

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

State of New Mexico
Energy Minerals and Natural
Resources Department

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

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

Incident ID	nAPP2229057488
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	Armstrong Energy Corporation	OGRID	1092
Contact Name	Jeffery Tew	Contact Telephone	575-625-2222
Contact email	jtew@aecnrm.com	Incident # (assigned by OCD)	nAPP2229057488
Contact mailing address	PO Box 1973, Roswell, NM 88202		

Location of Release Source

Latitude 32.942522 Longitude -103.304927
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	SV Kim Harris #003	Site Type	Oil Well
Date Release Discovered	10/16/22	API# (if applicable)	30-025-33894

Unit Letter	Section	Township	Range	County
B	12	16S	36E	Lea

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (Name: Clayton Revocable Trust)

Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 18	Volume Recovered (bbls) 8
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Developed a hole in the water leg of the heater treater that resulted in a release of produced water.

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Was this a major release as defined by 19.15.29.7(A) NMAC? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Notice given by Kyle Alpers to Kerry Fortner on 10/17/22 via phone.	

Initial Response

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

<input checked="checked" type="checkbox"/> The source of the release has been stopped. <input checked="checked" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="checked" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="checked" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: <u>Jeffery Tew</u>	Title: <u>Operations Engineer</u>
Signature: <u><i>Jeffery Tew</i></u>	Date: <u>12/16/2022</u>
email: <u>jtew@aecnm.com</u>	Telephone: <u>575-625-2222</u>
<u>OCD Only</u>	
Received by: _____	Date: _____

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Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release?	>51 (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: *Each of the following items must be included in the report.*


- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☒ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☒ Boring or excavation logs
- ☒ Photographs including date and GIS information
- ☒ Topographic/Aerial maps
- ☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico
Oil Conservation Division

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I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Jeffery Tew Title: Operations Engineer
Signature:  Date: 12/16/2022
email: jtew@aecnmt.com Telephone: 575-625-2222

OCD Only

Received by: Jocelyn Harimon Date: 12/16/2022

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Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

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

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

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Jeffery Tew Title: Operations Engineer
Signature: *Jeffery Tew* Date: 12/16/2022
email: jtew@aecnm.com Telephone: 575-625-2222

OCD Only

Received by: Jocelyn Harimon Date: 12/16/2022

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

Closure Approved by: *Jennifer Nobui* Date: 01/13/2023
Printed Name: Jennifer Nobui Title: Environmental Specialist A



December 16, 2022

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
SV Kim Harris #003
Incident Number nAPP2229057488
Lea County, New Mexico**

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of Armstrong Energy Corporation (AEC), has prepared this *Closure Request* to document assessment, delineation, excavation, and soil sampling activities performed at the SV Kim Harris #003 (Site), located in Unit B, Section 12, Township 16 South, Range 36 East, in Lea County, New Mexico (**Figure 1**). The purpose of the Site assessment, delineation, excavation, and soil sampling activities was to remediate impacts to soil resulting from a release of produced water from a hole in the water leg of the heater treater. Based on field observations and screening activities, excavation activities, and laboratory analytical results, AEC is submitting this *Closure Request* for Incident Number nAPP2229057488.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Lea County, New Mexico (32.942522° N, 103.304927° W) and is associated with oil and gas exploration and production operations on private land. **Figure 2** depicts the Site.

On October 16, 2022, a hole developed in the water flowline associated with the heater treater, which resulted in the release of 18 barrels (bbls) of produced water into the earthen secondary containment berm; approximately 8 bbls of fluid was recovered. AEC notified the New Mexico Oil Conservation Division (NMOCD) of the release via phone call on October 17, 2022 and subsequently through the Notification of Release portal on October 21, 2022 through a Release Notification Form C-141 (Form C-141). NMOCD assigned the release with Incident Number nAPP2229057488.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized according to Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Results from the characterization desktop review are presented on page 3 of the Form C-141, Site Assessment/Characterization. Potential site receptors are identified on **Figure 1**.

Depth to groundwater at the Site is estimated to be between 51 feet and 100 feet below ground surface (bgs) based on a data collected from New Mexico Office of the State Engineer (NM OSE) well permit L 06618, which is located 0.19 miles north of the Site. The well has a depth to water of 60 feet

bgs and total well depth of 95 feet bgs. In addition, there are five wells within ½-mile of the Site with groundwater measurements within the last 25 years indicating depth to water in the region is between 60 feet and 110 feet bgs. The Well Records and Logs are included in **Appendix A**.

The closest continuously flowing or significant watercourse to the Site is greater than 300 feet away. 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).

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) Combined: 1,000 mg/kg
- TPH: 2,500 mg/kg
- Chloride: 10,000 mg/kg

SITE ASSESSMENT ACTIVITIES

On October 28, 2022, Site assessment activities were conducted to evaluate the release based on information provided by AEC and visual observations during the assessment. Ensolum personnel advanced three boreholes (BH01 through BH03) inside the secondary containment and release extent and three boreholes (PH04 through PH06) and one pothole (PH08, associated with Incident Number NAPP2218940551) outside of the release to define the lateral extent of the release. The boreholes were advanced via hand auger and the pothole was advanced via backhoe to depths ranging from 1-foot to 4 feet bgs. Refusal was observed throughout the assessment area due to shallow, competent bedrock, at depths ranging from 1-foot to 4 feet bgs. Discrete soil samples were collected from each location and field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride utilizing Hach® chloride QuanTab® test strips, respectively. The soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on **Figure 2**. Photographic documentation was conducted during the Site visit. A photographic log is included in **Appendix B**. Field screening results and observations from the potholes were documented on lithologic/soil sampling logs, which are included as **Appendix C**.

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

Laboratory analytical results for delineation soil sample BH03 indicated the aggregate concentration of TPH-GRO and TPH-DRO exceeded the Site Closure Criteria. Soil from borehole BH01, BH02, and BH04 through BH06 and pothole PH08 indicated concentrations of all COCs were compliant with the Closure Criteria. In addition, pothole PH08 and borehole BH06, located at the edge of the well pad to the north and east, respectively, indicated COC concentrations were in compliance with the strictest

Table I Closure Criteria, confirming the release did not extend off pad. Laboratory analytical results depicted on **Figure 2** and are summarized in **Table 1**. The complete laboratory analytical report is included as **Appendix d**.

Due to the presence of impacted soil exceeding the Closure Criteria was detected during delineation activities, excavation of the impacted soil appeared warranted. As the pad is currently in use for oil and gas production activities and waste-containing soil was not detected in areas not in use for oil and gas production (pasture), reclamation activities related to this release did not appear warranted.

EXCAVATION AND ADDITIONAL DELINEATION ACTIVITIES

Based on soil analytical results from delineation activities, remediation of TPH-impacted soil appeared warranted. As such, Ensolum oversaw the excavation and proper disposal of impacted soil on November 17 and 18, 2022. Excavation activities were directed by previously failed soil sample location (BH03) and field screening for VOCs and chloride. Impacted soil was excavated via hand shovels and a backhoe. The excavation was completed up against a 3-foot soil berm to the north and it extended to the north in the vicinity of the heater treater. The excavation extent to the west and east was bound by the earthen berm. Upon identifying field screening results indicating impacted soils were adequately remediated, Ensolum proceeded to collect confirmation soil samples from the floor and sidewalls of the excavation. The total areal extent of the excavation was approximately 325 square feet in size and with total excavated depths ranging from 4 feet to 5 feet bgs, totaling approximately 8 cubic yards of impacted material removed from the Site. The impacted soil was properly disposed of at a New Mexico-permitted land farm.

Ensolum collected 5-point composite soil samples every 200 square feet from the sidewalls and floor of the excavations. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil samples FS01 and FS02 were collected from the floor of the excavations at a depth of 0.5 feet bgs. Based on the shallow depth of the excavation, soil from the sidewalls were incorporated into the composite soil samples. The excavation soil samples were collected, handled, and analyzed as described above. The excavation extents and excavation soil sample locations are presented on **Figure 3**. Photographic documentation of the excavation is presented in **Appendix B**.

Analytical results from the two confirmation soil samples indicate all COC concentrations were in compliance with the Closure Criteria. **Table 1** summarizes confirmation soil analytical results. The complete laboratory analytical report is included as **Appendix D**.

Since impacts were observed in the vicinity of borehole BH03, additional lateral delineation soil samples were collected to confirm the release did not encroach into the pasture or other locations on pad. Borehole BH07 was advanced west of borehole BH04; borehole BH08 was advanced east of borehole BH03, near the edge of the well pad; and borehole BH09 was advanced west of borehole BH03 on pad. All samples were handled and analyzed as described above. The additional delineation sample locations are depicted on Figure 2.

Analytical results confirmed the October 2022 release was contained on pad and did not go off pad into the pasture. Table 1 summarizes the delineation soil sample analytical results and the complete laboratory analytical report is included in Appendix D.

CLOSURE REQUEST

A release of 18 bbls of produced water inside an earthen berm secondary containment occurred on October 16, 2022 due to the corrosion and subsequent hole in a flowline associated with the heater

treater. Remedial actions to address the release included the recovery of 8 bbls of standing fluid and excavation of 8 cubic yards of impacted soil.

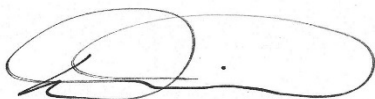
In total, 8 cubic yards of TPH-impacted soil were excavated and properly disposed of at a New Mexico permitted landfill. The excavation has been fenced off and non-waste containing caliche has been stockpiled next to the excavation in preparation of backfilling once NMOCD of this closure request.

Delineation soil analytical results indicated the release was contained on pad and did not encroach into the pasture. Waste-containing soil was not detected at the edge of the well pad. The well pad is currently in use for the production of oil and gas and is not subject to reclamation requirements per 19.15.29.13 NMAC.

Based on delineation and excavation activities, and results of the confirmation soil samples, it appears the remediation actions have been protective of human health, the environment, and groundwater. As such, AEC respectfully requests closure for Incident Number nAPP2229057488.

If you have any questions or comments, please contact Mr. Daniel Moir at (303) 887-2946 or dmoir@ensolum.com.

Sincerely,
Ensolum, LLC



Daniel R. Moir, P.G.
Senior Managing Geologist

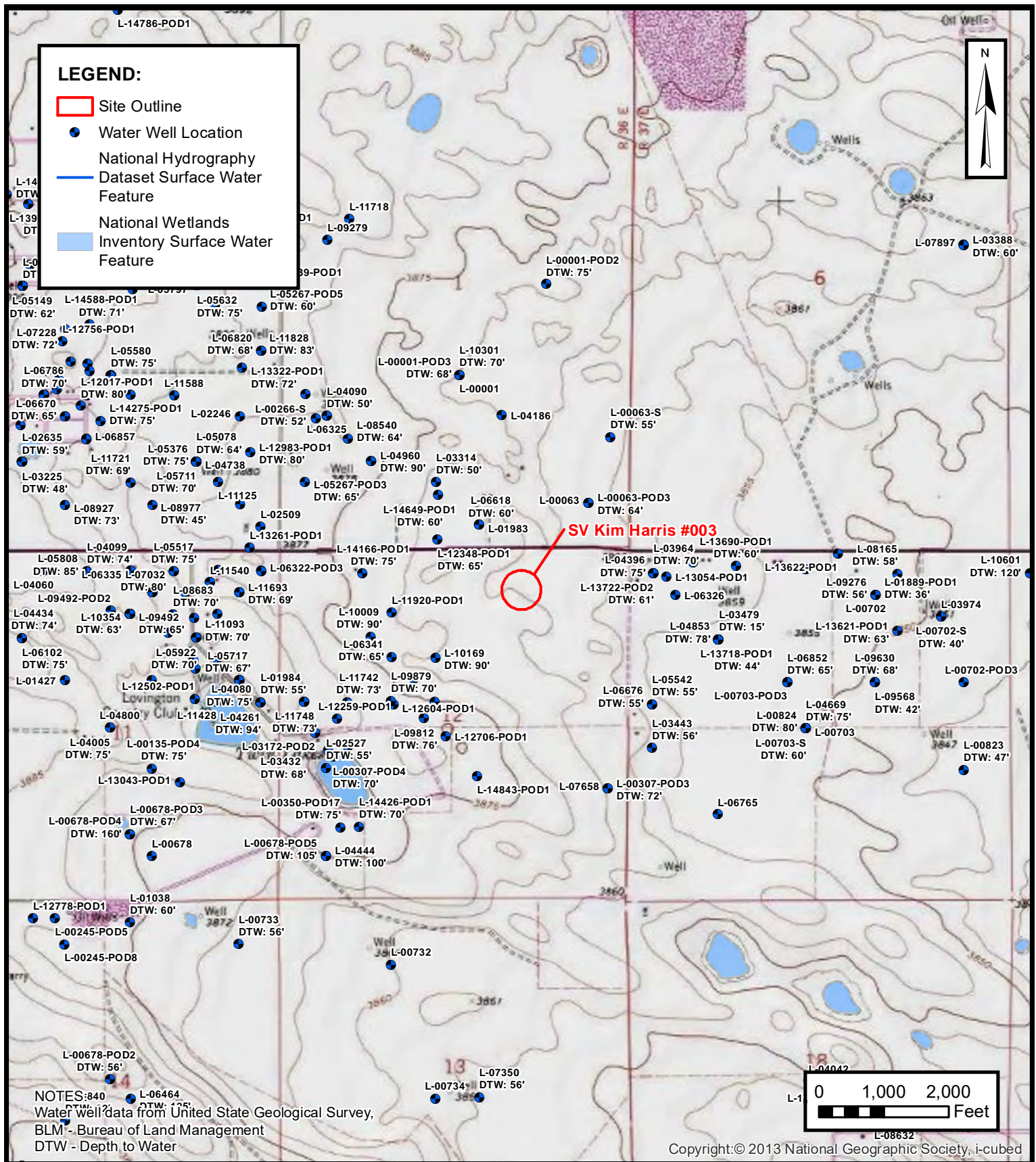
cc: Jeff Tew, Armstrong Energy Corporation

Appendices:

Figure 1	Site Receptor Map
Figure 2	Delineation Soil Sample Locations
Figure 3	Excavation Confirmation Soil Sample Locations
Table 1	Soil Sample Analytical Results
Appendix A	Well Records
Appendix B	Photographic Log
Appendix C	Lithologic Soil Sampling Logs
Appendix D	Laboratory Analytical Reports & Chain-of-Custody Documentation



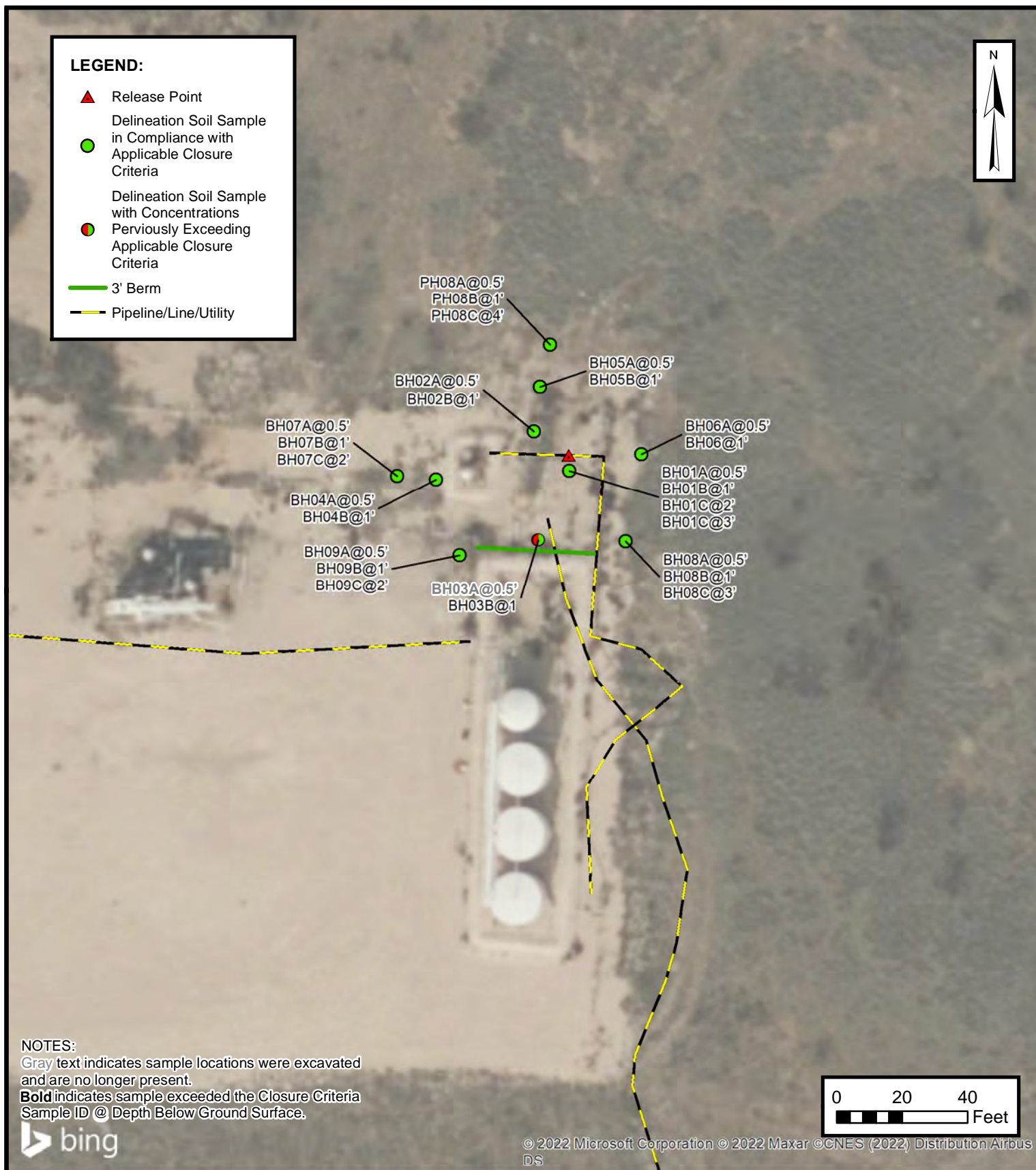
Figures



SITE RECEPTOR MAP

XTO ENERGY, INC
SV KIM HARRIS #003
Incident Number nAPP2229057488
Unit B, Section 12, Township 16S, Range 36E
Lea County, New Mexico

FIGURE
1

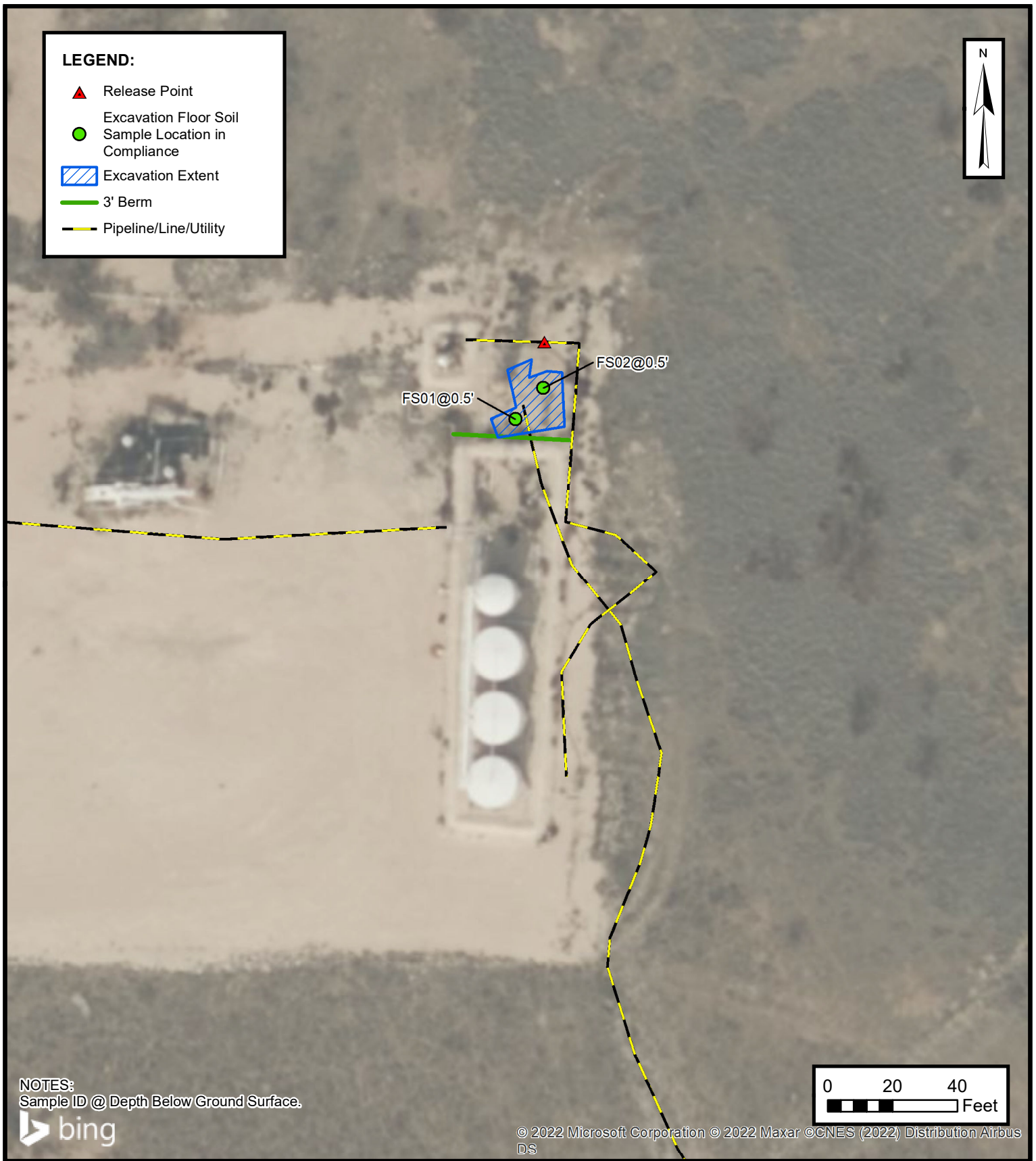


DELINEATION SOIL SAMPLE LOCATIONS

ARMSTRONG ENERGY CORPORATION
 SV KIM HARRIS #003
 NAPP2229057488
 Unit B, Section 12, Township 16S, Range 36E
 Lea County, New Mexico

