	
EXT DRO >C28-C36	<10.0	10.0	08/09/2024	ND					

Surrogate: 1-Chlorooctane 61.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 71.8 % 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: 08/07/2024
 Reported: 08/13/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/07/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 30 4 (H244774-27)

BTX 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	08/08/2024	ND	1.95	97.5	2.00	4.64		
Toluene*	<0.050	0.050	08/08/2024	ND	1.96	98.0	2.00	3.48		
Ethylbenzene*	<0.050	0.050	08/08/2024	ND	2.11	105	2.00	2.38		
Total Xylenes*	<0.150	0.150	08/08/2024	ND	6.22	104	6.00	2.24		
Total BTX	<0.300	0.300	08/08/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.4 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	10400	16.0	08/09/2024	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	08/08/2024	ND	198	99.0	200	7.92	
DRO >C10-C28*	<10.0	10.0	08/08/2024	ND	194	97.0	200	8.94	
EXT DRO >C28-C36	<10.0	10.0	08/08/2024	ND					

Surrogate: 1-Chlorooctane 63.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 76.0 % 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: 08/07/2024
 Reported: 08/13/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/07/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 31 4 (H244774-28)

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	08/08/2024	ND	1.95	97.5	2.00	4.64		
Toluene*	<0.050	0.050	08/08/2024	ND	1.96	98.0	2.00	3.48		
Ethylbenzene*	<0.050	0.050	08/08/2024	ND	2.11	105	2.00	2.38		
Total Xylenes*	<0.150	0.150	08/08/2024	ND	6.22	104	6.00	2.24		
Total BTEX	<0.300	0.300	08/08/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 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	6260	16.0	08/09/2024	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	08/08/2024	ND	198	99.0	200	7.92	
DRO >C10-C28*	<10.0	10.0	08/08/2024	ND	194	97.0	200	8.94	
EXT DRO >C28-C36	<10.0	10.0	08/08/2024	ND					

Surrogate: 1-Chlorooctane 71.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 81.3 % 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: 08/07/2024
 Reported: 08/13/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/07/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 32 4 (H244774-29)

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	08/08/2024	ND	1.95	97.5	2.00	4.64	
Toluene*	<0.050	0.050	08/08/2024	ND	1.96	98.0	2.00	3.48	
Ethylbenzene*	<0.050	0.050	08/08/2024	ND	2.11	105	2.00	2.38	
Total Xylenes*	<0.150	0.150	08/08/2024	ND	6.22	104	6.00	2.24	
Total BTEX	<0.300	0.300	08/08/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.3 % 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	2640	16.0	08/09/2024	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	08/08/2024	ND	198	99.0	200	7.92	
DRO >C10-C28*	<10.0	10.0	08/08/2024	ND	194	97.0	200	8.94	
EXT DRO >C28-C36	<10.0	10.0	08/08/2024	ND					

Surrogate: 1-Chlorooctane 75.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 86.4 % 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: 08/07/2024
 Reported: 08/13/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/07/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 33 4 (H244774-30)

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	08/08/2024	ND	1.95	97.5	2.00	4.64		
Toluene*	<0.050	0.050	08/08/2024	ND	1.96	98.0	2.00	3.48		
Ethylbenzene*	<0.050	0.050	08/08/2024	ND	2.11	105	2.00	2.38		
Total Xylenes*	<0.150	0.150	08/08/2024	ND	6.22	104	6.00	2.24		
Total BTEX	<0.300	0.300	08/08/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.4 % 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	224	16.0	08/09/2024	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	08/08/2024	ND	198	99.0	200	7.92	
DRO >C10-C28*	<10.0	10.0	08/08/2024	ND	194	97.0	200	8.94	
EXT DRO >C28-C36	<10.0	10.0	08/08/2024	ND					

Surrogate: 1-Chlorooctane 75.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 86.1 % 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: 08/07/2024
 Reported: 08/13/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/07/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 34 4 (H244774-31)

BTX 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	08/08/2024	ND	1.95	97.5	2.00	4.64		
Toluene*	<0.050	0.050	08/08/2024	ND	1.96	98.0	2.00	3.48		
Ethylbenzene*	<0.050	0.050	08/08/2024	ND	2.11	105	2.00	2.38		
Total Xylenes*	<0.150	0.150	08/08/2024	ND	6.22	104	6.00	2.24		
Total BTX	<0.300	0.300	08/08/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.1 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1120	16.0	08/09/2024	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	08/08/2024	ND	198	99.0	200	7.92	
DRO >C10-C28*	<10.0	10.0	08/08/2024	ND	194	97.0	200	8.94	
EXT DRO >C28-C36	<10.0	10.0	08/08/2024	ND					

Surrogate: 1-Chlorooctane 71.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 83.0 % 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: 08/07/2024
 Reported: 08/13/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/07/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 35 4 (H244774-32)

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	08/08/2024	ND	1.95	97.5	2.00	4.64		
Toluene*	<0.050	0.050	08/08/2024	ND	1.96	98.0	2.00	3.48		
Ethylbenzene*	<0.050	0.050	08/08/2024	ND	2.11	105	2.00	2.38		
Total Xylenes*	<0.150	0.150	08/08/2024	ND	6.22	104	6.00	2.24		
Total BTEX	<0.300	0.300	08/08/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.0 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	3680	16.0	08/09/2024	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*	12.0	10.0	08/08/2024	ND	198	99.0	200	7.92	
DRO >C10-C28*	<10.0	10.0	08/08/2024	ND	194	97.0	200	8.94	
EXT DRO >C28-C36	<10.0	10.0	08/08/2024	ND					

Surrogate: 1-Chlorooctane 77.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 88.6 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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: 08/07/2024
 Reported: 08/13/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/07/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 36 4 (H244774-33)

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	08/08/2024	ND	1.95	97.5	2.00	4.64		
Toluene*	<0.050	0.050	08/08/2024	ND	1.96	98.0	2.00	3.48		
Ethylbenzene*	<0.050	0.050	08/08/2024	ND	2.11	105	2.00	2.38		
Total Xylenes*	<0.150	0.150	08/08/2024	ND	6.22	104	6.00	2.24		
Total BTEX	<0.300	0.300	08/08/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	6320	16.0	08/09/2024	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	08/08/2024	ND	198	99.0	200	7.92	
DRO >C10-C28*	<10.0	10.0	08/08/2024	ND	194	97.0	200	8.94	
EXT DRO >C28-C36	<10.0	10.0	08/08/2024	ND					

Surrogate: 1-Chlorooctane 67.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 78.4 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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: 08/07/2024
 Reported: 08/13/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/07/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 37 4 (H244774-34)

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	08/08/2024	ND	1.95	97.5	2.00	4.64		
Toluene*	<0.050	0.050	08/08/2024	ND	1.96	98.0	2.00	3.48		
Ethylbenzene*	<0.050	0.050	08/08/2024	ND	2.11	105	2.00	2.38		
Total Xylenes*	<0.150	0.150	08/08/2024	ND	6.22	104	6.00	2.24		
Total BTEX	<0.300	0.300	08/08/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 100 % 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	5520	16.0	08/09/2024	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	08/08/2024	ND	198	99.0	200	7.92	
DRO >C10-C28*	<10.0	10.0	08/08/2024	ND	194	97.0	200	8.94	
EXT DRO >C28-C36	<10.0	10.0	08/08/2024	ND					

Surrogate: 1-Chlorooctane 63.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 71.5 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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: 08/07/2024
 Reported: 08/13/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/07/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 38 4 (H244774-35)

BTX 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	08/08/2024	ND	1.95	97.5	2.00	4.64		
Toluene*	<0.050	0.050	08/08/2024	ND	1.96	98.0	2.00	3.48		
Ethylbenzene*	<0.050	0.050	08/08/2024	ND	2.11	105	2.00	2.38		
Total Xylenes*	<0.150	0.150	08/08/2024	ND	6.22	104	6.00	2.24		
Total BTX	<0.300	0.300	08/08/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	2440	16.0	08/09/2024	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*	13.5	10.0	08/08/2024	ND	198	99.0	200	7.92	
DRO >C10-C28*	<10.0	10.0	08/08/2024	ND	194	97.0	200	8.94	
EXT DRO >C28-C36	<10.0	10.0	08/08/2024	ND					

Surrogate: 1-Chlorooctane 79.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 90.4 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
QR-03	The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
GC-NC1	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are biased high with interfering compounds.
GC-NC	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are reported as ND.
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

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A handwritten signature in black ink, appearing to read "Celey D. Keene", is written over a horizontal line.

Celey D. Keene, Lab Director/Quality Manager



101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

1 of 4

Company Name: Ensolum, LLC

Project Manager: Aimee Cole

Address: 3122 National Parks Hwy

City: Carlsbad

Phone #: (720) 384-7365

Project #: 03E2057055

Project Name: Talmat Yates Unit #188

Project Location: 32.34554, -103.321776

Sampler Name: Mario Sackis

Bill To

ANALYSIS REQUEST

P.O. #:

Company: Ensolum, LLC

Attn: Aimee Cole

Address:

City:

State: Zip:

Phone #:

Fax #:

FOR LAB USE ONLY

Lab I.D. Sample I.D.

Depth (feet)

(G)RAB OR (C)OMP.

CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER :

ACID/BASE:

ICE / COOL

OTHER :

DATE TIME

BTEX

TPH

Chlorides

Sw01	0-4	C	1	✓	8/12/24	0940	✓	✓	✓										
Sw07	0-4	C	1	✓	1000		✓	✓	✓										
Sw10	0-4	C	1	✓	1018		✓	✓	✓										
Sw12	0-4	C	1	✓	1027		✓	✓	✓										
FS08	4	C	1	✓	1207		✓	✓	✓										
FS09	4	C	1	✓	1211		✓	✓	✓										
FS10	4	C	1	✓	1213		✓	✓	✓										
FS11	4	C	1	✓	1215		✓	✓	✓										
FS12	4	C	1	✓	1219		✓	✓	✓										
FS13	4	C	1	✓	1222		✓	✓	✓										

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Relinquished By:

Date: 8/12/24

Received By:

Verbal Result: ☐ Yes ☐ No Add'l Phone #:

All Results are emailed. Please provide Email address:

REMARKS: acole@ensolum.com / msathis@ensolum.com

Relinquished By:

Date: 8/12/24

Received By:

Time:

Date:

Time:

Delivered By: (Circle One)