FIGURE
2



**EXCAVATION SOIL SAMPLE LOCATIONS**

ARMSTRONG ENERGY CORPORATION
SV KIM HARRIS #003
NAPP2229057488
Unit B, Section 12, Township 16S, Range 36E
Lea County, New Mexico

FIGURE**3**



Table



TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS Armstrong Energy Corporation - SV Kim Harris #003 Lea County, New Mexico Ensolum Project No. 09C2041003										
Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	TPH GRO + DRO (mg/kg)	Total TPH (GRO+DRO+MRO) (mg/kg)	Chloride (mg/kg)
NMOCD Closure Criteria for Soils Impacted by a Release (Groundwater 51-100 feet bgs)			10	50	NE	NE	NE	1,000	2,500	10,000
Delineation Soil Sample Analytical Results										
BH01A	10/28/2022	0.5	<0.00202	<0.00403	<50.0	77.7	<50.0	77.7	77.7	4,680
BH01B	10/28/2022	1.0	<0.00200	<0.00399	<49.8	<49.8	50.1	<49.8	50.1	3,970
BH01C	10/28/2022	2	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	1,160
BH01C	11/17/2022	3	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	625
BH02A	10/28/2022	0.5	<0.00202	<0.00403	<49.9	489	140	489	629	107
BH02B	10/28/2022	1	<0.00200	<0.00401	<50.0	130	<50.0	130	130	83.6
BH03A	10/28/2022	0.5	<0.00199	<0.00398	<50.0	1,240	359	1,240	1,600	206
BH03B	10/28/2022	1	<0.00199	<0.00398	<50.0	561	159	561	720	181
BH04A	10/28/2022	0.5	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	948
BH04B	10/28/2022	1	<0.00200	<0.00401	<49.8	<49.8	<49.8	<49.8	<49.8	3,150
BH05A	10/28/2022	0.5	<0.00202	<0.00404	<49.9	159	97.2	159	256	482
BH05B	10/28/2022	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	483
BH06A	10/28/2022	0.5	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	16.5
BH06B	10/28/2022	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	16.1
BH07A	11/17/2022	0.5	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	22.6
BH07B	11/17/2022	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	28.9
BH07C	11/17/2022	2	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	28.7
BH08A	11/17/2022	0.5	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	67.2
BH08B	11/17/2022	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	43.2
BH08C	11/17/2022	3	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	38.2
BH09A	11/17/2022	0.5	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	63.0
BH09B	11/17/2022	1	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	23.6
BH09C	11/17/2022	2	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	19.7
PH08A*	10/28/2022	0.5'	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	29.6
PH08B*	10/28/2022	1'	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	20.9
PH08C*	10/28/2022	4'	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	19.5
Excavation Confirmation Soil Sample Analytical Results										
FS01	11/17/2022	0.5	<0.00200	<0.00399	<50.0	318	<50.0	318	318	58.6
FS02	11/17/2022	0.5	<0.00199	<0.00398	<49.8	110	<49.8	110	110	164

Notes:

bgs: below ground surface

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

mg/kg: milligrams per kilogram

NA: Not Applicable

NE: Not Established

NS: Not Sampled

NMOCD: New Mexico Oil Conservation Division

PID: Photoionization Detector

ppm: parts per million

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

MRO: Motor Oil/Lube Oil Range Organics

TPH: Total Petroleum Hydrocarbon

<49.9: indicates result less than the stated laboratory reporting limit (RL)

Concentrations in **bold** and shaded exceed the New Mexico Oil Conservation Division Table 1 Closure Criteria for Soils Impacted by a Release

Gray text indicates sample locations were excavated and are no longer present

* - samples collected for Incident Number




APPENDIX A

Well Records



New Mexico Office of the State Engineer

Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE)							
		(quarters are smallest to largest)				(NAD83 UTM in meters)			
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
L	12348 POD1	4	2	1	12	16S	36E	658080	3646393 

Driller License: 1626 **Driller Company:** TAYLOR, ROY ALLEN

Driller Name: TAYLOR, ROY ALLEN

Drill Start Date: 01/28/2009	Drill Finish Date: 01/30/2009	Plug Date:
Log File Date: 02/11/2009	PCW Rev Date:	Source: Shallow
Pump Type:	Pipe Discharge Size:	Estimated Yield: 20 GPM
Casing Size: 5.00	Depth Well: 186 feet	Depth Water: 65 feet

Water Bearing Stratifications:	Top	Bottom	Description
	70	185	Sandstone/Gravel/Conglomerate

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

7/22/22 9:19 AM

POINT OF DIVERSION SUMMARY



New Mexico Office of the State Engineer

Transaction Summary

72121 All Applications Under Statute 72-12-1

Transaction Number: 488145

Transaction Desc: L 12348

File Date: 12/16/2008



Primary Status: PMT Permit

Secondary Status: LOG Well Log Received


Person Assigned: *****

Applicant: BRIAN CUNNINGHAM

Events

	Date	Type	Description	Comment	Processed By
 get images	12/16/2008	APP	Application Received	*	*****
	12/17/2008	FIN	Final Action on application		*****
	12/17/2008	WAP	General Approval Letter		*****
 get images	02/11/2009	LOG	Well Log Received	*	*****
	11/01/2011	QAT	Quality Assurance Completed	IMAGES	*****
	12/31/2013	ARW	WRAB Main File Rm Arch Sect	L 12348 Archived	*****

Change To:

WR File Nbr	Acres	Diversion	Consumptive	Purpose of Use
L 12348		3		DOL 72-12-1 DOMESTIC AND LIVESTOCK WATERING
**Point of Diversion				
L 12348 POD1		658080	3646393 	

Conditions

- 1B Depth of the well shall not exceed the thickness of the Ogallala formation.
- 10 Total diversion from all wells under this permit number shall not exceed 3 acre-feet per annum.
- 11 This permit authorizes the diversion of water for domestic use to serve a single household. The total diversion of water under this permit shall not exceed 3 acre-feet per year. The diversion of water for domestic use may include the watering of non-commercial trees, lawn and garden not to exceed one acre.
- 14 This permit authorized the diversion of water for watering livestock. The total diversion of water under this permit shall not exceed 3 acre-feet per year.
- 18 Any diversion of water made in excess of the authorized maximum diversion amount shall be repaid with twice the amount of the over-diversion during the following calendar year. Repayment shall be made by either: (a) reducing the diversion from the well that is the source of the over-diversion; or (b) acquiring or leasing a valid, existing consumptive use water right in an amount equal to the repayment amount and submitting to the State Engineer for his approval a plan for the proposed repayment.
- O This well permit shall automatically expire unless the well is completed and the

well record is filed with the State Engineer within one year of the date of issuance of the permit. It is the responsibility of the permit holder to ensure that the well record has been properly filed with the State Engineer.

x

Action of the State Engineer

THIS APPLICATION IS APPROVED FOR THE USE INDICATED, SUBJECT TO ALL GENERAL CONDITIONS AND TO SPECIFIC CONDITIONS LISTED ABOVE.

**** See Image For Any Additional Conditions of Approval ****

Approval Code: A - Approved

Action Date: 12/17/2008

Log Due Date: 12/31/2009

State Engineer: John R. D Antonio,

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

7/22/22 9:19 AM

TRANSACTION SUMMARY



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

STATE ENGINEER OFFICE
ROSWELL, NEW MEXICO
2009 FEB 11 A 1:07

1. GENERAL AND WELL LOCATION	POD NUMBER (WELL NUMBER)				OSE FILE NUMBER(S) L-12348			
	WELL OWNER NAME(S) Brian Cunningham				PHONE (OPTIONAL) 875-390-8207			
	WELL OWNER MAILING ADDRESS #1 Anderson Drive				CITY STATE ZIP Lorington NM 88260			
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 56	SECONDS 58.3 N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS								
2. OPTIONAL	(2.5 ACRE) %	(10 ACRE) SE%	(40 ACRE) NE%	(160 ACRE) NW%	SECTION 12	TOWNSHIP 16	RANGE 36	<input type="checkbox"/> NORTH <input checked="" type="checkbox"/> SOUTH <input type="checkbox"/> EAST <input type="checkbox"/> WEST
	SUBDIVISION NAME				LOT NUMBER	BLOCK NUMBER	UNIT/TRACT	
	HYDROGRAPHIC SURVEY					MAP NUMBER	TRACT NUMBER	
3. DRILLING INFORMATION	LICENSE NUMBER WD1626		NAME OF LICENSED DRILLER Roy Taylor			NAME OF WELL DRILLING COMPANY Eco/EnviroDrilling LLC		
	DRILLING STARTED 1-28-09		DRILLING ENDED 1-30-09		DEPTH OF COMPLETED WELL (FT) 186	BORE HOLE DEPTH (FT) 186	DEPTH WATER FIRST ENCOUNTERED (FT) 70	
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)						STATIC WATER LEVEL IN COMPLETED WELL (FT) 65	
	DRILLING FLUID: <input type="checkbox"/> AIR <input checked="" type="checkbox"/> MUD <input type="checkbox"/> ADDITIVES SPECIFY:							
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:							
	DEPTH (FT)		BORE HOLE DIA. (IN)	CASING MATERIAL	CONNECTION TYPE (CASING)	INSIDE DIA. CASING (IN)	CASING WALL THICKNESS (IN)	SLOT SIZE (IN)
	FROM	TO						
	0	90	10	PVC	Glue	5.135	.214	N/A
	90	186	10	PVC	Glue	5.033	.265	.035
4. WATER BEARING STRATA	DEPTH (FT)		THICKNESS (FT)	FORMATION DESCRIPTION OF PRINCIPAL WATER-BEARING STRATA (INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES)			YIELD (GPM)	
	FROM	TO						
	70	185	115	Reddish/tan sand and sandstone			20	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA 1 hp Pump						TOTAL ESTIMATED WELL YIELD (GPM) 20		

FOR OSE INTERNAL USE

FILE NUMBER L-12348

POD NUMBER

WELL RECORD & LOG (Version 6/908)

TRN NUMBER 420108

LOCATION 16.36.12.124

PAGE 1 OF 2

Don/SLK

5. SEAL AND PUMP	TYPE OF PUMP: <input checked="" type="checkbox"/> SUBMERSIBLE <input type="checkbox"/> JET <input type="checkbox"/> NO PUMP - WELL NOT EQUIPPED <input type="checkbox"/> TURBINE <input type="checkbox"/> CYLINDER <input type="checkbox"/> OTHER - SPECIFY:						
	ANNULAR SEAL AND GRAVEL PACK	DEPTH (FT)		BORE HOLE DIA. (IN)	MATERIAL TYPE AND SIZE	AMOUNT (CUBIC FT)	METHOD OF PLACEMENT
		FROM	TO				
		20	186	10	3/8" Fill more	52	Hand

6. GEOLOGIC LOG OF WELL	DEPTH (FT)		THICKNESS (FT)	COLOR AND TYPE OF MATERIAL ENCOUNTERED (INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES)	WATER BEARING?		
	FROM	TO			<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO	
		0	2	2	Black top soil	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
		2	10	8	white caliche rock	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
		10	20	10	Tan sand	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
		20	25	5	Reddish Rock	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
		25	185	160	Reddish/tan sand and sandstone	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO
		185	186	1	Red clay	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
						<input type="checkbox"/> YES	<input type="checkbox"/> NO
						<input type="checkbox"/> YES	<input type="checkbox"/> NO
						<input type="checkbox"/> YES	<input type="checkbox"/> NO
						<input type="checkbox"/> YES	<input type="checkbox"/> NO
						<input type="checkbox"/> YES	<input type="checkbox"/> NO
						<input type="checkbox"/> YES	<input type="checkbox"/> NO

ATTACH ADDITIONAL PAGES AS NEEDED TO FULLY DESCRIBE THE GEOLOGIC LOG OF THE WELL

7. TEST & ADDITIONAL INFO	WELL TEST	METHOD: <input type="checkbox"/> BAILER <input type="checkbox"/> PUMP <input checked="" type="checkbox"/> AIR LIFT <input type="checkbox"/> OTHER - SPECIFY:	
		TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING START TIME, END TIME AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.	
	ADDITIONAL STATEMENTS OR EXPLANATIONS:		

8. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:	
	 SIGNATURE OF DRILLER	2-1-09 DATE

 STATE ENGINEER OFFICE
 ROSWELL, NEW MEXICO
 2009 FEB 11 A 11:07

FOR USE INTERNAL USE


WELL RECORD & LOG (Version 6/9/08)

FILE NUMBER	L-12348	POD NUMBER	TRN NUMBER
LOCATION	16.36.12.124		PAGE 2 OF 2



New Mexico Office of the State Engineer

Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE)				(quarters are smallest to largest)				(NAD83 UTM in meters)	
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y		
L	14166 POD1	2	1	1	12	16S	36E	657735	3646232		
<hr/>											
Driller License:		1044		Driller Company:			EADES WELL DRILLING & PUMP SERVICE				
Driller Name:		ALAN G EADES									
Drill Start Date:		08/17/2016		Drill Finish Date:			08/17/2016		Plug Date:		
Log File Date:		08/24/2016		PCW Rev Date:					Source:		Shallow
Pump Type:					Pipe Discharge Size:					Estimated Yield:	
Casing Size:		5.14		Depth Well:			190 feet		Depth Water:		75 feet
<hr/>											
Water Bearing Stratifications:					Top	Bottom	Description				
					75	164	Sandstone/Gravel/Conglomerate				
					164	190	Sandstone/Gravel/Conglomerate				

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

7/22/22 9:24 AM

POINT OF DIVERSION SUMMARY



New Mexico Office of the State Engineer

Transaction Summary

72121 All Applications Under Statute 72-12-1

Transaction Number: 591224

Transaction Desc: L 14166 POD1

File Date: 07/19/2016

Primary Status: PMT Permit

Secondary Status: LOG Well Log Received



Person Assigned: *****

Applicant: MICHAEL B HARTGRAVES

Applicant: MARILYN J HARTGRAVES


x

Events

	Date	Type	Description	Comment	Processed By
	get images 07/19/2016	APP	Application Received	*	*****
	08/04/2016	FIN	Final Action on application		*****
	08/04/2016	WAP	General Approval Letter		*****
	get images 08/24/2016	LOG	Well Log Received	*	*****
	10/03/2016	QAT	Quality Assurance Completed	DATA PMT & W/L	*****
	10/13/2016	QAT	Quality Assurance Completed	IMAGE	*****

x

Change To:

WR File Nbr	Acres	Diversion	Consumptive	Purpose of Use
L 14166		1		DOM 72-12-1 DOMESTIC ONE HOUSEHOLD
**Point of Diversion				
L 14166 POD1		657735	3646232	

x

Conditions

- 1B Depth of the well shall not exceed the thickness of the Ogallala formation.
- 10 Total diversion from all wells under this permit number shall not exceed 1 acre-feet per annum.
- 11 This permit authorizes the diversion of water for domestic use to serve a single household. The total diversion of water under this permit shall not exceed 1 acre-feet per year. The diversion of water for domestic use may include the watering of non-commercial trees, lawn and garden not to exceed one acre.

x

Action of the State Engineer

**** See Image For Any Additional Conditions of Approval ****

Approval Code: A - Approved

Action Date: 08/04/2016

Log Due Date: 08/04/2017

State Engineer: Tom Blaine, P.E.

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

7/22/22 9:25 AM

TRANSACTION SUMMARY



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

STATE ENGINEER OFFICE
ROSWELL, NEW MEXICO

2016 AUG 24 AM 2:30

1. GENERAL AND WELL LOCATION	OSE POD NUMBER (WELL NUMBER)				OSE FILE NUMBER(S)			
	WELL OWNER NAME(S)				PHONE (OPTIONAL)			
	MICHAEL B. HARTGRAVES or MARILYN J. HARTGRAVES							
	WELL OWNER MAILING ADDRESS				CITY STATE ZIP			
	PO BOX 1595				LOVINGTON		NM 88260	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE	MINUTES N32	SECONDS 56	34.84	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
		LONGITUDE	W103	18	45.58	* DATUM REQUIRED: WGS 84		
	DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS -- PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE							
	3012 E. AVENUE D, LOVINGTON, NM							
2. DRILLING & CASING INFORMATION	LICENSE NUMBER		NAME OF LICENSED DRILLER			NAME OF WELL DRILLING COMPANY		
	WD 1044		ALAN G. EADES			EADES DRILLING & PUMP SERVICE		
	DRILLING STARTED		DRILLING ENDED		DEPTH OF COMPLETED WELL (FT)		BORE HOLE DEPTH (FT)	
	08-17-16		08-17-16		190		190	
	COMPLETED WELL IS:		<input type="checkbox"/> ARTESIAN		<input type="checkbox"/> DRY HOLE		<input checked="" type="checkbox"/> SHALLOW (UNCONFINED)	
							DEPTH WATER FIRST ENCOUNTERED (FT)	
							~75	
	DRILLING FLUID:		<input type="checkbox"/> AIR		<input checked="" type="checkbox"/> MUD		<input type="checkbox"/> ADDITIVES -- SPECIFY:	
	DRILLING METHOD:		<input checked="" type="checkbox"/> ROTARY		<input type="checkbox"/> HAMMER		<input type="checkbox"/> CABLE TOOL	
							<input type="checkbox"/> OTHER -- SPECIFY:	
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)		CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)		CASING CONNECTION TYPE	
	FROM	TO					CASING INSIDE DIAM. (inches)	
	0	20	9.875		PVC		5.135	
	20	110	8.75		PVC		5.135	
	110	190	8.75		PVC SCREEN		5.135	
							CASING WALL THICKNESS (inches)	
							.214	
							.214	
							.214	
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)		LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL		AMOUNT (cubic feet)	
	FROM	TO					METHOD OF PLACEMENT	
	0	20	9.875		BENTONITE CHIPS -- HYDRATED		7	
	20	190	8.75		GRAVEL		44	

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	L-14166	POD NUMBER	1	TRN NUMBER	591224
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16S.36E.12.112

4. HYDROGEOLOGIC LOG OF WELL

5. TEST; RIG SUPERVISION


5. SIGNATURE

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 06/08/2012)	
FILE NUMBER	L-14166	POD NUMBER	A
		TRN NUMBER	591224



New Mexico Office of the State Engineer

Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE)							
		(quarters are smallest to largest)				(NAD83 UTM in meters)			
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
22216	L 14649 POD1	2	4	3	01	16S	36E	658079	3646597 

Driller License: 1044 **Driller Company:** EADES WELL DRILLING & PUMP SERVICE

Driller Name: EADES, ALANESL.G. HAYDENAS

Drill Start Date: 06/18/2019 **Drill Finish Date:** 06/18/2019 **Plug Date:**

Log File Date: 09/09/2019 **PCW Rev Date:** **Source:** Artesian

Pump Type: **Pipe Discharge Size:** **Estimated Yield:** 24 GPM

Casing Size: 5.00 **Depth Well:** 173 feet **Depth Water:** 60 feet

Water Bearing Stratifications:	Top	Bottom	Description
	60	148	Sandstone/Gravel/Conglomerate
	148	173	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	133	173

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

7/22/22 9:16 AM

POINT OF DIVERSION SUMMARY



New Mexico Office of the State Engineer

Transaction Summary

72121 All Applications Under Statute 72-12-1

Transaction Number: 640561

Transaction Desc: L 14649 POD1

File Date: 03/14/2018

Primary Status: PMT Permit

Secondary Status: LOG Well Log Received



Person Assigned: *****

Applicant: ASHLEY JAMESON

Applicant: CADEN JAMESON


x

Events

	Date	Type	Description	Comment	Processed By
	get images 03/14/2018	APP	Application Received	*	*****
	03/19/2019	FIN	Final Action on application		*****
	03/19/2019	WAP	General Approval Letter		*****
	get images 09/09/2019	LOG	Well Log Received	*	*****
	10/11/2019	QAT	Quality Assurance Completed	DATA	*****
	10/28/2019	QAT	Quality Assurance Completed	IMAGE	*****

x

Change To:

WR File Nbr	Acres	Diversion	Consumptive	Purpose of Use
L 14649		1		DOM 72-12-1 DOMESTIC ONE HOUSEHOLD
**Point of Diversion				
L 14649 POD1		658079	3646597	

x

Conditions

- 1B Depth of the well shall not exceed the thickness of the Ogallala formation.
- 4 Use shall be limited to household, non-commercial trees, lawn and garden not to exceed one acre and/or stock use.
- 10 Total diversion from all wells under this permit number shall not exceed 1 acre-feet per annum.
- 11 This permit authorizes the diversion of water for domestic use to serve a single household. The total diversion of water under this permit shall not exceed 1 acre-feet per year. The diversion of water for domestic use may include the watering of non-commercial trees, lawn and garden not to exceed one acre.

x

Action of the State Engineer

** See Image For Any Additional Conditions of Approval **

Approval Code: A - Approved

Action Date: 03/19/2019

Log Due Date: 03/19/2020

State Engineer: John R. D Antonio,

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

7/22/22 9:17 AM

TRANSACTION SUMMARY



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.)		WELL TAG ID NO. 22216		OSE FILE NO(S) L-14649		
	WELL OWNER NAME(S) Caden Jameson - Ashley Jameson				PHONE (OPTIONAL)		
	WELL OWNER MAILING ADDRESS 1308 West Avenue N				CITY Lovington	STATE NM ZIP 88260	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 56	SECONDS 46.5 N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
		LONGITUDE 103	18	32.1 W	* DATUM REQUIRED: WGS 84		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE Section 1, Township 16S, Range 36E							
2. DRILLING & CASING INFORMATION	LICENSE NO. WD1044		NAME OF LICENSED DRILLER Alan G. Eades		NAME OF WELL DRILLING COMPANY Eades Drilling & Pump Service		
	DRILLING STARTED 06-18-19	DRILLING ENDED 06-18-19	DEPTH OF COMPLETED WELL (FT) 173	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT) 60		
	COMPLETED WELL IS: <input checked="" type="checkbox"/> ARTESIAN <input type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) ~60		
	DRILLING FLUID: <input type="checkbox"/> AIR <input checked="" type="checkbox"/> MUD ADDITIVES - SPECIFY:						
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:						
	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM. (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)
	0 20		9.875	PVC	SLIP JOINT	5.135	.214
	20 133		8.75	PVC	SLIP JOINT	5.135	.214
	133 173		8.75	PVC SCREEN	SLIP JOINT	5.135	.214
3. ANNULAR MATERIAL	DEPTH (feet bgl) FROM TO		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT	
	0 20		9.875	BENTONITE CHIPS - HYDRATED	7	GRAVITY FED	
	20 173		8.75	GRAVEL	40	GRAVITY FED	

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/30/17)


FILE NO. L-14649 POD NO. TRN NO. 640561
LOCATION Dom 116S. 36E. 1. 342 WELL TAG ID NO. 22216 PAGE 1 OF 2

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 06/30/2017)	
FILE NO.	POD NO.	TRN NO.	
LOCATION	WELL TAG ID NO.		PAGE 2 OF 2



New Mexico Office of the State Engineer

Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE)							
		(quarters are smallest to largest)				(NAD83 UTM in meters)			
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
20F73	L 15209 POD1	4	4	1	12	16S	36E	658035	3645701 

Driller License: 1753 **Driller Company:** VANGUARD WATER WELLS

Driller Name: JACOB FRIESSEN

Drill Start Date: 12/17/2021 **Drill Finish Date:** 12/17/2021 **Plug Date:**

Log File Date: 01/18/2022 **PCW Rev Date:** **Source:** Shallow

Pump Type: **Pipe Discharge Size:** **Estimated Yield:** 15 GPM

Casing Size: 5.00 **Depth Well:** 200 feet **Depth Water:** 110 feet

Water Bearing Stratifications:

Top	Bottom	Description
23	189	Sandstone/Gravel/Conglomerate
189	197	Sandstone/Gravel/Conglomerate

Casing Perforations:

Top	Bottom
160	200

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

7/22/22 9:26 AM

POINT OF DIVERSION SUMMARY



New Mexico Office of the State Engineer

Transaction Summary

72121 All Applications Under Statute 72-12-1

Transaction Number: 704320

Transaction Desc: L 15209 POD1

File Date: 08/13/2021

Primary Status: PMT Permit



Secondary Status: LOG Well Log Received

Person Assigned: *****

Applicant: KENNETH WALLACE


x

Events

	Date	Type	Description	Comment	Processed By
	get images 08/13/2021	APP	Application Received	*	*****
	08/18/2021	FIN	Final Action on application		*****
	08/18/2021	WAP	General Approval Letter		*****
	09/14/2021	QAT	Quality Assurance Completed	DATA	*****
	10/27/2021	QAT	Quality Assurance Completed	IMAGE	*****
	10/27/2021	ARW	WRAB Main File Rm Arch Sect	L 15209 Archived	*****
	get images 01/18/2022	LOG	Well Log Received	*	*****
	03/31/2022	QAT	Quality Assurance Completed	DATA	*****
	04/11/2022	QAT	Quality Assurance Completed	IMAGES	*****

x

Change To:

WR File Nbr	Acres	Diversion	Consumptive	Purpose of Use
L 15209		3		DOL 72-12-1 DOMESTIC AND LIVESTOCK WATERING
**Point of Diversion				
L 15209 POD1		658035	3645701	

x

Conditions

- 1B Depth of the well shall not exceed the thickness of the Ogallala formation.
- 4 Use shall be limited to household, non-commercial trees, lawn and garden not to exceed one acre and/or stock use.
- 10 Total diversion from all wells under this permit number shall not exceed 3 acre-feet per annum.
- 19 This permit authorizes the diversion of water for domestic use to serve a single household and livestock. The maximum combined total diversion of water under this permit shall not exceed 3 acre-feet per year.

x

Action of the State Engineer

**** See Image For Any Additional Conditions of Approval ****

Approval Code: A - Approved

Action Date: 08/18/2021

Log Due Date: 08/18/2022

State Engineer: John R. D Antonio,

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

7/22/22 9:26 AM

TRANSACTION SUMMARY



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

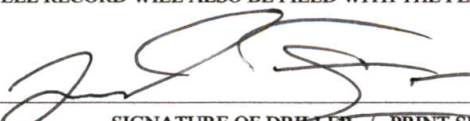
www.ose.state.nm.us

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) L-15209 POD1		WELL TAG ID NO. 20F73		OSE FILE NO(S). L-15209			
	WELL OWNER NAME(S) KENNETH WALLACE				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 3317 ANDERSON DRIVE				CITY STATE ZIP LOVINGTON NM 88260			
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 56	SECONDS 17.4 N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND			
		LONGITUDE 103	18	34.3 W	* DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE SECTION 12 TOWNSHIP 16S RANGE 36E								
2. DRILLING & CASING INFORMATION	LICENSE NO. WD-1753		NAME OF LICENSED DRILLER JACOB FRIESSEN			NAME OF WELL DRILLING COMPANY VANGUARD		
	DRILLING STARTED 12/17/2021		DRILLING ENDED 12/17/2021		DEPTH OF COMPLETED WELL (FT) 200		BORE HOLE DEPTH (FT) 200	
					DEPTH WATER FIRST ENCOUNTERED (FT) 110			
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) 128		
	DRILLING FLUID: <input type="checkbox"/> AIR <input checked="" type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:							
	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	-1	160	9.875	BLANK PVC SCH40	GLUE 5.5	5	.25	
	160	200	9.875	SCREEN PVC SCH40	GLUE 5.5	5	.25	.035
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						
	0	20	9.875	CONCRETE	7	POURED		
	20	150	9.875	GRAVEL	48	POURED		
	150	200	9.875	SILICA SAND	18	POURED		

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 04/30/19)

FILE NO. L-15209-POD1	POD NO. 1	TRN NO. 704320
LOCATION Dams STK 16.36.12.441	WELL TAG ID NO. 20F73	PAGE 1 OF 2


	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)
	FROM	TO				
4. HYDROGEOLOGIC LOG OF WELL	0	1	1	TOPSOIL	Y ✓ N	
	1	23	22	CALICHE	Y ✓ N	
	23	189	166	SAND	✓ Y N	10.00
	189	197	8	SAND & CLAY	✓ Y N	5.00
	197	200	3	RED BED	Y ✓ N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
	METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input checked="" type="checkbox"/> BAILER <input type="checkbox"/> OTHER – SPECIFY:				TOTAL ESTIMATED WELL YIELD (gpm): 15.00	
	5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.			
MISCELLANEOUS INFORMATION:						
<div style="text-align: right;">USE DTI JAN 18 2022 PM 4:21</div> PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: PETE LOEWEN						
6. SIGNATURE	BY SIGNING BELOW, I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED WELL. I ALSO CERTIFY THAT THE WELL TAG, IF REQUIRED, HAS BEEN INSTALLED AND THAT THIS WELL RECORD WILL ALSO BE FILED WITH THE PERMIT HOLDER WITHIN 30 DAYS AFTER THE COMPLETION OF WELL DRILLING.  JACOB FRIESSEN					01/11/2022
SIGNATURE OF DRILLER / PRINT SIGNEE NAME					DATE	

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 04/30/2019)	
FILE NO. L-15209-POD 1	POD NO. 1	TRN NO. 704320	
LOCATION 8pm + STK 16.36.12.441	WELL TAG ID NO. 20F73	PAGE 2 OF 2	



New Mexico Office of the State Engineer

Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE)							
		(quarters are smallest to largest)				(NAD83 UTM in meters)			
Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
20FCA	L 15245 POD1	1	4	2	12	16S	36E	658742	3645914 

Driller License: 1477 **Driller Company:** M & W WATERWELL SERVICE

Driller Name: MAUCK, ROBERT R. ALIGENER

Drill Start Date: 01/28/2022 **Drill Finish Date:** 01/28/2022 **Plug Date:**

Log File Date: 02/02/2022 **PCW Rev Date:** **Source:** Shallow

Pump Type: **Pipe Discharge Size:** **Estimated Yield:** 30 GPM

Casing Size: 5.00 **Depth Well:** 170 feet **Depth Water:** 72 feet

Water Bearing Stratifications:

Top	Bottom	Description
70	170	Sandstone/Gravel/Conglomerate

Casing Perforations:

Top	Bottom
130	170

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7/22/22 9:21 AM

POINT OF DIVERSION SUMMARY



New Mexico Office of the State Engineer

Transaction Summary

72121 All Applications Under Statute 72-12-1

Transaction Number: 714530

Transaction Desc: L 15245 POD1

File Date: 11/22/2021

Primary Status: PMT Permit



Secondary Status: LOG Well Log Received

Person Assigned: *****

Applicant: STEVEN CLAYTON


x

Events

	Date	Type	Description	Comment	Processed By
 get images	11/22/2021	APP	Application Received	*	*****
	12/13/2021	FIN	Final Action on application		*****
	12/13/2021	WAP	General Approval Letter		*****
 get images	02/02/2022	LOG	Well Log Received	*	*****
	02/07/2022	QAT	Quality Assurance Completed	DATA	*****
	02/23/2022	QAT	Quality Assurance Completed	SQ2	*****
	03/03/2022	ARW	WRAB Main File Rm Arch Sect	L 15245 Archived	*****
	03/04/2022	QAT	Quality Assurance Completed	DATA	*****
	03/14/2022	QAT	Quality Assurance Completed	IMAGE	*****

x

Change To:

WR File Nbr	Acres	Diversion	Consumptive	Purpose of Use
L 15245		1		DOM 72-12-1 DOMESTIC ONE HOUSEHOLD
**Point of Diversion				
L 15245 POD1		658742	3645914 	

x

Conditions

- S Construction of a water well by anyone without a valid New Mexico Well Driller License is illegal, and the landowner shall bear the cost of plugging the well by a licensed New Mexico well driller. This does not apply to driven wells, the casing of which does not exceed two and three-eighths inches outside diameter.
- 1B Depth of the well shall not exceed the thickness of the Ogallala formation.
- 10 Total diversion from all wells under this permit number shall not exceed 1 acre-feet per annum.
- 11 This permit authorizes the diversion of water for domestic use to serve a single household. The total diversion of water under this permit shall not exceed 1 acre-

feet per year. The diversion of water for domestic use may include the watering of non-commercial trees, lawn and garden not to exceed one acre.

Action of the State Engineer

IT IS THE PERMITTEES RESPONSIBILITY TO OBTAIN ALL AUTHORIZATIONS AND PERMISSIONS TO DRILL ON PROPERTY OF OTHER OWNERSHIP BEFORE COMMENCING ACTIVITIES UNDER THIS PERMIT.

**** See Image For Any Additional Conditions of Approval ****

Approval Code: A - Approved

Action Date: 12/13/2021

Log Due Date: 12/13/2022

State Engineer: John R. D Antonio,

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

7/22/22 9:22 AM

TRANSACTION SUMMARY



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) L-15245 Pod 1		WELL TAG ID NO. 20FCA		OSE FILE NO(S). L-15245		
	WELL OWNER NAME(S) Steven Clayton				PHONE (OPTIONAL)		
	WELL OWNER MAILING ADDRESS 3006 Anderson Dr.				CITY Louington	STATE NM	
					ZIP 88260		
WELL LOCATION (FROM GPS)	DEGREES	MINUTES	SECONDS	* ACCURACY REQUIRED: ONE TENTH OF A SECOND			
	LATITUDE 32	56	24.0 N	* DATUM REQUIRED: WGS 84			
	LONGITUDE 103	18	07.0 W				
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE							
2. DRILLING & CASING INFORMATION	LICENSE NO. WD-1477		NAME OF LICENSED DRILLER Robert Mauck		NAME OF WELL DRILLING COMPANY M+W		
	DRILLING STARTED 1-28-22	DRILLING ENDED 1-28-22	DEPTH OF COMPLETED WELL (FT) 170	BORE HOLE DEPTH (FT) 170	DEPTH WATER FIRST ENCOUNTERED (FT) 72		
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) 72		
	DRILLING FLUID: <input type="checkbox"/> AIR <input checked="" type="checkbox"/> MUD ADDITIVES - SPECIFY:						
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY:						
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)
	FROM	TO					
	0	130	9 1/8	SOR-26-160	6 1/2	5"	3/16
	130	170	9 1/8	SOR-21-200	6 1/2	5"	1/4
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT	
	FROM	TO					
	0	20	9 1/8	3/8 Bentonite Hole Plug	17 SLS	MANUAL	
	20	170	9 1/8	1/8" GRAVEL	2.8 TONS	MANUAL	

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 04/30/19)

FILE NO. L-15245	POD NO. 1	TRN NO. 714530
LOCATION 2-4-1	11ps-36E-12	WELL TAG ID NO. 20FCA

PAGE 1 OF 2

DOM-

4. HYDROGEOLOGIC LOG OF WELL

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 04/30/2019)	
FILE NO. L-15245	POD NO.	TRN NO. 714530	
LOCATION 3-4-1	16S-36F-12	WELL TAG ID NO. 20EFA	PAGE 2 OF 2



APPENDIX B

Photographic Log



Photographic Log

Armstrong Energy Corporation

SV Kim Harris #003

Incident Number nAPP2229057488



Photograph 1 Date: 10/25/2022
Description: View of heater treater and release area, view northeast



Photograph 2 Date: 11/18/2022
Description: Hand shoveled excavation area, view north-northwest



Photograph 3 Date: 11/18/2022
Description: view of southern excavation edge up against 3-foot berm, view west.





Photograph 4 Date: 11/18/2022
Description: Final excavation extent, view north-north east





APPENDIX C


Lithologic / Soil Sampling Logs


		Sample Name: BH01		Date: 10/28/2022				
		Site Name: SV Kim Harris #003						
		Incident Number: nAPP2229057488						
		Job Number: 09C2041003						
LITHOLOGIC / SOIL SAMPLING LOG								
Coordinates: 32.942522, -103.304927			Logged By: JF		Method: hand auger			
			Hole Diameter: N/A		Total Depth:			
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. No correction factors included.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
m	5,499	0.3	y	BH01A	@0.5'	0.5	cche	CALICHE, fg-cg sand, silty, clayey, brown-dk brown, moist, slight stained and slight odor
m	3,909	0.2	n	BH01B	@1'	1	SW	SAND, fg-cg, trace silt and clay, dark brown, moist, no staining, slight odor
m	<168	0	n	BH01C	@2'	2	SWS	SANDSTONE, fg-cg, trace silt moderately cemented, weathered, moist, no staining, no odor
m	<168	0.1	n	BH01C	@3'*	2.5		
						3		
						3.5		TD = 3 feet bgs
						4		
						4.5		*sample collected on 11/1//2022
						5		
						5.5		
						6		


		Sample Name: BH02		Date: 10/28/2022				
		Site Name: SV Kim Harris #003						
		Incident Number: nAPP2229057488						
		Job Number: 09C2041003						
LITHOLOGIC / SOIL SAMPLING LOG								
Coordinates: 32.942522, -103.304927			Logged By: JF		Method: hand auger			
			Hole Diameter: N/A		Total Depth:			
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. No correction factors included.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
m	<168	0.7		BH02A	@0.5'	0.5	cche	CALICHE, fg-cg sand, silty, clayey, brown-dk brown, moist, no staining, slight odor
m	<168	0.2		BH02B	@1'	1	SWS	SANDSTONE, fg-cg, trace silt moderately cemented, weathered, moist, no staining or odor
						1.5		
						2		
						2.5		
						3		
						3.5		TD = 1 foot bgs
						4		
						4.5		
						5		
						5.5		
						6		


								Sample Name: BH03		Date: 10/28/2022	
								Site Name: SV Kim Harris #003			
								Incident Number: nAPP2229057488			
								Job Number: 09C2041003			
LITHOLOGIC / SOIL SAMPLING LOG								Logged By: JF		Method: hand auger	
Coordinates: 32.942522, -103.304927								Hole Diameter: N/A		Total Depth:	
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. No correction factors included.											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions			
m	174	0.8	n	BH03A	@0.5'	0.5	cche	CALICHE, fg-cg sand, silty, clayey, brown-dk brown, moist, no staining or no odor			
m	207	0.4	n	BH03B	@1'	1	SWS	SANDSTONE, fg-cg, trace silt moderately cemented, weathered, moist, no staining or odor			
						1.5		TD = 1 foot bgs			
						2					
						2.5					
						3					
						3.5					
						4					
						4.5					
						5					
						5.5					
						6					


		Sample Name: BH04		Date: 10/28/2022				
		Site Name: SV Kim Harris #003						
		Incident Number: nAPP2229057488						
		Job Number: 09C2041003						
LITHOLOGIC / SOIL SAMPLING LOG								
Coordinates: 32.942522, -103.304927			Logged By: JF		Method: hand auger			
			Hole Diameter: N/A		Total Depth:			
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. No correction factors included.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
m	246	0.3	n	BH04A	@0.5'	0.5	cche	CALICHE, fg-cg sand, silty, clayey, brown-dk brown, moist, no staining or no odor
m	582	0.4	n	BH04B	@1'	1	SWS	SANDSTONE, fg-cg, trace silt moderately cemented, weathered, moist, no staining or odor
						1.5		
						2		
						2.5		
						3		
						3.5		TD = 1 foot bgs
						4		
						4.5		
						5		
						5.5		
						6		