Observed Temp.: °C

Sample Condition

CHECKED BY: (Initials)

Turnaround Time:

Standard

☐

Bacteria (only)

Sample Condition

Observed Temp.: °C

Sampler - UPS - Bus - Other:

Corrected Temp.: °C

Cool Intact

Yes ☐ No ☐

Thermometer ID

Correction Factor

☐

Cool Intact

Yes ☐ No ☐

Corrected Temp.: °C

FORM 0001R 3-22-10/07/21

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

2 of 2



101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Ensolum, LLC						
Project Manager: Aimee Cole						BILL TO
						ANALYSIS REQUEST
Address: 3122 National Parks Hwy City: Carlsbad State: NM Zip: 88220 Phone #: (720) 384-7365 Fax #: Project #: D3E2057055 Project Owner:						P.O. #:
Project Name: JAMES YATES UNIT #188 Project Location: 30.395541, -103.321776						Company: ENSOLUM, LLC Attn: AIMEE COLE
Sample Name: Mario SARKIS						Address:
						City:
						State: Zip:
						Phone #:
						Fax #:
FOR LAB USE ONLY						SAMPLING
Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP. # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER : ACID/BASE: ICE / COOL OTHER :	MATRIX <input checked="" type="checkbox"/>	PRESERV.	
H244774	FS24	4	C 1	V	DATE	TIME
21	FS25		C 1	V	8/24	12:23
22	FS26		C 1	V		12:27
23	FS27		C 1	V		12:29
24	FS28		C 1	V		12:27
25	FS29		C 1	V		12:31
26	FS30		C 1	V		12:32
27	FS31		C 1	V		12:33
28	FS32		C 1	V		12:34
29	FS33		C 1	V		12:34
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Relinquished By: [Signature] Date: 8/24 Received By: [Signature]						
Reinquinshed By: [Blank] Time: 1:50 PM Date: [Blank] Received By: [Blank]						
Delivered By: (Circle One) Observed Temp.: °C Sample Condition Cool Intact Yes No Checked BY: (Initials) Turnaround Time: Standard Rush Bacteria (only) Sample Condition Cool Intact Yes No Corrected Temp.: °C						
Sampler - UPS - Bus - Other: Corrected Temp.: °C						
REMARKS: ocle@ensolum.com/mario.sarkis@ensolum.com						



101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Ensolum, LLC		P.O. #:		ANALYSIS REQUEST
Project Manager: Aimee Cole				
Address: 3122 National Parks Hwy		Company: ENSOLUM, LLC		
City: Carlsbad	State: NM	Attn: AIMEE COLE		
Phone #: (720) 384-7365	Fax #:	Address:		
Project #: 03F2057055	Project Owner:	City:		
Project Name: JALMAT YATES UNIT #188		State:		
Project Location: 32.3955N, -103.3217W		Zip:		
Sampler Name: Mario SARKIS		Phone #:		
FOR LAB USE ONLY		Fax #:		

Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP. # CONTAINERS	MATRIX	PRESERV.	SAMPLING	BTEX	TPH	Chlorides										
#24474	E534	4'	C1	GROUNDWATER		DATE	TIME												
	E535		C1	WASTEWATER		8/2/24	1235	V	V	V									
	E536		C1	SOIL			1237	V	V	V									
	E537		C1	OIL			1238	V	V	V									
	E538		C1	SLUDGE			1239	V	V	V									
				OTHER :			1240	V	V	V									
				ACID/BASE:															
				ICE / COOL															
				OTHER :															

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Relinquished By:	Date: 8/1/24	Received By:	Verbal Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Add'l Phone #:
Time: 1:50			All Results are emailed. Please provide Email address:
Date: 8/1/24			Acole@ensolum.com/msarkis@ensolum.com
REMARKS:			

Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C Corrected Temp. °C	Sample Condition <input type="checkbox"/> Cool Intact <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> YES <input type="checkbox"/> No <input type="checkbox"/> NO	CHECKED BY: (Initials)	Turnaround Time: Standard Rush Thermometer ID #4437-1830ic	Bacteria (only) <input type="checkbox"/> Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> YES <input type="checkbox"/> No <input type="checkbox"/> NO	Sample Condition Observed Temp. °C Corrected Temp. °C
--	--	---	----------------------------------	---	--	--



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

August 01, 2024

AIMEE COLE

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: JALMAT YATES UNIT #188

Enclosed are the results of analyses for samples received by the laboratory on 07/29/24 14:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. 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 accredited 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,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager



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: 07/29/2024
 Reported: 08/01/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 07/29/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 01 4' (H244494-01)

BTX 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	07/30/2024	ND	2.08	104	2.00	1.66	
Toluene*	<0.050	0.050	07/30/2024	ND	2.19	109	2.00	2.39	
Ethylbenzene*	<0.050	0.050	07/30/2024	ND	2.27	113	2.00	2.23	
Total Xylenes*	<0.150	0.150	07/30/2024	ND	6.94	116	6.00	2.46	
Total BTX	<0.300	0.300	07/30/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 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	2320	16.0	07/30/2024	ND	448	112	400	0.00	

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	07/30/2024	ND	183	91.5	200	0.994	
DRO >C10-C28*	<10.0	10.0	07/30/2024	ND	174	87.0	200	1.60	
EXT DRO >C28-C36	<10.0	10.0	07/30/2024	ND					