		Sample Name: BH05		Date: 10/28/2022				
		Site Name: SV Kim Harris #003						
		Incident Number: nAPP2229057488						
		Job Number: 09C2041003						
LITHOLOGIC / SOIL SAMPLING LOG								
Coordinates: 32.942522, -103.304927				Logged By: JF				
				Method: hand auger				
				Hole Diameter: N/A				
				Total Depth:				
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. No correction factors included.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
m	1,764	0.2	n	BH05A	@0.5'	0.5	cche	CALICHE, fg-cg sand, silty, clayey, brown-dk brown, moist, no staining or no odor
m	207	0.1	n	BH05B	@1'	1	SWS	SANDSTONE, fg-cg, trace silt moderately cemented, weathered, moist, no staining or odor
						1.5		
						2		
						2.5		
						3		
						3.5		TD = 1 foot bgs
						4		
						4.5		
						5		
						5.5		
						6		

								Sample Name: BH06		Date: 10/28/2022					
								Site Name: SV Kim Harris #003							
								Incident Number: nAPP2229057488							
								Job Number: 09C2041003							
LITHOLOGIC / SOIL SAMPLING LOG								Logged By: JF		Method: hand auger					
Coordinates: 32.942522, -103.304927								Hole Diameter: N/A		Total Depth:					
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. No correction factors included.															
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions							
m	<168	0.1	n	BH06A	@0.5'	0.5	cche	CALICHE, fg-cg sand, silty, clayey, brown-dk brown, moist, no staining or no odor							
m	<168	0.1	n	BH06B	@1'	1	SW	SAND, fg-cg, trace silt and clay, dark brown, moist, staining, odor							
						1.5									
						2									
						2.5									
						3									
						3.5		TD = 2 feet bgs							
						4									
						4.5									
						5									
						5.5									
						6									

								Sample Name: BH07		Date: 11/17/2022	
								Site Name: SV Kim Harris #003			
								Incident Number: nAPP2229057488			
								Job Number: 09C2041003			
LITHOLOGIC / SOIL SAMPLING LOG								Logged By: JF		Method: hand auger	
Coordinates: 32.942522, -103.304927								Hole Diameter: N/A		Total Depth:	
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. No correction factors included.											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions			
m	<168	0.6	n	BH07A	@0.5'	0.5	cche	CALICHE, fg-cg sand, silty, clayey, brown-dk brown, moist, no staining or no odor			
m	<168	0.5	n	BH07B	@1'	1	SW	SAND, fg-cg, trace silt and clay, dark brown, moist, staining, odor			
m	<168	0.3	n	BH07C	@2'	2	SWS	SANDSTONE, fg-cg, trace silt moderately cemented, weathered, moist, no staining or odor			
						2.5		TD = 2 feet bgs			
						3					
						3.5					
						4					
						4.5					
						5					
						5.5					
						6					

		Sample Name: BH08		Date: 11/17/2022				
		Site Name: SV Kim Harris #003						
		Incident Number: nAPP2229057488						
		Job Number: 09C2041003						
LITHOLOGIC / SOIL SAMPLING LOG								
Coordinates: 32.942522, -103.304927			Logged By: JF		Method: hand auger			
			Hole Diameter: N/A		Total Depth:			
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. No correction factors included.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
m	<168	0.5	n	BH08A	@0.5'	0.5	cche	CALICHE, fg-cg sand, silty, clayey, brown-dk brown, moist, no staining or no odor
	<168	0.2	n	BH08B	@1'	1	SW	SAND, fg-cg, trace silt and clay, dark brown, moist, staining, odor
						1.5		
						2	SWS	SANDSTONE, fg-cg, trace silt moderately cemented, weathered, moist, no staining or odor
						2.5		
m	<168	0.2	n	BH08C	@3'	3		TD = 3 feet bgs
						3.5		
						4		
						4.5		
						5		
						5.5		
						6		

								Sample Name: BH09		Date: 11/17/2022	
								Site Name: SV Kim Harris #003			
								Incident Number: nAPP2229057488			
								Job Number: 09C2041003			
LITHOLOGIC / SOIL SAMPLING LOG								Logged By: JF		Method: hand auger	
Coordinates: 32.942522, -103.304927								Hole Diameter: N/A		Total Depth:	
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. No correction factors included.											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions			
m	<168	0.2	n	BH09A	@0.5'	0.5	cche	CALICHE, fg-cg sand, silty, clayey, brown-dk brown, moist, no staining or no odor			
m	<168	0.3	n	BH09B	@1'	1	SW	SAND, fg-cg, trace silt and clay, dark brown, moist, staining, odor			
m	<168	0.2	n	BH09C	@2'	2	SWS	SANDSTONE, fg-cg, trace silt moderately cemented, weathered, moist, no staining or odor			
						2.5		TD = 2 feet bgs			
						3					
						3.5					
						4					
						4.5					
						5					
						5.5					
						6					

		Sample Name: PH08		Date: 10/28/2022				
		Site Name: SV Kim Harris #003						
		Incident Number: nAPP2218940551						
		Job Number: 09C2041003						
LITHOLOGIC / SOIL SAMPLING LOG								
Coordinates: 32.942522, -103.304927			Logged By: JF		Method: backhoe			
			Hole Diameter: N/A		Total Depth: 3 ft 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. No correction factors included.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
m	<168	0	n	PH08A	@0.5'	0.5	cche	CALICHE, fg-cg sand, silty, clayey, brown-dk brown, moist, no staining and no odor
m	<168	0	n	PH08B	@1'	1	SW	SAND, fg-cg, trace silt and clay, dark brown, moist, no staining, no odor
m						1.5		
						2		
						2.5		
m	<168	0.0	n	PH08C	@3'	3	SW	SAA
						3.5		
						4		
						4.5		
						5		
						5.5		
						6		
								TD = 3 feet bgs



APPENDIX D

Laboratory Analytical Reports & Chain-of-Custody Documentation



Environment Testing

ANALYTICAL REPORT

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

Laboratory Job ID: 890-3335-1

Laboratory Sample Delivery Group: 090204003

Client Project/Site: SU KIM HARRIS #003

For:

Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Daniel Moir

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

Authorized for release by:

11/7/2022 3:33:14 PM

Jessica Kramer, Project Manager
(432)704-5440

Jessica.Kramer@et.eurofinsus.com

LINKS

Review your project
results through



Have a Question?



Visit us at:

www.eurofinsus.com/Env

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

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

Client: Ensolum
Project/Site: SU KIM HARRIS #003

Laboratory Job ID: 890-3335-1
SDG: 090204003

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Definitions/Glossary

Client: Ensolum
Project/Site: SU KIM HARRIS #003

Job ID: 890-3335-1
SDG: 090204003

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: SU KIM HARRIS #003

Job ID: 890-3335-1
SDG: 090204003

Job ID: 890-3335-1**Laboratory: Eurofins Carlsbad****Narrative****Job Narrative
890-3335-1****Receipt**

The samples were received on 10/28/2022 4:15 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 2.6°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: BH01A (890-3335-1), BH01B (890-3335-2), BH02A (890-3335-3), BH02B (890-3335-4), BH03A (890-3335-5), BH03B (890-3335-6), BH04A (890-3335-7), BH04B (890-3335-8), BH05A (890-3335-9), BH05B (890-3335-10), BH06A (890-3335-11), BH06B (890-3335-12) and BH01C (890-3335-13).

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-38429 and analytical batch 880-38578 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-38629 and analytical batch 880-38778 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: The method blank for preparation batch 880-38629 and analytical batch 880-38778 contained Benzene above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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

GC Semi VOA

Method 8015MOD_NM: The matrix spike duplicate (MSD) recoveries for preparation batch 880-38417 and analytical batch 880-38323 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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: SU KIM HARRIS #003

Job ID: 890-3335-1
SDG: 090204003

Client Sample ID: BH01A

Lab Sample ID: 890-3335-1

Date Collected: 10/28/22 11:30

Matrix: Solid

Date Received: 10/28/22 16:15

Sample Depth: 6

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		11/01/22 16:03	11/03/22 14:23	1
Toluene	<0.00202	U	0.00202	mg/Kg		11/01/22 16:03	11/03/22 14:23	1
Ethylbenzene	<0.00202	U F1	0.00202	mg/Kg		11/01/22 16:03	11/03/22 14:23	1
m-Xylene & p-Xylene	<0.00403	U F1	0.00403	mg/Kg		11/01/22 16:03	11/03/22 14:23	1
o-Xylene	<0.00202	U F1	0.00202	mg/Kg		11/01/22 16:03	11/03/22 14:23	1
Xylenes, Total	<0.00403	U F1	0.00403	mg/Kg		11/01/22 16:03	11/03/22 14:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130	11/01/22 16:03	11/03/22 14:23	1
1,4-Difluorobenzene (Surr)	103		70 - 130	11/01/22 16:03	11/03/22 14:23	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			11/03/22 17:00	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	77.7		50.0	mg/Kg			11/02/22 10:14	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		11/01/22 15:08	11/01/22 22:14	1
Diesel Range Organics (Over C10-C28)	77.7	F1	50.0	mg/Kg		11/01/22 15:08	11/01/22 22:14	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/01/22 15:08	11/01/22 22:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130	11/01/22 15:08	11/01/22 22:14	1
o-Terphenyl	97		70 - 130	11/01/22 15:08	11/01/22 22:14	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4680		49.7	mg/Kg			11/01/22 21:50	10

Client Sample ID: BH01B

Lab Sample ID: 890-3335-2

Date Collected: 10/28/22 11:35

Matrix: Solid

Date Received: 10/28/22 16:15

Sample Depth: 12

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		11/04/22 07:55	11/04/22 15:26	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/04/22 07:55	11/04/22 15:26	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/04/22 07:55	11/04/22 15:26	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		11/04/22 07:55	11/04/22 15:26	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/04/22 07:55	11/04/22 15:26	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/04/22 07:55	11/04/22 15:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130	11/04/22 07:55	11/04/22 15:26	1

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Client Sample Results

Client: Ensolum
Project/Site: SU KIM HARRIS #003

Job ID: 890-3335-1
SDG: 090204003

Client Sample ID: BH01B

Lab Sample ID: 890-3335-2

Date Collected: 10/28/22 11:35

Matrix: Solid

Date Received: 10/28/22 16:15

Sample Depth: 12

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	71		70 - 130	11/04/22 07:55	11/04/22 15:26	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			11/04/22 15:52	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	50.1		49.8	mg/Kg			11/02/22 10:14	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		11/01/22 15:08	11/01/22 23:19	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		11/01/22 15:08	11/01/22 23:19	1
Oil Range Organics (Over C28-C36)	50.1		49.8	mg/Kg		11/01/22 15:08	11/01/22 23:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	82		70 - 130	11/01/22 15:08	11/01/22 23:19	1
o-Terphenyl	86		70 - 130	11/01/22 15:08	11/01/22 23:19	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3970		49.6	mg/Kg			11/01/22 21:55	10

Client Sample ID: BH02A

Lab Sample ID: 890-3335-3

Date Collected: 10/28/22 11:40

Matrix: Solid

Date Received: 10/28/22 16:15

Sample Depth: 6

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		11/04/22 07:55	11/04/22 15:47	1
Toluene	<0.00202	U	0.00202	mg/Kg		11/04/22 07:55	11/04/22 15:47	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		11/04/22 07:55	11/04/22 15:47	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		11/04/22 07:55	11/04/22 15:47	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		11/04/22 07:55	11/04/22 15:47	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		11/04/22 07:55	11/04/22 15:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	11/04/22 07:55	11/04/22 15:47	1
1,4-Difluorobenzene (Surr)	92		70 - 130	11/04/22 07:55	11/04/22 15:47	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			11/07/22 15:35	1

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Client Sample Results

Client: Ensolum
Project/Site: SU KIM HARRIS #003

Job ID: 890-3335-1
SDG: 090204003

Client Sample ID: BH02A

Lab Sample ID: 890-3335-3

Date Collected: 10/28/22 11:40

Matrix: Solid

Date Received: 10/28/22 16:15

Sample Depth: 6

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	629		49.9	mg/Kg			11/02/22 10:14	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		11/01/22 15:08	11/01/22 23:40	1
Diesel Range Organics (Over C10-C28)	489		49.9	mg/Kg		11/01/22 15:08	11/01/22 23:40	1
Oil Range Organics (Over C28-C36)	140		49.9	mg/Kg		11/01/22 15:08	11/01/22 23:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	84		70 - 130			11/01/22 15:08	11/01/22 23:40	1
o-Terphenyl	87		70 - 130			11/01/22 15:08	11/01/22 23:40	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	107		4.99	mg/Kg			11/01/22 22:00	1

Client Sample ID: BH02B

Lab Sample ID: 890-3335-4

Date Collected: 10/28/22 11:45

Matrix: Solid

Date Received: 10/28/22 16:15

Sample Depth: 12

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U F1	0.00200	mg/Kg		11/03/22 12:48	11/05/22 22:00	1
Toluene	<0.00200	U F1	0.00200	mg/Kg		11/03/22 12:48	11/05/22 22:00	1
Ethylbenzene	<0.00200	U F1	0.00200	mg/Kg		11/03/22 12:48	11/05/22 22:00	1
m-Xylene & p-Xylene	<0.00401	U F1	0.00401	mg/Kg		11/03/22 12:48	11/05/22 22:00	1
o-Xylene	<0.00200	U F1	0.00200	mg/Kg		11/03/22 12:48	11/05/22 22:00	1
Xylenes, Total	<0.00401	U F1	0.00401	mg/Kg		11/03/22 12:48	11/05/22 22:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130			11/03/22 12:48	11/05/22 22:00	1
1,4-Difluorobenzene (Surr)	97		70 - 130			11/03/22 12:48	11/05/22 22:00	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			11/07/22 15:48	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	130		50.0	mg/Kg			11/02/22 10:14	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		11/01/22 15:08	11/02/22 00:02	1
Diesel Range Organics (Over C10-C28)	130		50.0	mg/Kg		11/01/22 15:08	11/02/22 00:02	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/01/22 15:08	11/02/22 00:02	1

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Client Sample Results

Client: Ensolum
Project/Site: SU KIM HARRIS #003

Job ID: 890-3335-1
SDG: 090204003

Client Sample ID: BH02B

Lab Sample ID: 890-3335-4

Date Collected: 10/28/22 11:45

Matrix: Solid

Date Received: 10/28/22 16:15

Sample Depth: 12

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130	11/01/22 15:08	11/02/22 00:02	1
o-Terphenyl	87		70 - 130	11/01/22 15:08	11/02/22 00:02	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	83.6		5.00	mg/Kg			11/01/22 22:05	1

Client Sample ID: BH03A

Lab Sample ID: 890-3335-5

Date Collected: 10/28/22 11:50

Matrix: Solid

Date Received: 10/28/22 16:15

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		11/01/22 16:03	11/03/22 15:44	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/01/22 16:03	11/03/22 15:44	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/01/22 16:03	11/03/22 15:44	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/01/22 16:03	11/03/22 15:44	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/01/22 16:03	11/03/22 15:44	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/01/22 16:03	11/03/22 15:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		70 - 130	11/01/22 16:03	11/03/22 15:44	1
1,4-Difluorobenzene (Surr)	101		70 - 130	11/01/22 16:03	11/03/22 15:44	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			11/03/22 17:00	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1600		50.0	mg/Kg			11/02/22 10:14	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		11/01/22 15:08	11/02/22 00:23	1
Diesel Range Organics (Over C10-C28)	1240		50.0	mg/Kg		11/01/22 15:08	11/02/22 00:23	1
Oil Range Organics (Over C28-C36)	359		50.0	mg/Kg		11/01/22 15:08	11/02/22 00:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	11/01/22 15:08	11/02/22 00:23	1
o-Terphenyl	111		70 - 130	11/01/22 15:08	11/02/22 00:23	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	206		4.98	mg/Kg			11/02/22 13:25	1

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Client Sample Results

Client: Ensolum
Project/Site: SU KIM HARRIS #003

Job ID: 890-3335-1
SDG: 090204003

Client Sample ID: BH03B

Lab Sample ID: 890-3335-6

Date Collected: 10/28/22 11:55

Matrix: Solid

Date Received: 10/28/22 16:15

Sample Depth: 12

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		11/01/22 16:03	11/03/22 16:05	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/01/22 16:03	11/03/22 16:05	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/01/22 16:03	11/03/22 16:05	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/01/22 16:03	11/03/22 16:05	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/01/22 16:03	11/03/22 16:05	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/01/22 16:03	11/03/22 16:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130	11/01/22 16:03	11/03/22 16:05	1
1,4-Difluorobenzene (Surr)	104		70 - 130	11/01/22 16:03	11/03/22 16:05	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			11/03/22 17:00	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	720		50.0	mg/Kg			11/02/22 10:14	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		11/01/22 15:08	11/02/22 00:45	1
Diesel Range Organics (Over C10-C28)	561		50.0	mg/Kg		11/01/22 15:08	11/02/22 00:45	1
Oil Range Organics (Over C28-C36)	159		50.0	mg/Kg		11/01/22 15:08	11/02/22 00:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	79		70 - 130	11/01/22 15:08	11/02/22 00:45	1
o-Terphenyl	83		70 - 130	11/01/22 15:08	11/02/22 00:45	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	181		5.00	mg/Kg			11/02/22 13:40	1

Client Sample ID: BH04A

Lab Sample ID: 890-3335-7

Date Collected: 10/28/22 13:00

Matrix: Solid

Date Received: 10/28/22 16:15

Sample Depth: 6

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		11/01/22 16:03	11/03/22 16:25	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/01/22 16:03	11/03/22 16:25	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/01/22 16:03	11/03/22 16:25	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		11/01/22 16:03	11/03/22 16:25	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/01/22 16:03	11/03/22 16:25	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/01/22 16:03	11/03/22 16:25	1

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Client Sample Results

Client: Ensolum
Project/Site: SU KIM HARRIS #003

Job ID: 890-3335-1
SDG: 090204003

Client Sample ID: BH04A

Lab Sample ID: 890-3335-7

Date Collected: 10/28/22 13:00

Matrix: Solid

Date Received: 10/28/22 16:15

Sample Depth: 6

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	11/01/22 16:03	11/03/22 16:25	1
1,4-Difluorobenzene (Surr)	106		70 - 130	11/01/22 16:03	11/03/22 16:25	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			11/03/22 17:00	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			11/02/22 10:14	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		11/01/22 15:08	11/02/22 01:06	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		11/01/22 15:08	11/02/22 01:06	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		11/01/22 15:08	11/02/22 01:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130	11/01/22 15:08	11/02/22 01:06	1
o-Terphenyl	97		70 - 130	11/01/22 15:08	11/02/22 01:06	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	948		4.99	mg/Kg			11/02/22 13:45	1

Client Sample ID: BH04B

Lab Sample ID: 890-3335-8

Date Collected: 10/28/22 13:05

Matrix: Solid

Date Received: 10/28/22 16:15

Sample Depth: 12

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		11/01/22 16:03	11/03/22 16:46	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/01/22 16:03	11/03/22 16:46	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/01/22 16:03	11/03/22 16:46	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		11/01/22 16:03	11/03/22 16:46	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/01/22 16:03	11/03/22 16:46	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		11/01/22 16:03	11/03/22 16:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	11/01/22 16:03	11/03/22 16:46	1
1,4-Difluorobenzene (Surr)	108		70 - 130	11/01/22 16:03	11/03/22 16:46	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			11/04/22 14:55	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			11/02/22 10:14	1

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Client Sample Results

Client: Ensolum
Project/Site: SU KIM HARRIS #003

Job ID: 890-3335-1
SDG: 090204003

Client Sample ID: BH04B

Lab Sample ID: 890-3335-8

Date Collected: 10/28/22 13:05

Matrix: Solid

Date Received: 10/28/22 16:15

Sample Depth: 12

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		11/01/22 15:08	11/02/22 01:27	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		11/01/22 15:08	11/02/22 01:27	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		11/01/22 15:08	11/02/22 01:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130			11/01/22 15:08	11/02/22 01:27	1
o-Terphenyl	100		70 - 130			11/01/22 15:08	11/02/22 01:27	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3150		25.1	mg/Kg			11/02/22 18:49	5

Client Sample ID: BH05A

Lab Sample ID: 890-3335-9

Date Collected: 10/28/22 13:10

Matrix: Solid

Date Received: 10/28/22 16:15

Sample Depth: 6

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		11/01/22 16:03	11/03/22 17:06	1
Toluene	<0.00202	U	0.00202	mg/Kg		11/01/22 16:03	11/03/22 17:06	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		11/01/22 16:03	11/03/22 17:06	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		11/01/22 16:03	11/03/22 17:06	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		11/01/22 16:03	11/03/22 17:06	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		11/01/22 16:03	11/03/22 17:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		70 - 130			11/01/22 16:03	11/03/22 17:06	1
1,4-Difluorobenzene (Surr)	104		70 - 130			11/01/22 16:03	11/03/22 17:06	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			11/04/22 14:55	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	256		49.9	mg/Kg			11/02/22 10:14	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		11/01/22 15:08	11/02/22 01:49	1
Diesel Range Organics (Over C10-C28)	159		49.9	mg/Kg		11/01/22 15:08	11/02/22 01:49	1
Oil Range Organics (Over C28-C36)	97.2		49.9	mg/Kg		11/01/22 15:08	11/02/22 01:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130			11/01/22 15:08	11/02/22 01:49	1
o-Terphenyl	104		70 - 130			11/01/22 15:08	11/02/22 01:49	1

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Client Sample Results

Client: Ensolum
Project/Site: SU KIM HARRIS #003

Job ID: 890-3335-1
SDG: 090204003

Client Sample ID: BH05A

Lab Sample ID: 890-3335-9

Date Collected: 10/28/22 13:10

Matrix: Solid

Date Received: 10/28/22 16:15

Sample Depth: 6

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	482		5.04	mg/Kg			11/02/22 14:05	1

Client Sample ID: BH05B

Lab Sample ID: 890-3335-10

Date Collected: 10/28/22 13:15

Matrix: Solid

Date Received: 10/28/22 16:15

Sample Depth: 12

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		11/01/22 16:03	11/03/22 17:26	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/01/22 16:03	11/03/22 17:26	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/01/22 16:03	11/03/22 17:26	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/01/22 16:03	11/03/22 17:26	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/01/22 16:03	11/03/22 17:26	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/01/22 16:03	11/03/22 17:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130			11/01/22 16:03	11/03/22 17:26	1
1,4-Difluorobenzene (Surr)	101		70 - 130			11/01/22 16:03	11/03/22 17:26	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			11/04/22 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			11/02/22 10:14	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		11/01/22 15:08	11/02/22 02:10	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/01/22 15:08	11/02/22 02:10	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/01/22 15:08	11/02/22 02:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130			11/01/22 15:08	11/02/22 02:10	1
o-Terphenyl	96		70 - 130			11/01/22 15:08	11/02/22 02:10	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	483		4.97	mg/Kg			11/02/22 14:10	1

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Client Sample Results

Client: Ensolum
Project/Site: SU KIM HARRIS #003

Job ID: 890-3335-1
SDG: 090204003

Client Sample ID: BH06A

Lab Sample ID: 890-3335-11

Date Collected: 10/28/22 13:20

Matrix: Solid

Date Received: 10/28/22 16:15

Sample Depth: 6

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		11/01/22 16:03	11/03/22 19:17	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/01/22 16:03	11/03/22 19:17	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/01/22 16:03	11/03/22 19:17	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		11/01/22 16:03	11/03/22 19:17	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/01/22 16:03	11/03/22 19:17	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/01/22 16:03	11/03/22 19:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	11/01/22 16:03	11/03/22 19:17	1
1,4-Difluorobenzene (Surr)	96		70 - 130	11/01/22 16:03	11/03/22 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			11/04/22 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			11/02/22 10:14	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		11/01/22 15:08	11/02/22 02:54	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/01/22 15:08	11/02/22 02:54	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/01/22 15:08	11/02/22 02:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130	11/01/22 15:08	11/02/22 02:54	1
o-Terphenyl	87		70 - 130	11/01/22 15:08	11/02/22 02:54	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16.5		4.98	mg/Kg			11/02/22 14:15	1

Client Sample ID: BH06B

Lab Sample ID: 890-3335-12

Date Collected: 10/28/22 13:25

Matrix: Solid

Date Received: 10/28/22 16:15

Sample Depth: 12

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		11/01/22 16:03	11/03/22 19:37	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/01/22 16:03	11/03/22 19:37	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/01/22 16:03	11/03/22 19:37	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/01/22 16:03	11/03/22 19:37	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/01/22 16:03	11/03/22 19:37	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/01/22 16:03	11/03/22 19:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130	11/01/22 16:03	11/03/22 19:37	1

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Client Sample Results

Client: Ensolum
Project/Site: SU KIM HARRIS #003

Job ID: 890-3335-1
SDG: 090204003

Client Sample ID: BH06B

Lab Sample ID: 890-3335-12

Date Collected: 10/28/22 13:25

Matrix: Solid

Date Received: 10/28/22 16:15

Sample Depth: 12

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	109		70 - 130	11/01/22 16:03	11/03/22 19:37	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			11/04/22 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			11/02/22 10:14	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		11/01/22 15:08	11/02/22 03:16	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		11/01/22 15:08	11/02/22 03:16	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/01/22 15:08	11/02/22 03:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	80		70 - 130			11/01/22 15:08	11/02/22 03:16	1
o-Terphenyl	84		70 - 130			11/01/22 15:08	11/02/22 03:16	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16.1		4.95	mg/Kg			11/02/22 14:20	1

Client Sample ID: BH01C

Lab Sample ID: 890-3335-13

Date Collected: 10/28/22 13:45

Matrix: Solid

Date Received: 10/28/22 16:15

Sample Depth: 24

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		11/01/22 16:03	11/03/22 19:57	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/01/22 16:03	11/03/22 19:57	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/01/22 16:03	11/03/22 19:57	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/01/22 16:03	11/03/22 19:57	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/01/22 16:03	11/03/22 19:57	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/01/22 16:03	11/03/22 19:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130	11/01/22 16:03	11/03/22 19:57	1
1,4-Difluorobenzene (Surr)	95		70 - 130	11/01/22 16:03	11/03/22 19:57	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			11/04/22 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			11/02/22 10:14	1

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Client Sample Results

Client: Ensolum
Project/Site: SU KIM HARRIS #003

Job ID: 890-3335-1
SDG: 090204003

Client Sample ID: BH01C

Lab Sample ID: 890-3335-13

Date Collected: 10/28/22 13:45

Matrix: Solid

Date Received: 10/28/22 16:15

Sample Depth: 24

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		11/01/22 15:08	11/02/22 03:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/01/22 15:08	11/02/22 03:37	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/01/22 15:08	11/02/22 03:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130			11/01/22 15:08	11/02/22 03:37	1
o-Terphenyl	102		70 - 130			11/01/22 15:08	11/02/22 03:37	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1160		4.99	mg/Kg			11/02/22 14:25	1

Surrogate Summary

Client: Ensolum
Project/Site: SU KIM HARRIS #003

Job ID: 890-3335-1
SDG: 090204003

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1	DFBZ1
		(70-130)	(70-130)
880-21089-A-31-D MS	Matrix Spike	111	99
880-21089-A-31-E MSD	Matrix Spike Duplicate	104	95
890-3335-1	BH01A	109	103
890-3335-1 MS	BH01A	104	96
890-3335-1 MSD	BH01A	109	99
890-3335-2	BH01B	92	71
890-3335-3	BH02A	98	92
890-3335-4	BH02B	102	97
890-3335-4 MS	BH02B	103	106
890-3335-4 MSD	BH02B	103	100
890-3335-5	BH03A	119	101
890-3335-6	BH03B	116	104
890-3335-7	BH04A	112	106
890-3335-8	BH04B	112	108
890-3335-9	BH05A	120	104
890-3335-10	BH05B	125	101
890-3335-11	BH06A	111	96
890-3335-12	BH06B	116	109
890-3335-13	BH01C	126	95
LCS 880-38429/1-A	Lab Control Sample	97	102
LCS 880-38629/1-A	Lab Control Sample	99	101
LCS 880-38695/1-A	Lab Control Sample	102	105
LCSD 880-38429/2-A	Lab Control Sample Dup	110	96
LCSD 880-38629/2-A	Lab Control Sample Dup	97	100
LCSD 880-38695/2-A	Lab Control Sample Dup	101	99
MB 880-38429/5-A	Method Blank	90	97
MB 880-38629/5-A	Method Blank	97	94
MB 880-38695/5-A	Method Blank	87	89
MB 880-38778/8	Method Blank	102	85
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	OTPH1
		(70-130)	(70-130)
890-3335-1	BH01A	91	97
890-3335-1 MS	BH01A	88	86
890-3335-1 MSD	BH01A	79	76
890-3335-2	BH01B	82	86
890-3335-3	BH02A	84	87
890-3335-4	BH02B	83	87
890-3335-5	BH03A	103	111
890-3335-6	BH03B	79	83
890-3335-7	BH04A	93	97
890-3335-8	BH04B	97	100

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Surrogate Summary

Client: Ensolum
Project/Site: SU KIM HARRIS #003

Job ID: 890-3335-1
SDG: 090204003

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)
890-3335-9	BH05A	101	104
890-3335-10	BH05B	95	96
890-3335-11	BH06A	83	87
890-3335-12	BH06B	80	84
890-3335-13	BH01C	100	102
LCS 880-38417/2-A	Lab Control Sample	101	106
LCSD 880-38417/3-A	Lab Control Sample Dup	90	95
MB 880-38417/1-A	Method Blank	92	99
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Ensolum
Project/Site: SU KIM HARRIS #003

Job ID: 890-3335-1
SDG: 090204003

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-38429/5-A

Matrix: Solid

Analysis Batch: 38578

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 38429

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/01/22 16:03	11/03/22 13:54	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/01/22 16:03	11/03/22 13:54	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/01/22 16:03	11/03/22 13:54	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/01/22 16:03	11/03/22 13:54	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/01/22 16:03	11/03/22 13:54	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/01/22 16:03	11/03/22 13:54	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130	11/01/22 16:03	11/03/22 13:54	1
1,4-Difluorobenzene (Surr)	97		70 - 130	11/01/22 16:03	11/03/22 13:54	1

Lab Sample ID: LCS 880-38429/1-A

Matrix: Solid

Analysis Batch: 38578

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 38429

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1055		mg/Kg		105	70 - 130
Toluene	0.100	0.1062		mg/Kg		106	70 - 130
Ethylbenzene	0.100	0.1011		mg/Kg		101	70 - 130
m-Xylene & p-Xylene	0.200	0.1781		mg/Kg		89	70 - 130
o-Xylene	0.100	0.08695		mg/Kg		87	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: LCSD 880-38429/2-A

Matrix: Solid

Analysis Batch: 38578

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 38429

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08951		mg/Kg		90	70 - 130	16	35
Toluene	0.100	0.1118		mg/Kg		112	70 - 130	5	35
Ethylbenzene	0.100	0.1144		mg/Kg		114	70 - 130	12	35
m-Xylene & p-Xylene	0.200	0.2092		mg/Kg		105	70 - 130	16	35
o-Xylene	0.100	0.1001		mg/Kg		100	70 - 130	14	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: 890-3335-1 MS

Matrix: Solid

Analysis Batch: 38578

Client Sample ID: BH01A

Prep Type: Total/NA

Prep Batch: 38429

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U	0.0998	0.07794		mg/Kg		78	70 - 130
Toluene	<0.00202	U	0.0998	0.07389		mg/Kg		74	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: SU KIM HARRIS #003

Job ID: 890-3335-1
SDG: 090204003

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

Lab Sample ID: 890-3335-1 MS

Matrix: Solid

Analysis Batch: 38578

Client Sample ID: BH01A

Prep Type: Total/NA

Prep Batch: 38429

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00202	U F1	0.0998	0.06461	F1	mg/Kg		65	70 - 130
m-Xylene & p-Xylene	<0.00403	U F1	0.200	0.1150	F1	mg/Kg		58	70 - 130
o-Xylene	<0.00202	U F1	0.0998	0.05875	F1	mg/Kg		58	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: 890-3335-1 MSD

Matrix: Solid

Analysis Batch: 38578

Client Sample ID: BH01A

Prep Type: Total/NA

Prep Batch: 38429

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	0.09324		mg/Kg		93	70 - 130	18	35
Toluene	<0.00202	U	0.100	0.08697		mg/Kg		87	70 - 130	16	35
Ethylbenzene	<0.00202	U F1	0.100	0.07149		mg/Kg		71	70 - 130	10	35
m-Xylene & p-Xylene	<0.00403	U F1	0.200	0.1254	F1	mg/Kg		63	70 - 130	9	35
o-Xylene	<0.00202	U F1	0.100	0.06362	F1	mg/Kg		63	70 - 130	8	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: MB 880-38629/5-A

Matrix: Solid

Analysis Batch: 38778

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 38629

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/03/22 12:48	11/05/22 21:39	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/03/22 12:48	11/05/22 21:39	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/03/22 12:48	11/05/22 21:39	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/03/22 12:48	11/05/22 21:39	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/03/22 12:48	11/05/22 21:39	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/03/22 12:48	11/05/22 21:39	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	11/03/22 12:48	11/05/22 21:39	1
1,4-Difluorobenzene (Surr)	94		70 - 130	11/03/22 12:48	11/05/22 21:39	1

Lab Sample ID: LCS 880-38629/1-A

Matrix: Solid

Analysis Batch: 38778

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 38629

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09073		mg/Kg		91	70 - 130
Toluene	0.100	0.09314		mg/Kg		93	70 - 130
Ethylbenzene	0.100	0.09370		mg/Kg		94	70 - 130
m-Xylene & p-Xylene	0.200	0.1851		mg/Kg		93	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: SU KIM HARRIS #003

Job ID: 890-3335-1
SDG: 090204003

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

Lab Sample ID: LCS 880-38629/1-A

Matrix: Solid

Analysis Batch: 38778

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 38629

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
o-Xylene	0.100	0.1072		mg/Kg		107	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: LCSD 880-38629/2-A

Matrix: Solid

Analysis Batch: 38778

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 38629

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09399		mg/Kg		94	70 - 130	4	35
Toluene	0.100	0.09630		mg/Kg		96	70 - 130	3	35
Ethylbenzene	0.100	0.09687		mg/Kg		97	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.1905		mg/Kg		95	70 - 130	3	35
o-Xylene	0.100	0.1095		mg/Kg		109	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 890-3335-4 MS

Matrix: Solid

Analysis Batch: 38778

Client Sample ID: BH02B

Prep Type: Total/NA

Prep Batch: 38629

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U F1	0.0996	0.04880	F1	mg/Kg		48	70 - 130
Toluene	<0.00200	U F1	0.0996	0.04928	F1	mg/Kg		49	70 - 130
Ethylbenzene	<0.00200	U F1	0.0996	0.04542	F1	mg/Kg		46	70 - 130
m-Xylene & p-Xylene	<0.00401	U F1	0.199	0.09400	F1	mg/Kg		47	70 - 130
o-Xylene	<0.00200	U F1	0.0996	0.05489	F1	mg/Kg		55	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: 890-3335-4 MSD

Matrix: Solid

Analysis Batch: 38778

Client Sample ID: BH02B

Prep Type: Total/NA

Prep Batch: 38629

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U F1	0.0990	0.06919	F1	mg/Kg		69	70 - 130	35	35
Toluene	<0.00200	U F1	0.0990	0.06233	F1	mg/Kg		63	70 - 130	23	35
Ethylbenzene	<0.00200	U F1	0.0990	0.05231	F1	mg/Kg		53	70 - 130	14	35
m-Xylene & p-Xylene	<0.00401	U F1	0.198	0.1055	F1	mg/Kg		53	70 - 130	12	35
o-Xylene	<0.00200	U F1	0.0990	0.06091	F1	mg/Kg		62	70 - 130	10	35

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QC Sample Results

Client: Ensolum
Project/Site: SU KIM HARRIS #003

Job ID: 890-3335-1
SDG: 090204003

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

Lab Sample ID: 890-3335-4 MSD

Matrix: Solid

Analysis Batch: 38778

Client Sample ID: BH02B

Prep Type: Total/NA

Prep Batch: 38629

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

Lab Sample ID: MB 880-38695/5-A

Matrix: Solid

Analysis Batch: 38696

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 38695

	MB	MB							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil	Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/04/22 07:55	11/04/22 10:38	1	
Toluene	<0.00200	U	0.00200	mg/Kg		11/04/22 07:55	11/04/22 10:38	1	
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/04/22 07:55	11/04/22 10:38	1	
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/04/22 07:55	11/04/22 10:38	1	
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/04/22 07:55	11/04/22 10:38	1	
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/04/22 07:55	11/04/22 10:38	1	

	MB	MB							
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil	Fac		
4-Bromofluorobenzene (Surr)	87		70 - 130	11/04/22 07:55	11/04/22 10:38	1			
1,4-Difluorobenzene (Surr)	89		70 - 130	11/04/22 07:55	11/04/22 10:38	1			

Lab Sample ID: LCS 880-38695/1-A

Matrix: Solid

Analysis Batch: 38696

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 38695

	Spike	LCS	LCS					%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Benzene	0.100	0.1080		mg/Kg		108	70 - 130		
Toluene	0.100	0.09419		mg/Kg		94	70 - 130		
Ethylbenzene	0.100	0.09607		mg/Kg		96	70 - 130		
m-Xylene & p-Xylene	0.200	0.1908		mg/Kg		95	70 - 130		
o-Xylene	0.100	0.09436		mg/Kg		94	70 - 130		

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: LCSD 880-38695/2-A

Matrix: Solid

Analysis Batch: 38696

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 38695

	Spike	LCSD	LCSD					%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.1051		mg/Kg		105	70 - 130	3	35	
Toluene	0.100	0.09171		mg/Kg		92	70 - 130	3	35	
Ethylbenzene	0.100	0.09095		mg/Kg		91	70 - 130	5	35	
m-Xylene & p-Xylene	0.200	0.1865		mg/Kg		93	70 - 130	2	35	
o-Xylene	0.100	0.09124		mg/Kg		91	70 - 130	3	35	

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: SU KIM HARRIS #003

Job ID: 890-3335-1
SDG: 090204003

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

Lab Sample ID: LCSD 880-38695/2-A

Matrix: Solid

Analysis Batch: 38696

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 38695

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

Lab Sample ID: 880-21089-A-31-D MS

Matrix: Solid

Analysis Batch: 38696

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 38695

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U	0.0998	0.1232		mg/Kg		123	70 - 130	
Toluene	<0.00201	U	0.0998	0.1080		mg/Kg		108	70 - 130	
Ethylbenzene	<0.00201	U	0.0998	0.1067		mg/Kg		107	70 - 130	
m-Xylene & p-Xylene	<0.00402	U	0.200	0.2199		mg/Kg		110	70 - 130	
o-Xylene	<0.00201	U	0.0998	0.1076		mg/Kg		108	70 - 130	

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: 880-21089-A-31-E MSD

Matrix: Solid

Analysis Batch: 38696

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 38695

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	<0.00201	U	0.101	0.1079		mg/Kg		107	70 - 130	13	35	
Toluene	<0.00201	U	0.101	0.09291		mg/Kg		92	70 - 130	15	35	
Ethylbenzene	<0.00201	U	0.101	0.09298		mg/Kg		92	70 - 130	14	35	
m-Xylene & p-Xylene	<0.00402	U	0.202	0.1927		mg/Kg		96	70 - 130	13	35	
o-Xylene	<0.00201	U	0.101	0.09451		mg/Kg		94	70 - 130	13	35	

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: MB 880-38778/8

Matrix: Solid

Analysis Batch: 38778

Client Sample ID: Method Blank

Prep Type: Total/NA

	MB	MB								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac		
Benzene	<0.00200	U	0.00200	mg/Kg			11/05/22 17:11	1		
Toluene	<0.00200	U	0.00200	mg/Kg			11/05/22 17:11	1		
Ethylbenzene	<0.00200	U	0.00200	mg/Kg			11/05/22 17:11	1		
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg			11/05/22 17:11	1		
o-Xylene	<0.00200	U	0.00200	mg/Kg			11/05/22 17:11	1		
Xylenes, Total	<0.00400	U	0.00400	mg/Kg			11/05/22 17:11	1		

	MB	MB								
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac				
4-Bromofluorobenzene (Surr)	102		70 - 130		11/05/22 17:11	1				
1,4-Difluorobenzene (Surr)	85		70 - 130		11/05/22 17:11	1				