Surrogate: 1-Chlorooctane 93.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 86.4 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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: 07/29/2024
 Reported: 08/01/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 07/29/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 02 4' (H244494-02)

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	07/30/2024	ND	2.08	104	2.00	1.66		
Toluene*	<0.050	0.050	07/30/2024	ND	2.19	109	2.00	2.39		
Ethylbenzene*	<0.050	0.050	07/30/2024	ND	2.27	113	2.00	2.23		
Total Xylenes*	<0.150	0.150	07/30/2024	ND	6.94	116	6.00	2.46		
Total BTEX	<0.300	0.300	07/30/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 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	1470	16.0	07/30/2024	ND	448	112	400	0.00		

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	07/30/2024	ND	183	91.5	200	0.994	
DRO >C10-C28*	<10.0	10.0	07/30/2024	ND	174	87.0	200	1.60	
EXT DRO >C28-C36	<10.0	10.0	07/30/2024	ND					

Surrogate: 1-Chlorooctane 107 % 48.2-134

Surrogate: 1-Chlorooctadecane 102 % 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: 07/29/2024
 Reported: 08/01/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 07/29/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 03 4' (H244494-03)

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	07/30/2024	ND	2.08	104	2.00	1.66		
Toluene*	<0.050	0.050	07/30/2024	ND	2.19	109	2.00	2.39		
Ethylbenzene*	<0.050	0.050	07/30/2024	ND	2.27	113	2.00	2.23		
Total Xylenes*	<0.150	0.150	07/30/2024	ND	6.94	116	6.00	2.46		
Total BTEx	<0.300	0.300	07/30/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 111 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	784	16.0	07/30/2024	ND	448	112	400	0.00		

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	07/30/2024	ND	183	91.5	200	0.994	
DRO >C10-C28*	<10.0	10.0	07/30/2024	ND	174	87.0	200	1.60	
EXT DRO >C28-C36	<10.0	10.0	07/30/2024	ND					

Surrogate: 1-Chlorooctane 71.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 68.4 % 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: 07/29/2024
 Reported: 08/01/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 07/29/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 04 5' (H244494-04)

BTX 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	07/30/2024	ND	2.08	104	2.00	1.66	
Toluene*	<0.050	0.050	07/30/2024	ND	2.19	109	2.00	2.39	
Ethylbenzene*	<0.050	0.050	07/30/2024	ND	2.27	113	2.00	2.23	
Total Xylenes*	<0.150	0.150	07/30/2024	ND	6.94	116	6.00	2.46	
Total BTX	<0.300	0.300	07/30/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	3280	16.0	07/30/2024	ND	448	112	400	0.00		

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	07/30/2024	ND	183	91.5	200	0.994	
DRO >C10-C28*	<10.0	10.0	07/30/2024	ND	174	87.0	200	1.60	
EXT DRO >C28-C36	<10.0	10.0	07/30/2024	ND					

Surrogate: 1-Chlorooctane 96.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 90.4 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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: 07/29/2024
 Reported: 08/01/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 07/29/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 05 4' (H244494-05)

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	07/30/2024	ND	2.08	104	2.00	1.66		
Toluene*	<0.050	0.050	07/30/2024	ND	2.19	109	2.00	2.39		
Ethylbenzene*	<0.050	0.050	07/30/2024	ND	2.27	113	2.00	2.23		
Total Xylenes*	<0.150	0.150	07/30/2024	ND	6.94	116	6.00	2.46		
Total BTEx	<0.300	0.300	07/30/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 112 % 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	3120	16.0	07/30/2024	ND	448	112	400	0.00		

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	07/30/2024	ND	183	91.5	200	0.994	
DRO >C10-C28*	<10.0	10.0	07/30/2024	ND	174	87.0	200	1.60	
EXT DRO >C28-C36	<10.0	10.0	07/30/2024	ND					

Surrogate: 1-Chlorooctane 89.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 84.3 % 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: 07/29/2024
 Reported: 08/01/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 07/29/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 06 5' (H244494-06)

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	07/30/2024	ND	2.08	104	2.00	1.66		
Toluene*	<0.050	0.050	07/30/2024	ND	2.19	109	2.00	2.39		
Ethylbenzene*	<0.050	0.050	07/30/2024	ND	2.27	113	2.00	2.23		
Total Xylenes*	<0.150	0.150	07/30/2024	ND	6.94	116	6.00	2.46		
Total BTEx	<0.300	0.300	07/30/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 111 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	7700	16.0	07/30/2024	ND	448	112	400	0.00		

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	07/30/2024	ND	183	91.5	200	0.994	
DRO >C10-C28*	<10.0	10.0	07/30/2024	ND	174	87.0	200	1.60	
EXT DRO >C28-C36	<10.0	10.0	07/30/2024	ND					

Surrogate: 1-Chlorooctane 96.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 91.9 % 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: 07/29/2024
 Reported: 08/01/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 07/29/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 07 5' (H244494-07)

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	07/30/2024	ND	2.08	104	2.00	1.66		
Toluene*	<0.050	0.050	07/30/2024	ND	2.19	109	2.00	2.39		
Ethylbenzene*	<0.050	0.050	07/30/2024	ND	2.27	113	2.00	2.23		
Total Xylenes*	<0.150	0.150	07/30/2024	ND	6.94	116	6.00	2.46		
Total BTEX	<0.300	0.300	07/30/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 111 % 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	3520	16.0	07/30/2024	ND	448	112	400	0.00		

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	07/30/2024	ND	183	91.5	200	0.994	
DRO >C10-C28*	<10.0	10.0	07/30/2024	ND	174	87.0	200	1.60	
EXT DRO >C28-C36	<10.0	10.0	07/30/2024	ND					

Surrogate: 1-Chlorooctane 94.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 91.2 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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: 07/29/2024
 Reported: 08/01/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 07/29/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Alyssa Parras

Sample ID: FS 08 4' (H244494-08)

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	07/30/2024	ND	2.08	104	2.00	1.66		
Toluene*	<0.050	0.050	07/30/2024	ND	2.19	109	2.00	2.39		
Ethylbenzene*	<0.050	0.050	07/30/2024	ND	2.27	113	2.00	2.23		
Total Xylenes*	<0.150	0.150	07/30/2024	ND	6.94	116	6.00	2.46		
Total BTEX	<0.300	0.300	07/30/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 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	5600	16.0	07/30/2024	ND	448	112	400	0.00		

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	07/30/2024	ND	183	91.5	200	0.994	
DRO >C10-C28*	<10.0	10.0	07/30/2024	ND	174	87.0	200	1.60	
EXT DRO >C28-C36	<10.0	10.0	07/30/2024	ND					

Surrogate: 1-Chlorooctane 106 % 48.2-134

Surrogate: 1-Chlorooctadecane 102 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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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

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]



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

August 28, 2024

AIMEE COLE

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: JALMAT YATES UNIT #188

Enclosed are the results of analyses for samples received by the laboratory on 08/22/24 12:34.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. 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 accredited 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,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



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: 08/22/2024
 Reported: 08/28/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: TOPSOIL (H245122-01)

BTX 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	08/23/2024	ND	2.04	102	2.00	1.26		
Toluene*	<0.050	0.050	08/23/2024	ND	1.97	98.7	2.00	0.495		
Ethylbenzene*	<0.050	0.050	08/23/2024	ND	1.97	98.5	2.00	0.414		
Total Xylenes*	<0.150	0.150	08/23/2024	ND	5.87	97.8	6.00	0.150		
Total BTX	<0.300	0.300	08/23/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 96.0 % 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	<16.0	16.0	08/23/2024	ND	432	108	400	0.00		

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	08/23/2024	ND	219	109	200	2.23	
DRO >C10-C28*	<10.0	10.0	08/23/2024	ND	215	108	200	7.74	
EXT DRO >C28-C36	<10.0	10.0	08/23/2024	ND					

Surrogate: 1-Chlorooctane 90.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 99.6 % 49.1-148

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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: 08/22/2024
 Reported: 08/28/2024
 Project Name: JALMAT YATES UNIT #188
 Project Number: 03E2057055
 Project Location: MAVERICK 32.395541,-103.321776

Sampling Date: 08/22/2024
 Sampling Type: Soil
 Sampling Condition: Cool & Intact
 Sample Received By: Shalyn Rodriguez

Sample ID: CALICHE (H245122-02)

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	08/23/2024	ND	2.04	102	2.00	1.26		
Toluene*	<0.050	0.050	08/23/2024	ND	1.97	98.7	2.00	0.495		
Ethylbenzene*	<0.050	0.050	08/23/2024	ND	1.97	98.5	2.00	0.414		
Total Xylenes*	<0.150	0.150	08/23/2024	ND	5.87	97.8	6.00	0.150		
Total BTEx	<0.300	0.300	08/23/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.3 % 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	112	16.0	08/23/2024	ND	432	108	400	0.00		

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	08/23/2024	ND	219	109	200	2.23	
DRO >C10-C28*	<10.0	10.0	08/23/2024	ND	215	108	200	7.74	
EXT DRO >C28-C36	<10.0	10.0	08/23/2024	ND					

Surrogate: 1-Chlorooctane 84.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 93.1 % 49.1-148

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*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- 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

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A handwritten signature in black ink, appearing to read "C. D. Keene".

Celey D. Keene, Lab Director/Quality Manager



101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Ensolum, LLC				BILL TO				ANALYSIS REQUEST			
Project Manager: Aimee Cole				P.O. #:							
Address: 3122 National Parks Hwy				Company: Ensolum, LLC							
City: Carlsbad				State: NM				Attn: Aimee Cole			
Phone #: (720) 384-7365				Fax #:				Address:			
Project #: 03E2057055				Project Owner:				City:			
Project Name: Jalmat Yates Unit 188				State:				Zip:			
Project Location: 32.345541, -103.321776				Phone #:							
Sampler Name: Maito Sotchi				Fax #:							
FOR LAB USE ONLY											
Lab I.D.		Sample I.D.		Depth (feet)		(G)RAB OR (C)OMP.		# CONTAINERS		MATRIX	
H45122		TOP SOIL		61		G1		1		GROUNDWATER	
2		Caliche		61		G1		1		WASTEWATER	
										SOIL	
										OIL	
										SLUDGE	
										OTHER :	
										ACID/BASE:	
										ICE / COOL	
										OTHER :	
										DATE	
										TIME	
										BTEx	
										TPH	
										Chlorides	
APPS											
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Relinquished By: [Signature]				Date: 8/22/24				Received By: [Signature]			
Relinquished By: [Signature]				Date: 8/24				Received By: [Signature]			
Delivered By: (Circle One)				Observed Temp. °C				Sample Condition			
Sampler - UPS - Bus - Other:				Corrected Temp. °C				Cool Intact			
				4.10				Yes			
				4.00				No			
								CHECKED BY: [Signature]			
								Turnaround Time: Standard Rush			
								Thermometer ID #413			
								Correction Factor -0.5°C			
								Bacteria (only) Sample Condition			
								Cool Intact			
								Observed Temp. °C			
								Corrected Temp. °C			
REMARKS: All Results are emailed. Please provide Email address: acole@ensolum.com / msan@ensolum.com											