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QC Sample Results

Client: Ensolum
Project/Site: SU KIM HARRIS #003

Job ID: 890-3335-1
SDG: 090204003

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

Lab Sample ID: MB 880-38417/1-A

Matrix: Solid

Analysis Batch: 38323

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 38417

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		11/01/22 15:08	11/01/22 21:10	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/01/22 15:08	11/01/22 21:10	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/01/22 15:08	11/01/22 21:10	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130			11/01/22 15:08	11/01/22 21:10	1
o-Terphenyl	99		70 - 130			11/01/22 15:08	11/01/22 21:10	1

Lab Sample ID: LCS 880-38417/2-A

Matrix: Solid

Analysis Batch: 38323

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 38417

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1076		mg/Kg		108	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1008		mg/Kg		101	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	101		70 - 130				
o-Terphenyl	106		70 - 130				

Lab Sample ID: LCSD 880-38417/3-A

Matrix: Solid

Analysis Batch: 38323

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 38417

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1087		mg/Kg		109	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	910.4		mg/Kg		91	70 - 130	10	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	90		70 - 130						
o-Terphenyl	95		70 - 130						

Lab Sample ID: 890-3335-1 MS

Matrix: Solid

Analysis Batch: 38323

Client Sample ID: BH01A

Prep Type: Total/NA

Prep Batch: 38417

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	997	812.4		mg/Kg		79	70 - 130
Diesel Range Organics (Over C10-C28)	77.7	F1	997	799.4		mg/Kg		72	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: SU KIM HARRIS #003

Job ID: 890-3335-1
SDG: 090204003

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

Lab Sample ID: 890-3335-1 MS

Matrix: Solid

Analysis Batch: 38323

Client Sample ID: BH01A

Prep Type: Total/NA

Prep Batch: 38417

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	88		70 - 130
o-Terphenyl	86		70 - 130

Lab Sample ID: 890-3335-1 MSD

Matrix: Solid

Analysis Batch: 38323

Client Sample ID: BH01A

Prep Type: Total/NA

Prep Batch: 38417

	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	999	984.3		mg/Kg		96	70 - 130	19	20
Diesel Range Organics (Over C10-C28)	77.7	F1	999	702.0	F1	mg/Kg		62	70 - 130	13	20
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	79		70 - 130								
o-Terphenyl	76		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-38328/1-A

Matrix: Solid

Analysis Batch: 38427

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			11/01/22 19:36	1		

Lab Sample ID: LCS 880-38328/2-A

Matrix: Solid

Analysis Batch: 38427

Client Sample ID: Lab Control Sample

Prep Type: Soluble

	Spike	LCS	LCS				%Rec		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	250	260.1		mg/Kg		104	90 - 110		

Lab Sample ID: LCSD 880-38328/3-A

Matrix: Solid

Analysis Batch: 38427

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	250	260.1		mg/Kg		104	90 - 110	0	20

Lab Sample ID: 880-20959-A-11-B MS

Matrix: Solid

Analysis Batch: 38427

Client Sample ID: Matrix Spike

Prep Type: Soluble

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	605		251	841.2		mg/Kg		94	90 - 110	

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QC Sample Results

Client: Ensolum
Project/Site: SU KIM HARRIS #003

Job ID: 890-3335-1
SDG: 090204003

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-20959-A-11-C MSD

Matrix: Solid

Analysis Batch: 38427

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	605		251	840.5		mg/Kg		94	90 - 110	0	20

Lab Sample ID: MB 880-38432/1-A

Matrix: Solid

Analysis Batch: 38532

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			11/02/22 08:36	1

Lab Sample ID: LCS 880-38432/2-A

Matrix: Solid

Analysis Batch: 38532

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	257.2		mg/Kg		103	90 - 110

Lab Sample ID: LCSD 880-38432/3-A

Matrix: Solid

Analysis Batch: 38532

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	254.2		mg/Kg		102	90 - 110	1	20

Lab Sample ID: 890-3335-5 MS

Matrix: Solid

Analysis Batch: 38532

Client Sample ID: BH03A

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	206		249	446.5		mg/Kg		97	90 - 110

Lab Sample ID: 890-3335-5 MSD

Matrix: Solid

Analysis Batch: 38532

Client Sample ID: BH03A

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	206		249	445.9		mg/Kg		96	90 - 110	0	20

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QC Association Summary

Client: Ensolum
Project/Site: SU KIM HARRIS #003

Job ID: 890-3335-1
SDG: 090204003

GC VOA

Prep Batch: 38429

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3335-1	BH01A	Total/NA	Solid	5035	
890-3335-5	BH03A	Total/NA	Solid	5035	
890-3335-6	BH03B	Total/NA	Solid	5035	
890-3335-7	BH04A	Total/NA	Solid	5035	
890-3335-8	BH04B	Total/NA	Solid	5035	
890-3335-9	BH05A	Total/NA	Solid	5035	
890-3335-10	BH05B	Total/NA	Solid	5035	
890-3335-11	BH06A	Total/NA	Solid	5035	
890-3335-12	BH06B	Total/NA	Solid	5035	
890-3335-13	BH01C	Total/NA	Solid	5035	
MB 880-38429/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-38429/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-38429/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3335-1 MS	BH01A	Total/NA	Solid	5035	
890-3335-1 MSD	BH01A	Total/NA	Solid	5035	

Analysis Batch: 38578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3335-1	BH01A	Total/NA	Solid	8021B	38429
890-3335-5	BH03A	Total/NA	Solid	8021B	38429
890-3335-6	BH03B	Total/NA	Solid	8021B	38429
890-3335-7	BH04A	Total/NA	Solid	8021B	38429
890-3335-8	BH04B	Total/NA	Solid	8021B	38429
890-3335-9	BH05A	Total/NA	Solid	8021B	38429
890-3335-10	BH05B	Total/NA	Solid	8021B	38429
890-3335-11	BH06A	Total/NA	Solid	8021B	38429
890-3335-12	BH06B	Total/NA	Solid	8021B	38429
890-3335-13	BH01C	Total/NA	Solid	8021B	38429
MB 880-38429/5-A	Method Blank	Total/NA	Solid	8021B	38429
LCS 880-38429/1-A	Lab Control Sample	Total/NA	Solid	8021B	38429
LCSD 880-38429/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	38429
890-3335-1 MS	BH01A	Total/NA	Solid	8021B	38429
890-3335-1 MSD	BH01A	Total/NA	Solid	8021B	38429

Prep Batch: 38629

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3335-4	BH02B	Total/NA	Solid	5035	
MB 880-38629/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-38629/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-38629/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3335-4 MS	BH02B	Total/NA	Solid	5035	
890-3335-4 MSD	BH02B	Total/NA	Solid	5035	

Analysis Batch: 38674

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3335-1	BH01A	Total/NA	Solid	Total BTEX	
890-3335-2	BH01B	Total/NA	Solid	Total BTEX	
890-3335-3	BH02A	Total/NA	Solid	Total BTEX	
890-3335-4	BH02B	Total/NA	Solid	Total BTEX	
890-3335-5	BH03A	Total/NA	Solid	Total BTEX	
890-3335-6	BH03B	Total/NA	Solid	Total BTEX	

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QC Association Summary

Client: Ensolum
Project/Site: SU KIM HARRIS #003

Job ID: 890-3335-1
SDG: 090204003

GC VOA (Continued)

Analysis Batch: 38674 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3335-7	BH04A	Total/NA	Solid	Total BTEX	
890-3335-8	BH04B	Total/NA	Solid	Total BTEX	
890-3335-9	BH05A	Total/NA	Solid	Total BTEX	
890-3335-10	BH05B	Total/NA	Solid	Total BTEX	
890-3335-11	BH06A	Total/NA	Solid	Total BTEX	
890-3335-12	BH06B	Total/NA	Solid	Total BTEX	
890-3335-13	BH01C	Total/NA	Solid	Total BTEX	

Prep Batch: 38695

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3335-2	BH01B	Total/NA	Solid	5035	
890-3335-3	BH02A	Total/NA	Solid	5035	
MB 880-38695/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-38695/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-38695/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-21089-A-31-D MS	Matrix Spike	Total/NA	Solid	5035	
880-21089-A-31-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 38696

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3335-2	BH01B	Total/NA	Solid	8021B	38695
890-3335-3	BH02A	Total/NA	Solid	8021B	38695
MB 880-38695/5-A	Method Blank	Total/NA	Solid	8021B	38695
LCS 880-38695/1-A	Lab Control Sample	Total/NA	Solid	8021B	38695
LCSD 880-38695/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	38695
880-21089-A-31-D MS	Matrix Spike	Total/NA	Solid	8021B	38695
880-21089-A-31-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	38695

Analysis Batch: 38778

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3335-4	BH02B	Total/NA	Solid	8021B	38629
MB 880-38629/5-A	Method Blank	Total/NA	Solid	8021B	38629
MB 880-38778/8	Method Blank	Total/NA	Solid	8021B	
LCS 880-38629/1-A	Lab Control Sample	Total/NA	Solid	8021B	38629
LCSD 880-38629/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	38629
890-3335-4 MS	BH02B	Total/NA	Solid	8021B	38629
890-3335-4 MSD	BH02B	Total/NA	Solid	8021B	38629

GC Semi VOA

Analysis Batch: 38323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3335-1	BH01A	Total/NA	Solid	8015B NM	38417
890-3335-2	BH01B	Total/NA	Solid	8015B NM	38417
890-3335-3	BH02A	Total/NA	Solid	8015B NM	38417
890-3335-4	BH02B	Total/NA	Solid	8015B NM	38417
890-3335-5	BH03A	Total/NA	Solid	8015B NM	38417
890-3335-6	BH03B	Total/NA	Solid	8015B NM	38417
890-3335-7	BH04A	Total/NA	Solid	8015B NM	38417
890-3335-8	BH04B	Total/NA	Solid	8015B NM	38417
890-3335-9	BH05A	Total/NA	Solid	8015B NM	38417

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QC Association Summary

Client: Ensolum
Project/Site: SU KIM HARRIS #003

Job ID: 890-3335-1
SDG: 090204003

GC Semi VOA (Continued)

Analysis Batch: 38323 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3335-10	BH05B	Total/NA	Solid	8015B NM	38417
890-3335-11	BH06A	Total/NA	Solid	8015B NM	38417
890-3335-12	BH06B	Total/NA	Solid	8015B NM	38417
890-3335-13	BH01C	Total/NA	Solid	8015B NM	38417
MB 880-38417/1-A	Method Blank	Total/NA	Solid	8015B NM	38417
LCS 880-38417/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	38417
LCSD 880-38417/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	38417
890-3335-1 MS	BH01A	Total/NA	Solid	8015B NM	38417
890-3335-1 MSD	BH01A	Total/NA	Solid	8015B NM	38417

Prep Batch: 38417

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3335-1	BH01A	Total/NA	Solid	8015NM Prep	
890-3335-2	BH01B	Total/NA	Solid	8015NM Prep	
890-3335-3	BH02A	Total/NA	Solid	8015NM Prep	
890-3335-4	BH02B	Total/NA	Solid	8015NM Prep	
890-3335-5	BH03A	Total/NA	Solid	8015NM Prep	
890-3335-6	BH03B	Total/NA	Solid	8015NM Prep	
890-3335-7	BH04A	Total/NA	Solid	8015NM Prep	
890-3335-8	BH04B	Total/NA	Solid	8015NM Prep	
890-3335-9	BH05A	Total/NA	Solid	8015NM Prep	
890-3335-10	BH05B	Total/NA	Solid	8015NM Prep	
890-3335-11	BH06A	Total/NA	Solid	8015NM Prep	
890-3335-12	BH06B	Total/NA	Solid	8015NM Prep	
890-3335-13	BH01C	Total/NA	Solid	8015NM Prep	
MB 880-38417/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-38417/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-38417/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3335-1 MS	BH01A	Total/NA	Solid	8015NM Prep	
890-3335-1 MSD	BH01A	Total/NA	Solid	8015NM Prep	

Analysis Batch: 38470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3335-1	BH01A	Total/NA	Solid	8015 NM	
890-3335-2	BH01B	Total/NA	Solid	8015 NM	
890-3335-3	BH02A	Total/NA	Solid	8015 NM	
890-3335-4	BH02B	Total/NA	Solid	8015 NM	
890-3335-5	BH03A	Total/NA	Solid	8015 NM	
890-3335-6	BH03B	Total/NA	Solid	8015 NM	
890-3335-7	BH04A	Total/NA	Solid	8015 NM	
890-3335-8	BH04B	Total/NA	Solid	8015 NM	
890-3335-9	BH05A	Total/NA	Solid	8015 NM	
890-3335-10	BH05B	Total/NA	Solid	8015 NM	
890-3335-11	BH06A	Total/NA	Solid	8015 NM	
890-3335-12	BH06B	Total/NA	Solid	8015 NM	
890-3335-13	BH01C	Total/NA	Solid	8015 NM	

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QC Association Summary

Client: Ensolum
Project/Site: SU KIM HARRIS #003

Job ID: 890-3335-1
SDG: 090204003

HPLC/IC

Leach Batch: 38328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3335-1	BH01A	Soluble	Solid	DI Leach	
890-3335-2	BH01B	Soluble	Solid	DI Leach	
890-3335-3	BH02A	Soluble	Solid	DI Leach	
890-3335-4	BH02B	Soluble	Solid	DI Leach	
MB 880-38328/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-38328/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-38328/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-20959-A-11-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-20959-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 38427

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3335-1	BH01A	Soluble	Solid	300.0	38328
890-3335-2	BH01B	Soluble	Solid	300.0	38328
890-3335-3	BH02A	Soluble	Solid	300.0	38328
890-3335-4	BH02B	Soluble	Solid	300.0	38328
MB 880-38328/1-A	Method Blank	Soluble	Solid	300.0	38328
LCS 880-38328/2-A	Lab Control Sample	Soluble	Solid	300.0	38328
LCSD 880-38328/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	38328
880-20959-A-11-B MS	Matrix Spike	Soluble	Solid	300.0	38328
880-20959-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	38328

Leach Batch: 38432

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3335-5	BH03A	Soluble	Solid	DI Leach	
890-3335-6	BH03B	Soluble	Solid	DI Leach	
890-3335-7	BH04A	Soluble	Solid	DI Leach	
890-3335-8	BH04B	Soluble	Solid	DI Leach	
890-3335-9	BH05A	Soluble	Solid	DI Leach	
890-3335-10	BH05B	Soluble	Solid	DI Leach	
890-3335-11	BH06A	Soluble	Solid	DI Leach	
890-3335-12	BH06B	Soluble	Solid	DI Leach	
890-3335-13	BH01C	Soluble	Solid	DI Leach	
MB 880-38432/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-38432/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-38432/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3335-5 MS	BH03A	Soluble	Solid	DI Leach	
890-3335-5 MSD	BH03A	Soluble	Solid	DI Leach	

Analysis Batch: 38532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3335-5	BH03A	Soluble	Solid	300.0	38432
890-3335-6	BH03B	Soluble	Solid	300.0	38432
890-3335-7	BH04A	Soluble	Solid	300.0	38432
890-3335-8	BH04B	Soluble	Solid	300.0	38432
890-3335-9	BH05A	Soluble	Solid	300.0	38432
890-3335-10	BH05B	Soluble	Solid	300.0	38432
890-3335-11	BH06A	Soluble	Solid	300.0	38432
890-3335-12	BH06B	Soluble	Solid	300.0	38432
890-3335-13	BH01C	Soluble	Solid	300.0	38432
MB 880-38432/1-A	Method Blank	Soluble	Solid	300.0	38432

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QC Association Summary

Client: Ensolum
Project/Site: SU KIM HARRIS #003

Job ID: 890-3335-1
SDG: 090204003

HPLC/IC (Continued)

Analysis Batch: 38532 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-38432/2-A	Lab Control Sample	Soluble	Solid	300.0	38432
LCSD 880-38432/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	38432
890-3335-5 MS	BH03A	Soluble	Solid	300.0	38432
890-3335-5 MSD	BH03A	Soluble	Solid	300.0	38432

Lab Chronicle

Client: Ensolum
Project/Site: SU KIM HARRIS #003

Job ID: 890-3335-1
SDG: 090204003

Client Sample ID: BH01A**Lab Sample ID: 890-3335-1****Date Collected: 10/28/22 11:30****Matrix: Solid****Date Received: 10/28/22 16:15**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	38429	11/01/22 16:03	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38578	11/03/22 14:23	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38674	11/03/22 17:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			38470	11/02/22 10:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	38417	11/01/22 15:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38323	11/01/22 22:14	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	38328	11/01/22 09:01	CH	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	38427	11/01/22 21:50	CH	EET MID

Client Sample ID: BH01B**Lab Sample ID: 890-3335-2****Date Collected: 10/28/22 11:35****Matrix: Solid****Date Received: 10/28/22 16:15**

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	38695	11/04/22 07:55	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38696	11/04/22 15:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38674	11/04/22 15:52	SM	EET MID
Total/NA	Analysis	8015 NM		1			38470	11/02/22 10:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	38417	11/01/22 15:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38323	11/01/22 23:19	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	38328	11/01/22 09:01	CH	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	38427	11/01/22 21:55	CH	EET MID

Client Sample ID: BH02A**Lab Sample ID: 890-3335-3****Date Collected: 10/28/22 11:40****Matrix: Solid****Date Received: 10/28/22 16:15**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	38695	11/04/22 07:55	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38696	11/04/22 15:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38674	11/07/22 15:35	SM	EET MID
Total/NA	Analysis	8015 NM		1			38470	11/02/22 10:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	38417	11/01/22 15:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38323	11/01/22 23:40	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	38328	11/01/22 09:01	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38427	11/01/22 22:00	CH	EET MID

Client Sample ID: BH02B**Lab Sample ID: 890-3335-4****Date Collected: 10/28/22 11:45****Matrix: Solid****Date Received: 10/28/22 16:15**

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	38629	11/03/22 12:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38778	11/05/22 22:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38674	11/07/22 15:48	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: SU KIM HARRIS #003

Job ID: 890-3335-1
SDG: 090204003

Client Sample ID: BH02B

Lab Sample ID: 890-3335-4

Date Collected: 10/28/22 11:45

Matrix: Solid

Date Received: 10/28/22 16:15

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			38470	11/02/22 10:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	38417	11/01/22 15:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38323	11/02/22 00:02	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	38328	11/01/22 09:01	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38427	11/01/22 22:05	CH	EET MID

Client Sample ID: BH03A

Lab Sample ID: 890-3335-5

Date Collected: 10/28/22 11:50

Matrix: Solid

Date Received: 10/28/22 16:15

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	38429	11/01/22 16:03	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38578	11/03/22 15:44	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38674	11/03/22 17:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			38470	11/02/22 10:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	38417	11/01/22 15:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38323	11/02/22 00:23	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	38432	11/01/22 16:11	CH	EET MID
Soluble	Analysis	300.0		1			38532	11/02/22 13:25	CH	EET MID

Client Sample ID: BH03B

Lab Sample ID: 890-3335-6

Date Collected: 10/28/22 11:55

Matrix: Solid

Date Received: 10/28/22 16:15

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	38429	11/01/22 16:03	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38578	11/03/22 16:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38674	11/03/22 17:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			38470	11/02/22 10:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	38417	11/01/22 15:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38323	11/02/22 00:45	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	38432	11/01/22 16:11	CH	EET MID
Soluble	Analysis	300.0		1			38532	11/02/22 13:40	CH	EET MID

Client Sample ID: BH04A

Lab Sample ID: 890-3335-7

Date Collected: 10/28/22 13:00

Matrix: Solid

Date Received: 10/28/22 16:15

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	38429	11/01/22 16:03	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38578	11/03/22 16:25	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38674	11/03/22 17:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			38470	11/02/22 10:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	38417	11/01/22 15:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38323	11/02/22 01:06	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: SU KIM HARRIS #003

Job ID: 890-3335-1
SDG: 090204003

Client Sample ID: BH04A

Lab Sample ID: 890-3335-7

Date Collected: 10/28/22 13:00

Matrix: Solid

Date Received: 10/28/22 16:15

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	38432	11/01/22 16:11	CH	EET MID
Soluble	Analysis	300.0		1			38532	11/02/22 13:45	CH	EET MID

Client Sample ID: BH04B

Lab Sample ID: 890-3335-8

Date Collected: 10/28/22 13:05

Matrix: Solid

Date Received: 10/28/22 16:15

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	38429	11/01/22 16:03	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38578	11/03/22 16:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38674	11/04/22 14:55	SM	EET MID
Total/NA	Analysis	8015 NM		1			38470	11/02/22 10:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	38417	11/01/22 15:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38323	11/02/22 01:27	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	38432	11/01/22 16:11	CH	EET MID
Soluble	Analysis	300.0		5			38532	11/02/22 18:49	CH	EET MID