APPENDIX E

NMOCD Correspondence

From: [Rodgers, Scott, EMNRD](#)
To: [Aimee Cole](#)
Subject: RE: [EXTERNAL] Maverick Permian, LLC - Extension Request - Jalmat 188 (Incident Number NAPP2235373931)
Date: Wednesday, June 12, 2024 1:49:36 PM
Attachments: [image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)

You don't often get email from scott.rodgers@emnrd.nm.gov. [Learn why this is important](#)

[**EXTERNAL EMAIL**]

Your time extension request is approved. Remediation Due date has been updated to August 10, 2024 within the incident page.

Please keep a copy of this communication for inclusion within the appropriate reporting documentation.

The OCD requires a copy of all correspondence related to remedial activities be included in all proposals, weekly/monthly/quarterly/semi-annual/annual, or final closure reports. Correspondence reporting requirements may include, but not limited to, time extension requests, sample event notifications, and variance requests.

If you have any questions, please contact me via email at your convenience.

Thank you.

Regards,
Scott

Scott Rodgers • Environmental Specialist – Adv.
Environmental Bureau
EMNRD - Oil Conservation Division
8801 Horizon Blvd. NE, Suite 260 | Albuquerque, NM 87113
505.469.1830 | scott.rodgers@emnrd.nm.gov
<http://www.emnrd.nm.gov/oqd>



From: Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>
Sent: Wednesday, June 12, 2024 11:34 AM

To: Rodgers, Scott, EMNRD <Scott.Rodgers@emnrd.nm.gov>
Cc: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Subject: FW: [EXTERNAL] Maverick Permian, LLC - Extension Request - Jalmat 188 (Incident Number NAPP2235373931)

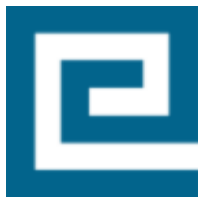
From: Aimee Cole <acole@ensolum.com>
Sent: Wednesday, June 12, 2024 11:24 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Subject: [EXTERNAL] Maverick Permian, LLC - Extension Request - Jalmat 188 (Incident Number NAPP2235373931)

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

To Whom It May Concern,

Maverick Permian, LLC (Maverick) is requesting an extension of the current June 11, 2024, deadline for submitting a report required in 9.15.29.12.B.(1) NMAC detailing remedial actions at the Jalmat 188 (Incident Number NAPP2235373931). A remediation work plan was approved by the NMOCD, private landowner, and NMSLO. Excavation of impacted soil was delayed due to internal logistics but is scheduled to be completed during June/July 2024. In order to complete the excavation activities, review the soil sample laboratory analytical results, and prepare a closure report, Maverick requests a 60-day extension until August 10, 2024.

Thank you,



Aimee Cole

Senior Managing Scientist

720-384-7365

Ensolum, LLC

in f 

From: [Buchanan, Michael, EMNRD](#)
To: [Aimee Cole](#)
Subject: RE: [EXTERNAL] FW: The Oil Conservation Division (OCD) has approved the application, Application ID: 301733
Date: Wednesday, June 12, 2024 9:52:41 AM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)

[**EXTERNAL EMAIL **]

Hi Aimee,

You're welcome, glad I could help clear some of that up. As far as the clay liner installation goes, the OCD isn't necessarily approving it, but that is something that has been agreed on with the landowner and Maverick, and OCD has been notified. Is the clay locally sourced/ mined from the area?

Thank you,

From: Aimee Cole <acole@ensolum.com>
Sent: Wednesday, June 12, 2024 9:35 AM
To: Buchanan, Michael, EMNRD <Michael.Buchanan@emnrd.nm.gov>
Subject: RE: [EXTERNAL] FW: The Oil Conservation Division (OCD) has approved the application, Application ID: 301733

Thank you for your response!

You are right about the boring log, I see that now.

The liner is only being installed because the private landowner is requiring it, remediation will meet NMOCD requirements without the liner.

Thank you for confirming the 500 ft² sampling variance for the floor samples.



Aimee Cole
Associate Principal
720-384-7365
Ensolum, LLC
in f X

From: Buchanan, Michael, EMNRD <Michael.Buchanan@emnrd.nm.gov>
Sent: Wednesday, June 12, 2024 8:12 AM
To: Aimee Cole <acole@ensolum.com>
Subject: RE: [EXTERNAL] FW: The Oil Conservation Division (OCD) has approved the application, Application ID: 301733

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[**EXTERNAL EMAIL **]

Good morning, Aimee

There was conflicting information in the Soil Sampling Log for DTW, as it stated, "No water was observed within the soil boring after at least 24 hours." Please ensure in the future that the information matches, as I see in the narrative that it states 72 hours.