Client Sample ID: BH05A

Lab Sample ID: 890-3335-9

Date Collected: 10/28/22 13:10

Matrix: Solid

Date Received: 10/28/22 16:15

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	38429	11/01/22 16:03	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38578	11/03/22 17:06	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38674	11/04/22 14:55	SM	EET MID
Total/NA	Analysis	8015 NM		1			38470	11/02/22 10:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	38417	11/01/22 15:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38323	11/02/22 01:49	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	38432	11/01/22 16:11	CH	EET MID
Soluble	Analysis	300.0		1			38532	11/02/22 14:05	CH	EET MID

Client Sample ID: BH05B

Lab Sample ID: 890-3335-10

Date Collected: 10/28/22 13:15

Matrix: Solid

Date Received: 10/28/22 16:15

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	38429	11/01/22 16:03	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38578	11/03/22 17:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38674	11/04/22 14:55	SM	EET MID
Total/NA	Analysis	8015 NM		1			38470	11/02/22 10:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	38417	11/01/22 15:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38323	11/02/22 02:10	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	38432	11/01/22 16:11	CH	EET MID
Soluble	Analysis	300.0		1			38532	11/02/22 14:10	CH	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: SU KIM HARRIS #003

Job ID: 890-3335-1
SDG: 090204003

Client Sample ID: BH06A

Lab Sample ID: 890-3335-11

Date Collected: 10/28/22 13:20

Matrix: Solid

Date Received: 10/28/22 16:15

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	38429	11/01/22 16:03	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38578	11/03/22 19:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38674	11/04/22 14:55	SM	EET MID
Total/NA	Analysis	8015 NM		1			38470	11/02/22 10:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	38417	11/01/22 15:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38323	11/02/22 02:54	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	38432	11/01/22 16:11	CH	EET MID
Soluble	Analysis	300.0		1			38532	11/02/22 14:15	CH	EET MID

Client Sample ID: BH06B

Lab Sample ID: 890-3335-12

Date Collected: 10/28/22 13:25

Matrix: Solid

Date Received: 10/28/22 16:15

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	38429	11/01/22 16:03	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38578	11/03/22 19:37	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38674	11/04/22 14:55	SM	EET MID
Total/NA	Analysis	8015 NM		1			38470	11/02/22 10:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	38417	11/01/22 15:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38323	11/02/22 03:16	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	38432	11/01/22 16:11	CH	EET MID
Soluble	Analysis	300.0		1			38532	11/02/22 14:20	CH	EET MID

Client Sample ID: BH01C

Lab Sample ID: 890-3335-13

Date Collected: 10/28/22 13:45

Matrix: Solid

Date Received: 10/28/22 16:15

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	38429	11/01/22 16:03	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38578	11/03/22 19:57	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38674	11/04/22 14:55	SM	EET MID
Total/NA	Analysis	8015 NM		1			38470	11/02/22 10:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	38417	11/01/22 15:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38323	11/02/22 03:37	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	38432	11/01/22 16:11	CH	EET MID
Soluble	Analysis	300.0		1			38532	11/02/22 14:25	CH	EET MID

Laboratory References:

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

Eurofins Carlsbad

Accreditation/Certification Summary

Client: Ensolum
Project/Site: SU KIM HARRIS #003

Job ID: 890-3335-1
SDG: 090204003

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	T104704400-22-24	06-30-23

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

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

Method Summary

Client: Ensolum
Project/Site: SU KIM HARRIS #003

Job ID: 890-3335-1
SDG: 090204003

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: SU KIM HARRIS #003

Job ID: 890-3335-1
SDG: 090204003

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3335-1	BH01A	Solid	10/28/22 11:30	10/28/22 16:15	6
890-3335-2	BH01B	Solid	10/28/22 11:35	10/28/22 16:15	12
890-3335-3	BH02A	Solid	10/28/22 11:40	10/28/22 16:15	6
890-3335-4	BH02B	Solid	10/28/22 11:45	10/28/22 16:15	12
890-3335-5	BH03A	Solid	10/28/22 11:50	10/28/22 16:15	6
890-3335-6	BH03B	Solid	10/28/22 11:55	10/28/22 16:15	12
890-3335-7	BH04A	Solid	10/28/22 13:00	10/28/22 16:15	6
890-3335-8	BH04B	Solid	10/28/22 13:05	10/28/22 16:15	12
890-3335-9	BH05A	Solid	10/28/22 13:10	10/28/22 16:15	6
890-3335-10	BH05B	Solid	10/28/22 13:15	10/28/22 16:15	12
890-3335-11	BH06A	Solid	10/28/22 13:20	10/28/22 16:15	6
890-3335-12	BH06B	Solid	10/28/22 13:25	10/28/22 16:15	12
890-3335-13	BH01C	Solid	10/28/22 13:45	10/28/22 16:15	24

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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:	Dan Mior	Bill to: (if different)	A.A.
Company Name:	ANALYTICAL	Company Name:	
Address:	5177 Nact 1 Parts Hwy	Address:	
City, State ZIP:	Carlsbad NM 88220	City, State ZIP:	carlsbad@analytical.com
Phone:	308-887-2946	Email:	

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:	SUPTM Hays #008	Turn Around	
Project Number:	0902041003	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	Pst. Code
Project Location:	32.9425345 - 103.5055486	Date:	
Sampler's Name:	Julianne Falkenberger	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			
SAMPLE RECEIPT		Temp Blank:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Samples Received Intact:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Thermometer ID:	TCU00037
Cooler Custody Seals:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Temperature Reading:	2.8
Total Containers:		Corrected Temperature:	2.4
Sample Identification		Parameters	
Sample	Matrix	Date Sampled	Time Sampled
BH01A		10-28-22	1130
BH01B		10-28-22	1135
BH02A		10-28-22	1140
BH02B		10-28-22	1145
BH03A		10-28-22	1150
BH03B		10-28-22	1155
BH04A		10-28-22	1300
BH04B		10-28-22	1305
BH05A		10-28-22	1310
BH05B		10-28-22	1315



890-3335 Chain of Custody

TPH
BTX
Chlorides

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 Comments	Incident # 6		
AAPD22057488			

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 \$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
		10-28-22 1615			



Environment Testing

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

Chain of Custody

Work Order No:

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Page 2 of 2

Project Manager:	Dean M. Bric	Bill to: (if different)	09-09-
Company Name:	Qnsolium LLC	Company Name:	
Address:	3172 Apt. 111 Hwy 4	Address:	
City, State ZIP:	Northbrook, IL 60062-2000	City, State ZIP:	
Phone:	303 887-2946	Email:	dmb@qnsolium.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:	Sukim Horns #003	Turn Around
Project Number:	1902041003	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush
Project location:	324425545 - 103, 30554	Exp Date:
Sampler's Name:	Jullionna Williams	TAT starts the day received by the lab if received by 4:30pm
P O #:		
SAMPLE RECEIPT		
Samples Received Intact:	Yes No	Thermometer ID:
Cooler Custody Seals:	Yes No N/A	Correction factor:
Sample Custody Seals:	Yes No N/A	Temperature reading:
Total Containers:		Corrected Temperature:

ANALYSIS REQUEST										Preservative Codes	
Pres. Code										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: SACP	

[illegible]

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
1		10.25.22	2		
3			4		
5			6		

Printed Date: 08.12.2020 Rev: 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3335-1

SDG Number: 090204003

Login Number: 3335

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: 890-3335-1

SDG Number: 090204003

Login Number: 3335

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 11/01/22 10:26 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

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ANALYTICAL REPORT

PREPARED FOR

Attn: Daniel Moir

Ensolum

601 N. Marienfeld St.

Suite 400

Midland, Texas 79701

Generated 12/1/2022 1:48:04 PM

JOB DESCRIPTION

SV KIM HARRIS #003

SDG NUMBER 09C2041003

JOB NUMBER

890-3511-1

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
12/1/2022 1:48:04 PM

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

Client: Ensolum
Project/Site: SV KIM HARRIS #003

Laboratory Job ID: 890-3511-1
SDG: 09C2041003

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Definitions/Glossary

Client: Ensolum
Project/Site: SV KIM HARRIS #003

Job ID: 890-3511-1
SDG: 09C2041003

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.
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
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: SV KIM HARRIS #003

Job ID: 890-3511-1
SDG: 09C2041003

Job ID: 890-3511-1**Laboratory: Eurofins Carlsbad****Narrative****Job Narrative
890-3511-1****Receipt**

The samples were received on 11/17/2022 4:30 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 4.4°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-40434 and analytical batch 880-40362 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: The absolute response for Benzene, Toluene, Ethylbenzene, m-Xylene & p-Xylene and o-Xylene was greater than the method reporting limit (RL) in the following sample: (LCSD 880-40436/2-A). The instrument raw data has been manually reviewed and the result can be reported as ND.

Method 8021B: The matrix spike (MS) and/or matrix spike duplicate (MSD) recovery for preparation batch 880-40436 and analytical batch 880-40689 was outside control limits for the following analyte(s): Benzene and Toluene. Results may be biased high because this analyte is a common laboratory solvent and contaminant.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-40436 and analytical batch 880-40689 was outside the control limits.

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

GC Semi VOA

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-40271 and analytical batch 880-40260 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-40260/5) and (LCS 880-40271/2-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: BH01C (890-3511-7). 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: BH08C (890-3511-10). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-40006 and analytical batch 880-40248 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits. The associated sample is: BH07A (890-3511-1).

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: SV KIM HARRIS #003

Job ID: 890-3511-1
SDG: 09C2041003

Client Sample ID: BH07A

Lab Sample ID: 890-3511-1

Date Collected: 11/17/22 09:20

Matrix: Solid

Date Received: 11/17/22 16:30

Sample Depth: 6

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		11/28/22 11:03	11/29/22 03:57	1
Toluene	<0.00201	U	0.00201	mg/Kg		11/28/22 11:03	11/29/22 03:57	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		11/28/22 11:03	11/29/22 03:57	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		11/28/22 11:03	11/29/22 03:57	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		11/28/22 11:03	11/29/22 03:57	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		11/28/22 11:03	11/29/22 03:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		70 - 130	11/28/22 11:03	11/29/22 03:57	1
1,4-Difluorobenzene (Surr)	80		70 - 130	11/28/22 11:03	11/29/22 03:57	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			11/29/22 09:20	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			11/28/22 12:39	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/23/22 08:58	11/23/22 11:38	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/23/22 08:58	11/23/22 11:38	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/23/22 08:58	11/23/22 11:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	114		70 - 130	11/23/22 08:58	11/23/22 11:38	1
o-Terphenyl	124		70 - 130	11/23/22 08:58	11/23/22 11:38	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22.6		4.95	mg/Kg			11/23/22 07:14	1

Client Sample ID: BH07B

Lab Sample ID: 890-3511-2

Date Collected: 11/17/22 09:30

Matrix: Solid

Date Received: 11/17/22 16:30

Sample Depth: 12

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		11/28/22 11:03	11/29/22 04:18	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/28/22 11:03	11/29/22 04:18	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/28/22 11:03	11/29/22 04:18	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/28/22 11:03	11/29/22 04:18	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/28/22 11:03	11/29/22 04:18	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/28/22 11:03	11/29/22 04:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	11/28/22 11:03	11/29/22 04:18	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: SV KIM HARRIS #003

Job ID: 890-3511-1
SDG: 09C2041003

Client Sample ID: BH07B

Lab Sample ID: 890-3511-2

Date Collected: 11/17/22 09:30

Matrix: Solid

Date Received: 11/17/22 16:30

Sample Depth: 12

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	106		70 - 130	11/28/22 11:03	11/29/22 04:18	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/29/22 09:20	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			11/28/22 12:39	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		11/23/22 08:58	11/23/22 12:44	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		11/23/22 08:58	11/23/22 12:44	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/23/22 08:58	11/23/22 12:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130			11/23/22 08:58	11/23/22 12:44	1
o-Terphenyl	123		70 - 130			11/23/22 08:58	11/23/22 12:44	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	28.9		4.97	mg/Kg			11/23/22 07:20	1

Client Sample ID: BH07C

Lab Sample ID: 890-3511-3

Date Collected: 11/17/22 09:45

Matrix: Solid

Date Received: 11/17/22 16:30

Sample Depth: 24

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		11/28/22 11:03	11/29/22 04:38	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/28/22 11:03	11/29/22 04:38	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/28/22 11:03	11/29/22 04:38	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/28/22 11:03	11/29/22 04:38	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/28/22 11:03	11/29/22 04:38	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/28/22 11:03	11/29/22 04:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130	11/28/22 11:03	11/29/22 04:38	1
1,4-Difluorobenzene (Surr)	80		70 - 130	11/28/22 11:03	11/29/22 04:38	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			11/29/22 09:20	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			11/28/22 12:39	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: SV KIM HARRIS #003

Job ID: 890-3511-1
SDG: 09C2041003

Client Sample ID: BH07C

Lab Sample ID: 890-3511-3

Date Collected: 11/17/22 09:45

Matrix: Solid

Date Received: 11/17/22 16:30

Sample Depth: 24

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		11/23/22 08:58	11/23/22 13:06	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		11/23/22 08:58	11/23/22 13:06	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/23/22 08:58	11/23/22 13:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130			11/23/22 08:58	11/23/22 13:06	1
o-Terphenyl	118		70 - 130			11/23/22 08:58	11/23/22 13:06	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	28.7		5.00	mg/Kg			11/23/22 07:37	1

Client Sample ID: BH09A

Lab Sample ID: 890-3511-4

Date Collected: 11/17/22 11:30

Matrix: Solid

Date Received: 11/17/22 16:30

Sample Depth: 6

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		11/28/22 11:03	11/29/22 04:59	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/28/22 11:03	11/29/22 04:59	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/28/22 11:03	11/29/22 04:59	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		11/28/22 11:03	11/29/22 04:59	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/28/22 11:03	11/29/22 04:59	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		11/28/22 11:03	11/29/22 04:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130			11/28/22 11:03	11/29/22 04:59	1
1,4-Difluorobenzene (Surr)	96		70 - 130			11/28/22 11:03	11/29/22 04:59	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			11/29/22 09:20	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			11/28/22 12:39	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/23/22 08:58	11/23/22 13:28	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/23/22 08:58	11/23/22 13:28	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/23/22 08:58	11/23/22 13:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130			11/23/22 08:58	11/23/22 13:28	1
o-Terphenyl	119		70 - 130			11/23/22 08:58	11/23/22 13:28	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: SV KIM HARRIS #003

Job ID: 890-3511-1
SDG: 09C2041003

Client Sample ID: BH09A

Lab Sample ID: 890-3511-4

Date Collected: 11/17/22 11:30

Matrix: Solid

Date Received: 11/17/22 16:30

Sample Depth: 6

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	63.0		4.99	mg/Kg			11/23/22 07:42	1

Client Sample ID: BH09B

Lab Sample ID: 890-3511-5

Date Collected: 11/17/22 11:40

Matrix: Solid

Date Received: 11/17/22 16:30

Sample Depth: 12

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		11/28/22 11:03	11/29/22 05:19	1
Toluene	<0.00202	U	0.00202	mg/Kg		11/28/22 11:03	11/29/22 05:19	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		11/28/22 11:03	11/29/22 05:19	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		11/28/22 11:03	11/29/22 05:19	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		11/28/22 11:03	11/29/22 05:19	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		11/28/22 11:03	11/29/22 05:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130			11/28/22 11:03	11/29/22 05:19	1
1,4-Difluorobenzene (Surr)	100		70 - 130			11/28/22 11:03	11/29/22 05:19	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			11/29/22 09:20	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			11/28/22 12:39	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/23/22 08:58	11/23/22 13:49	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/23/22 08:58	11/23/22 13:49	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/23/22 08:58	11/23/22 13:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130			11/23/22 08:58	11/23/22 13:49	1
o-Terphenyl	120		70 - 130			11/23/22 08:58	11/23/22 13:49	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23.6		5.01	mg/Kg			11/23/22 07:59	1

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Client Sample Results

Client: Ensolum
Project/Site: SV KIM HARRIS #003

Job ID: 890-3511-1
SDG: 09C2041003

Client Sample ID: BH09C

Lab Sample ID: 890-3511-6

Date Collected: 11/17/22 11:50

Matrix: Solid

Date Received: 11/17/22 16:30

Sample Depth: 24

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		11/28/22 11:03	11/29/22 05:40	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/28/22 11:03	11/29/22 05:40	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/28/22 11:03	11/29/22 05:40	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		11/28/22 11:03	11/29/22 05:40	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/28/22 11:03	11/29/22 05:40	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/28/22 11:03	11/29/22 05:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	11/28/22 11:03	11/29/22 05:40	1
1,4-Difluorobenzene (Surr)	103		70 - 130	11/28/22 11:03	11/29/22 05:40	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			11/29/22 09:20	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			11/28/22 12:39	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/23/22 08:58	11/23/22 14:11	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/23/22 08:58	11/23/22 14:11	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/23/22 08:58	11/23/22 14:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130	11/23/22 08:58	11/23/22 14:11	1
o-Terphenyl	126		70 - 130	11/23/22 08:58	11/23/22 14:11	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19.7		4.98	mg/Kg			11/23/22 08:05	1

Client Sample ID: BH01C

Lab Sample ID: 890-3511-7

Date Collected: 11/17/22 13:10

Matrix: Solid

Date Received: 11/17/22 16:30

Sample Depth: 36

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		11/28/22 11:03	11/29/22 06:00	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/28/22 11:03	11/29/22 06:00	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/28/22 11:03	11/29/22 06:00	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		11/28/22 11:03	11/29/22 06:00	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/28/22 11:03	11/29/22 06:00	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		11/28/22 11:03	11/29/22 06:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	11/28/22 11:03	11/29/22 06:00	1

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Client Sample Results

Client: Ensolum
Project/Site: SV KIM HARRIS #003

Job ID: 890-3511-1
SDG: 09C2041003

Client Sample ID: BH01C

Lab Sample ID: 890-3511-7

Date Collected: 11/17/22 13:10

Matrix: Solid

Date Received: 11/17/22 16:30

Sample Depth: 36

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	99		70 - 130	11/28/22 11:03	11/29/22 06:00	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			11/29/22 09:20	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			11/28/22 12:39	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		11/23/22 08:58	11/23/22 14:33	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		11/23/22 08:58	11/23/22 14:33	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/23/22 08:58	11/23/22 14:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	128		70 - 130			11/23/22 08:58	11/23/22 14:33	1
o-Terphenyl	133	S1+	70 - 130			11/23/22 08:58	11/23/22 14:33	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	625		4.99	mg/Kg			11/23/22 08:11	1

Client Sample ID: BH08A

Lab Sample ID: 890-3511-8

Date Collected: 11/17/22 13:30

Matrix: Solid

Date Received: 11/17/22 16:30

Sample Depth: 6

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		11/28/22 11:03	11/29/22 06:20	1
Toluene	<0.00201	U	0.00201	mg/Kg		11/28/22 11:03	11/29/22 06:20	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		11/28/22 11:03	11/29/22 06:20	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		11/28/22 11:03	11/29/22 06:20	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		11/28/22 11:03	11/29/22 06:20	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		11/28/22 11:03	11/29/22 06:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	11/28/22 11:03	11/29/22 06:20	1
1,4-Difluorobenzene (Surr)	99		70 - 130	11/28/22 11:03	11/29/22 06:20	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			11/29/22 09:20	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			11/28/22 12:39	1

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Client Sample Results

Client: Ensolum
Project/Site: SV KIM HARRIS #003

Job ID: 890-3511-1
SDG: 09C2041003

Client Sample ID: BH08A

Lab Sample ID: 890-3511-8

Date Collected: 11/17/22 13:30

Matrix: Solid

Date Received: 11/17/22 16:30

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	<50.0	U	50.0	mg/Kg		11/23/22 08:58	11/23/22 14:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/23/22 08:58	11/23/22 14:55	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/23/22 08:58	11/23/22 14:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130			11/23/22 08:58	11/23/22 14:55	1
o-Terphenyl	123		70 - 130			11/23/22 08:58	11/23/22 14:55	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	67.2		4.96	mg/Kg			11/23/22 08:16	1