Maverick Permian is approved to collect samples every 500 sq. ft for confirmation sampling.

Liners that are placed on top of contamination as a remediation variance in an effort solely to ensure contamination doesn't migrate further is not equal or better protection of public health or the environment, as the contamination will remain in place. **Variances with a liner request solely to reduce cleanup will be denied.** OCD may also require landowner concurrence for any variance request to permanently leave contamination in place. OCD will not be approving liners at 4 feet as a remediation method.

Thank you, please feel free to reach out with further questions or concerns.

Mike Buchanan

From: Aimee Cole <acole@ensolum.com>

Sent: Wednesday, June 12, 2024 8:41 AM

To: Buchanan, Michael, EMNRD <Michael.Buchanan@emnrd.nm.gov>

Subject: [EXTERNAL] FW: The Oil Conservation Division (OCD) has approved the application, Application ID: 301733

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Hi Michael,

We are scheduling excavation activities for incident ID nAPP2235373931 and I am reviewing your below conditional approval of the work plan.

Can you please clarify the conditions and confirm if the floor samples are approved to be collected every 500 square feet?

The Remediation Plan is Conditionally Approved.

- **Boreholes drilled to determine DTW are required to be open for a minimum of 72 hours.**
 - This was already completed and documented in the work plan.
- **All samples must be analyzed for all constituents listed in Table I of 19.15.29.12 NMAC.**
 - Agree and stated in the work plan.
- **Floor confirmation samples should be delineated/excavated to meet closure criteria standards for site assessment/characterization/proven depth to water**

determination.

- Agree and stated in the work plan.
- Please clarify if floor samples are approved to be collected every 500 square feet as proposed in the work plan.
 - The excavation will be 4 feet deep and approximately 20,000 square feet (50 floor samples vs 100 floor samples).
 - The release was vertically delineated to below the most stringent Table 1 Closure Criteria
 - Depth to groundwater was confirmed to be >100 feet
 - Floor samples will be collected at a depth of 4 feet and will meet Closure Criteria for depth to groundwater >100 feet.
 - A clay liner will be installed in the excavation over the floor samples.
- **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.**
 - Agree and stated in the work plan.
- **All off pad areas must meet reclamation standards set forth in the OCD Spill Rule.**
 - Agree and stated in the work plan.

Thank you for your help!



Aimee Cole
Associate Principal
720-384-7365
Ensolum, LLC
in f X

From: OCDOnline@state.nm.us <OCDOnline@state.nm.us>

Sent: Wednesday, March 13, 2024 8:46 AM

To: Aimee Cole <acole@ensolum.com>

Subject: The Oil Conservation Division (OCD) has approved the application, Application ID: 301733

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[**EXTERNAL EMAIL**]

To whom it may concern (c/o Aimee Cole for Maverick Permian LLC),

The OCD has approved the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nAPP2235373931, with the following conditions:

- **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.**

The signed C-141 can be found in the OCD Online: Imaging under the incident ID (n#).

If you have any questions regarding this application, please contact me.

Thank you,
Michael Buchanan
Environmental Specialist
505-490-0798
Michael.Buchanan@emnrd.nm.gov

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

From: [Bradley Blevins](#)
To: [Aimee Cole](#)
Cc: [Bradley Blevins](#)
Subject: RE: Jalmat Yates Unit #188 - Remediation Work Plan (Maverick Permian, LLC)
Date: Monday, March 18, 2024 7:30:15 AM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)

[**EXTERNAL EMAIL**]

Yes, please proceed.

From: Aimee Cole <acole@ensolum.com>
Sent: Wednesday, March 13, 2024 11:38 AM
To: Bradley Blevins <Bradley@merchantlivestock.com>
Subject: RE: Jalmat Yates Unit #188 - Remediation Work Plan (Maverick Permian, LLC)

Hi Bradley,

I just want to make sure you have reviewed and approve of the attached work plan before we proceed with excavation activities. The work plan was revised to include the installation of a liner per your request.



Aimee Cole
Associate Principal
720-384-7365
Ensolum, LLC
in f t

From: Bradley Blevins <Bradley@merchantlivestock.com>
Sent: Monday, January 22, 2024 12:55 PM
To: Aimee Cole <acole@ensolum.com>
Cc: Bryce.Wagoner@mavresources.com
Subject: RE: Jalmat Yates Unit #188 - Remediation Work Plan (Maverick Permian, LLC)

[**EXTERNAL EMAIL**]

Received, thank you.

From: Aimee Cole <acole@ensolum.com>
Sent: Monday, January 22, 2024 11:51 AM
To: Bradley Blevins <Bradley@merchantlivestock.com>
Cc: Bryce.Wagoner@mavresources.com
Subject: RE: Jalmat Yates Unit #188 - Remediation Work Plan (Maverick Permian, LLC)

Hi Bradley,

Please see the attached revised Remediation Work Plan for the Jalmat Yates Unit 188 (Incident Number NAPP2235373931).

The work plan has been revised to include installation of a clay liner over the historical pit (liner will be installed within the open excavation at 4 feet bgs prior to backfilling).

Thank you,



Aimee Cole

Senior Managing Scientist

720-384-7365

Ensolum, LLC

in f 

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS

Action 381314

QUESTIONS

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 381314
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2235373931
Incident Name	NAPP2235373931 JALMAT YATES UNIT #188 @ 30-025-37580
Incident Type	Other
Incident Status	Reclamation Report 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.

District I

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Phone:(575) 748-1283 Fax:(575) 748-9720

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District IV

1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS, Page 2

Action 381314

QUESTIONS (continued)

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID:
	331199
	Action Number:
	381314
Action Type:	
[C-141] Reclamation Report C-141 (C-141-v-Reclamation)	

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	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
--	---

District I

1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720

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

QUESTIONS, Page 3

Action 381314

QUESTIONS (continued)

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID:	331199
	Action Number:	381314
	Action Type:	[C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS**Site Characterization**

Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 100 and 500 (ft.)
What method was used to determine the depth to ground water	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, Page 4

Action 381314

QUESTIONS (continued)

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID:	331199
	Action Number:	381314
	Action Type:	[C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Remediation Plan (continued)	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
<i>(Select all answers below that apply.)</i>	
(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	No
OR is the off-site disposal site, to be used, an NMED facility	No
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	No
(In Situ) Soil Vapor Extraction	No
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	No
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	No
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	No
Ground Water Abatement pursuant to 19.15.30 NMAC	No
OTHER (Non-listed remedial process)	No
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Aimee Cole Email: acole@ensolum.com Date: 01/09/2024
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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QUESTIONS, Page 5

Action 381314

QUESTIONS (continued)

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 381314
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

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, Page 6

Action 381314

QUESTIONS (continued)

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID:	331199
	Action Number:	381314
	Action Type:	[C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	372060
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	08/12/2024
What was the (estimated) number of samples that were to be gathered	40
What was the sampling surface area in square feet	10000

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	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	20300
What was the total volume (cubic yards) remediated	3900
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	20300
What was the total volume (in cubic yards) reclaimed	3000
Summarize any additional remediation activities not included by answers (above)	Remediation was completed in accordance with the approved Work Plan for this site.

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (in .pdf format) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

I hereby agree and sign off to the above statement	Name: Aimee Cole Email: acole@ensolum.com Date: 09/06/2024
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QUESTIONS, Page 7

Action 381314

QUESTIONS (continued)

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID:	331199
	Action Number:	381314
	Action Type:	[C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS**Reclamation Report**

Only answer the questions in this group if all reclamation steps have been completed.

Requesting a reclamation approval with this submission	Yes
What was the total reclamation surface area (in square feet) for this site	20300
What was the total volume of replacement material (in cubic yards) for this site	3000

Per Paragraph (1) of Subsection D of 19.15.29.13 NMAC the reclamation must contain a minimum of four feet of non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, or other test methods approved by the division. The soil cover must include a top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater.

Is the soil top layer complete and is it suitable material to establish vegetation	Yes
On what (estimated) date will (or was) the reseedling commence(d)	09/06/2024

Summarize any additional reclamation activities not included by answers (above)	See attached report
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The responsible party must attach information demonstrating they have complied with all applicable reclamation requirements and any conditions or directives of the OCD. This demonstration should be in the form of attachments (in .pdf format) including a scaled site map, any proposed reseedling plans or relevant field notes, photographs of reclaimed area, and a narrative of the reclamation activities. Refer to 19.15.29.13 NMAC.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

I hereby agree and sign off to the above statement	Name: Aimee Cole Email: acole@ensolum.com Date: 09/06/2024
--	--

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QUESTIONS, Page 8

Action 381314

QUESTIONS (continued)

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 381314
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

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

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CONDITIONS

Action 381314

CONDITIONS

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID:
	331199
	Action Number:
	381314
Action Type:	
[C-141] Reclamation Report C-141 (C-141-v-Reclamation)	

CONDITIONS

Created By	Condition	Condition Date
amaxwell	The reclamation report has been approved pursuant to 19.15.29.13 E. NMAC. The acceptance of this 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; or if the location fails to revegetate properly. In addition, OCD approval does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.	9/12/2024
amaxwell	A revegetation report will not be accepted until revegetation of the release area, including areas reasonably needed for production or drilling activities, is complete and meet the requirements of 19.15.29.13 NMAC. Areas not reasonably needed for production or drilling activities will still need to be reclaimed and revegetated as early as practicable.	9/12/2024
amaxwell	All revegetation activities will need to be documented and included in the revegetation report. The revegetation report will need to include: An executive summary of the revegetation activities including: Seed mix, Method of seeding, dates of when the release area was reseeded, information pertinent to inspections, information about any amendments added to the soil, information on how the vegetative cover established meets the life-form ratio of plus or minus fifty percent of pre-disturbance levels and a total percent plant cover of at least seventy percent of pre-disturbance levels, excluding noxious weeds per 19.15.29.13 D.(3) NMAC, and any additional information; a scaled Site Map including area that was revegetated in square feet; and pictures of the revegetated areas during reseeding activities, inspections, and final pictures when revegetation is achieved.	9/12/2024