Client Sample ID: BH08B

Lab Sample ID: 890-3511-9

Date Collected: 11/17/22 13:40

Matrix: Solid

Date Received: 11/17/22 16:30

Sample Depth: 12

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		11/28/22 11:03	11/29/22 06:41	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/28/22 11:03	11/29/22 06:41	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/28/22 11:03	11/29/22 06:41	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/28/22 11:03	11/29/22 06:41	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/28/22 11:03	11/29/22 06:41	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/28/22 11:03	11/29/22 06:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130			11/28/22 11:03	11/29/22 06:41	1
1,4-Difluorobenzene (Surr)	112		70 - 130			11/28/22 11:03	11/29/22 06:41	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/29/22 09:20	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			11/28/22 12:39	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		11/23/22 08:58	11/23/22 15:17	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		11/23/22 08:58	11/23/22 15:17	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/23/22 08:58	11/23/22 15:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	110		70 - 130			11/23/22 08:58	11/23/22 15:17	1
o-Terphenyl	119		70 - 130			11/23/22 08:58	11/23/22 15:17	1

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Client Sample Results

Client: Ensolum
Project/Site: SV KIM HARRIS #003

Job ID: 890-3511-1
SDG: 09C2041003

Client Sample ID: BH08B

Lab Sample ID: 890-3511-9

Date Collected: 11/17/22 13:40

Matrix: Solid

Date Received: 11/17/22 16:30

Sample Depth: 12

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	43.2		5.05	mg/Kg			11/23/22 08:22	1

Client Sample ID: BH08C

Lab Sample ID: 890-3511-10

Date Collected: 11/17/22 13:50

Matrix: Solid

Date Received: 11/17/22 16:30

Sample Depth: 36

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U F1 *- *1	0.00201	mg/Kg		11/28/22 11:21	11/30/22 17:33	1
Toluene	<0.00201	U F1 *- *1	0.00201	mg/Kg		11/28/22 11:21	11/30/22 17:33	1
Ethylbenzene	<0.00201	U *- *1	0.00201	mg/Kg		11/28/22 11:21	11/30/22 17:33	1
m-Xylene & p-Xylene	<0.00402	U *- *1	0.00402	mg/Kg		11/28/22 11:21	11/30/22 17:33	1
o-Xylene	<0.00201	U *- *1	0.00201	mg/Kg		11/28/22 11:21	11/30/22 17:33	1
Xylenes, Total	<0.00402	U *- *1	0.00402	mg/Kg		11/28/22 11:21	11/30/22 17:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130			11/28/22 11:21	11/30/22 17:33	1
1,4-Difluorobenzene (Surr)	97		70 - 130			11/28/22 11:21	11/30/22 17:33	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			12/01/22 13:21	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			11/28/22 12:39	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		11/23/22 08:58	11/23/22 15:39	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		11/23/22 08:58	11/23/22 15:39	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/23/22 08:58	11/23/22 15:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	132	S1+	70 - 130			11/23/22 08:58	11/23/22 15:39	1
o-Terphenyl	135	S1+	70 - 130			11/23/22 08:58	11/23/22 15:39	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	38.2		4.98	mg/Kg			11/23/22 08:27	1

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Surrogate Summary

Client: Ensolum
Project/Site: SV KIM HARRIS #003

Job ID: 890-3511-1
SDG: 09C2041003

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	BFB1	DFBZ1				
		(70-130)	(70-130)				
890-3509-A-1-C MS	Matrix Spike	103	104				
890-3509-A-1-D MSD	Matrix Spike Duplicate	74	100				
890-3511-1	BH07A	81	80				
890-3511-2	BH07B	97	106				
890-3511-3	BH07C	90	80				
890-3511-4	BH09A	94	96				
890-3511-5	BH09B	99	100				
890-3511-6	BH09C	98	103				
890-3511-7	BH01C	106	99				
890-3511-8	BH08A	97	99				
890-3511-9	BH08B	96	112				
890-3511-10	BH08C	97	97				
890-3511-10 MS	BH08C	92	104				
890-3511-10 MSD	BH08C	101	95				
LCS 880-40434/1-A	Lab Control Sample	97	105				
LCS 880-40436/1-A	Lab Control Sample	99	89				
LCSD 880-40434/2-A	Lab Control Sample Dup	93	109				
LCSD 880-40436/2-A	Lab Control Sample Dup	0 S1-	0 S1-				
MB 880-40407/5-A	Method Blank	80	103				
MB 880-40434/5-A	Method Blank	83	105				
MB 880-40436/5-A	Method Blank	66 S1-	95				
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	OTPH1				
		(70-130)	(70-130)				
890-3511-1	BH07A	114	124				
890-3511-1 MS	BH07A	130	122				
890-3511-1 MSD	BH07A	118	122				
890-3511-2	BH07B	113	123				
890-3511-3	BH07C	110	118				
890-3511-4	BH09A	113	119				
890-3511-5	BH09B	113	120				
890-3511-6	BH09C	115	126				
890-3511-7	BH01C	128	133 S1+				
890-3511-8	BH08A	113	123				
890-3511-9	BH08B	110	119				
890-3511-10	BH08C	132 S1+	135 S1+				
LCS 880-40271/2-A	Lab Control Sample	120	133 S1+				
LCSD 880-40271/3-A	Lab Control Sample Dup	114	127				
MB 880-40271/1-A	Method Blank	129	138 S1+				
Surrogate Legend							
1CO = 1-Chlorooctane							
OTPH = o-Terphenyl							

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QC Sample Results

Client: Ensolum
Project/Site: SV KIM HARRIS #003

Job ID: 890-3511-1
SDG: 09C2041003

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-40407/5-A

Matrix: Solid

Analysis Batch: 40362

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 40407

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/28/22 09:59	11/28/22 12:11	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/28/22 09:59	11/28/22 12:11	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/28/22 09:59	11/28/22 12:11	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/28/22 09:59	11/28/22 12:11	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/28/22 09:59	11/28/22 12:11	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/28/22 09:59	11/28/22 12:11	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		70 - 130	11/28/22 09:59	11/28/22 12:11	1
1,4-Difluorobenzene (Surr)	103		70 - 130	11/28/22 09:59	11/28/22 12:11	1

Lab Sample ID: MB 880-40434/5-A

Matrix: Solid

Analysis Batch: 40362

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 40434

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/28/22 11:03	11/28/22 22:49	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/28/22 11:03	11/28/22 22:49	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/28/22 11:03	11/28/22 22:49	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/28/22 11:03	11/28/22 22:49	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/28/22 11:03	11/28/22 22:49	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/28/22 11:03	11/28/22 22:49	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		70 - 130	11/28/22 11:03	11/28/22 22:49	1
1,4-Difluorobenzene (Surr)	105		70 - 130	11/28/22 11:03	11/28/22 22:49	1

Lab Sample ID: LCS 880-40434/1-A

Matrix: Solid

Analysis Batch: 40362

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 40434

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1007		mg/Kg		101	70 - 130
Toluene	0.100	0.09296		mg/Kg		93	70 - 130
Ethylbenzene	0.100	0.09103		mg/Kg		91	70 - 130
m-Xylene & p-Xylene	0.200	0.1893		mg/Kg		95	70 - 130
o-Xylene	0.100	0.09471		mg/Kg		95	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: LCSD 880-40434/2-A

Matrix: Solid

Analysis Batch: 40362

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 40434

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1120		mg/Kg		112	70 - 130	11	35

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QC Sample Results

Client: Ensolum
Project/Site: SV KIM HARRIS #003

Job ID: 890-3511-1
SDG: 09C2041003

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

Lab Sample ID: LCSD 880-40434/2-A

Matrix: Solid

Analysis Batch: 40362

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 40434

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene	0.100	0.1008		mg/Kg		101	70 - 130	8	35
Ethylbenzene	0.100	0.09560		mg/Kg		96	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.1933		mg/Kg		97	70 - 130	2	35
o-Xylene	0.100	0.09615		mg/Kg		96	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	93		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

Lab Sample ID: 890-3509-A-1-C MS

Matrix: Solid

Analysis Batch: 40362

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 40434

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U F1 F2	0.0996	0.05553	F1	mg/Kg		56	70 - 130
Toluene	<0.00200	U F1 F2	0.0996	0.05359	F1	mg/Kg		54	70 - 130
Ethylbenzene	<0.00200	U F1 F2	0.0996	0.05575	F1	mg/Kg		56	70 - 130
m-Xylene & p-Xylene	<0.00401	U F1 F2	0.199	0.1058	F1	mg/Kg		53	70 - 130
o-Xylene	<0.00200	U F1 F2	0.0996	0.05416	F1	mg/Kg		54	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: 890-3509-A-1-D MSD

Matrix: Solid

Analysis Batch: 40362

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 40434

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U F1 F2	0.0994	0.02856	F1 F2	mg/Kg		29	70 - 130	64	35
Toluene	<0.00200	U F1 F2	0.0994	0.02643	F1 F2	mg/Kg		27	70 - 130	68	35
Ethylbenzene	<0.00200	U F1 F2	0.0994	0.02401	F1 F2	mg/Kg		24	70 - 130	80	35
m-Xylene & p-Xylene	<0.00401	U F1 F2	0.199	0.04452	F1 F2	mg/Kg		22	70 - 130	82	35
o-Xylene	<0.00200	U F1 F2	0.0994	0.02377	F1 F2	mg/Kg		23	70 - 130	78	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	74		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: MB 880-40436/5-A

Matrix: Solid

Analysis Batch: 40689

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 40436

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/28/22 11:21	11/30/22 17:06	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/28/22 11:21	11/30/22 17:06	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/28/22 11:21	11/30/22 17:06	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/28/22 11:21	11/30/22 17:06	1

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QC Sample Results

Client: Ensolum
Project/Site: SV KIM HARRIS #003

Job ID: 890-3511-1
SDG: 09C2041003

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

Lab Sample ID: MB 880-40436/5-A

Matrix: Solid

Analysis Batch: 40689

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 40436

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/28/22 11:21	11/30/22 17:06	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/28/22 11:21	11/30/22 17:06	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	66	S1-	70 - 130			11/28/22 11:21	11/30/22 17:06	1
1,4-Difluorobenzene (Surr)	95		70 - 130			11/28/22 11:21	11/30/22 17:06	1

Lab Sample ID: LCS 880-40436/1-A

Matrix: Solid

Analysis Batch: 40689

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 40436

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1127		mg/Kg		113	70 - 130
Toluene	0.100	0.1182		mg/Kg		118	70 - 130
Ethylbenzene	0.100	0.1070		mg/Kg		107	70 - 130
m-Xylene & p-Xylene	0.200	0.2149		mg/Kg		107	70 - 130
o-Xylene	0.100	0.1084		mg/Kg		108	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	99		70 - 130				
1,4-Difluorobenzene (Surr)	89		70 - 130				

Lab Sample ID: LCSD 880-40436/2-A

Matrix: Solid

Analysis Batch: 40689

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 40436

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	<0.00200	U *- *1	mg/Kg		0	70 - 130	200	35
Toluene	0.100	<0.00200	U *- *1	mg/Kg		0	70 - 130	200	35
Ethylbenzene	0.100	<0.00200	U *- *1	mg/Kg		0	70 - 130	200	35
m-Xylene & p-Xylene	0.200	<0.00400	U *- *1	mg/Kg		0	70 - 130	200	35
o-Xylene	0.100	<0.00200	U *- *1	mg/Kg		0	70 - 130	200	35
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	0	S1-	70 - 130						
1,4-Difluorobenzene (Surr)	0	S1-	70 - 130						

Lab Sample ID: 890-3511-10 MS

Matrix: Solid

Analysis Batch: 40689

Client Sample ID: BH08C

Prep Type: Total/NA

Prep Batch: 40436

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U F1 *- *1	0.0996	0.1174		mg/Kg		118	70 - 130
Toluene	<0.00201	U F1 *- *1	0.0996	0.1158		mg/Kg		116	70 - 130
Ethylbenzene	<0.00201	U *- *1	0.0996	0.09952		mg/Kg		100	70 - 130
m-Xylene & p-Xylene	<0.00402	U *- *1	0.199	0.2008		mg/Kg		101	70 - 130
o-Xylene	<0.00201	U *- *1	0.0996	0.1059		mg/Kg		106	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: SV KIM HARRIS #003

Job ID: 890-3511-1
SDG: 09C2041003

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

Lab Sample ID: 890-3511-10 MS

Matrix: Solid

Analysis Batch: 40689

Client Sample ID: BH08C

Prep Type: Total/NA

Prep Batch: 40436

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: 890-3511-10 MSD

Matrix: Solid

Analysis Batch: 40689

Client Sample ID: BH08C

Prep Type: Total/NA

Prep Batch: 40436

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U F1 *- *1	0.100	0.1370	F1	mg/Kg		136	70 - 130	15	35
Toluene	<0.00201	U F1 *- *1	0.100	0.1331	F1	mg/Kg		133	70 - 130	14	35
Ethylbenzene	<0.00201	U *- *1	0.100	0.1144		mg/Kg		114	70 - 130	14	35
m-Xylene & p-Xylene	<0.00402	U *- *1	0.201	0.2338		mg/Kg		116	70 - 130	15	35
o-Xylene	<0.00201	U *- *1	0.100	0.1220		mg/Kg		122	70 - 130	14	35

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

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

Lab Sample ID: MB 880-40271/1-A

Matrix: Solid

Analysis Batch: 40260

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 40271

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		11/23/22 08:28	11/23/22 08:39	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/23/22 08:28	11/23/22 08:39	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/23/22 08:28	11/23/22 08:39	1

	MB	MB						
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
1-Chlorooctane	129		70 - 130	11/23/22 08:28	11/23/22 08:39	1		
o-Terphenyl	138	S1+	70 - 130	11/23/22 08:28	11/23/22 08:39	1		

Lab Sample ID: LCS 880-40271/2-A

Matrix: Solid

Analysis Batch: 40260

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 40271

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	1031		mg/Kg		103	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	1036		mg/Kg		104	70 - 130		

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	120		70 - 130
o-Terphenyl	133	S1+	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: SV KIM HARRIS #003

Job ID: 890-3511-1
SDG: 09C2041003

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

Lab Sample ID: LCSD 880-40271/3-A

Matrix: Solid

Analysis Batch: 40260

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 40271

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1146		mg/Kg		115	70 - 130	11	20
Diesel Range Organics (Over C10-C28)	1000	1037		mg/Kg		104	70 - 130	0	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	114		70 - 130						
o-Terphenyl	127		70 - 130						

Lab Sample ID: 890-3511-1 MS

Matrix: Solid

Analysis Batch: 40260

Client Sample ID: BH07A

Prep Type: Total/NA

Prep Batch: 40271

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	999	837.6		mg/Kg		84	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	999	1013		mg/Kg		101	70 - 130		
Surrogate	MS %Recovery	MS Qualifier	Limits								
1-Chlorooctane	130		70 - 130								
o-Terphenyl	122		70 - 130								

Lab Sample ID: 890-3511-1 MSD

Matrix: Solid

Analysis Batch: 40260

Client Sample ID: BH07A

Prep Type: Total/NA

Prep Batch: 40271

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	997	849.7		mg/Kg		85	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<50.0	U	997	1017		mg/Kg		102	70 - 130	0	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	118		70 - 130								
o-Terphenyl	122		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-40006/1-A

Matrix: Solid

Analysis Batch: 40248

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			11/23/22 05:43	1

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QC Sample Results

Client: Ensolum
Project/Site: SV KIM HARRIS #003

Job ID: 890-3511-1
SDG: 09C2041003

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-40006/2-A

Matrix: Solid

Analysis Batch: 40248

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	264.7		mg/Kg		106	90 - 110		

Lab Sample ID: LCSD 880-40006/3-A

Matrix: Solid

Analysis Batch: 40248

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	262.7		mg/Kg		105	90 - 110	1	20

Lab Sample ID: 890-3511-2 MS

Matrix: Solid

Analysis Batch: 40248

Client Sample ID: BH07B

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	28.9		249	277.8		mg/Kg		100	90 - 110		

Lab Sample ID: 890-3511-2 MSD

Matrix: Solid

Analysis Batch: 40248

Client Sample ID: BH07B

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	28.9		249	278.5		mg/Kg		100	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: SV KIM HARRIS #003

Job ID: 890-3511-1
SDG: 09C2041003

GC VOA

Analysis Batch: 40362

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3511-1	BH07A	Total/NA	Solid	8021B	40434
890-3511-2	BH07B	Total/NA	Solid	8021B	40434
890-3511-3	BH07C	Total/NA	Solid	8021B	40434
890-3511-4	BH09A	Total/NA	Solid	8021B	40434
890-3511-5	BH09B	Total/NA	Solid	8021B	40434
890-3511-6	BH09C	Total/NA	Solid	8021B	40434
890-3511-7	BH01C	Total/NA	Solid	8021B	40434
890-3511-8	BH08A	Total/NA	Solid	8021B	40434
890-3511-9	BH08B	Total/NA	Solid	8021B	40434
MB 880-40407/5-A	Method Blank	Total/NA	Solid	8021B	40407
MB 880-40434/5-A	Method Blank	Total/NA	Solid	8021B	40434
LCS 880-40434/1-A	Lab Control Sample	Total/NA	Solid	8021B	40434
LCSD 880-40434/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	40434
890-3509-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	40434
890-3509-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	40434

Prep Batch: 40407

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-40407/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 40434

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3511-1	BH07A	Total/NA	Solid	5035	
890-3511-2	BH07B	Total/NA	Solid	5035	
890-3511-3	BH07C	Total/NA	Solid	5035	
890-3511-4	BH09A	Total/NA	Solid	5035	
890-3511-5	BH09B	Total/NA	Solid	5035	
890-3511-6	BH09C	Total/NA	Solid	5035	
890-3511-7	BH01C	Total/NA	Solid	5035	
890-3511-8	BH08A	Total/NA	Solid	5035	
890-3511-9	BH08B	Total/NA	Solid	5035	
MB 880-40434/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-40434/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-40434/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3509-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-3509-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 40436

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3511-10	BH08C	Total/NA	Solid	5035	
MB 880-40436/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-40436/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-40436/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3511-10 MS	BH08C	Total/NA	Solid	5035	
890-3511-10 MSD	BH08C	Total/NA	Solid	5035	

Analysis Batch: 40561

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3511-1	BH07A	Total/NA	Solid	Total BTEX	
890-3511-2	BH07B	Total/NA	Solid	Total BTEX	
890-3511-3	BH07C	Total/NA	Solid	Total BTEX	

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QC Association Summary

Client: Ensolum
Project/Site: SV KIM HARRIS #003

Job ID: 890-3511-1
SDG: 09C2041003

GC VOA (Continued)

Analysis Batch: 40561 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3511-4	BH09A	Total/NA	Solid	Total BTEX	
890-3511-5	BH09B	Total/NA	Solid	Total BTEX	
890-3511-6	BH09C	Total/NA	Solid	Total BTEX	
890-3511-7	BH01C	Total/NA	Solid	Total BTEX	
890-3511-8	BH08A	Total/NA	Solid	Total BTEX	
890-3511-9	BH08B	Total/NA	Solid	Total BTEX	
890-3511-10	BH08C	Total/NA	Solid	Total BTEX	

Analysis Batch: 40689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3511-10	BH08C	Total/NA	Solid	8021B	40436
MB 880-40436/5-A	Method Blank	Total/NA	Solid	8021B	40436
LCS 880-40436/1-A	Lab Control Sample	Total/NA	Solid	8021B	40436
LCSD 880-40436/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	40436
890-3511-10 MS	BH08C	Total/NA	Solid	8021B	40436
890-3511-10 MSD	BH08C	Total/NA	Solid	8021B	40436

GC Semi VOA

Analysis Batch: 40260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3511-1	BH07A	Total/NA	Solid	8015B NM	40271
890-3511-2	BH07B	Total/NA	Solid	8015B NM	40271
890-3511-3	BH07C	Total/NA	Solid	8015B NM	40271
890-3511-4	BH09A	Total/NA	Solid	8015B NM	40271
890-3511-5	BH09B	Total/NA	Solid	8015B NM	40271
890-3511-6	BH09C	Total/NA	Solid	8015B NM	40271
890-3511-7	BH01C	Total/NA	Solid	8015B NM	40271
890-3511-8	BH08A	Total/NA	Solid	8015B NM	40271
890-3511-9	BH08B	Total/NA	Solid	8015B NM	40271
890-3511-10	BH08C	Total/NA	Solid	8015B NM	40271
MB 880-40271/1-A	Method Blank	Total/NA	Solid	8015B NM	40271
LCS 880-40271/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	40271
LCSD 880-40271/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	40271
890-3511-1 MS	BH07A	Total/NA	Solid	8015B NM	40271
890-3511-1 MSD	BH07A	Total/NA	Solid	8015B NM	40271

Prep Batch: 40271

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3511-1	BH07A	Total/NA	Solid	8015NM Prep	
890-3511-2	BH07B	Total/NA	Solid	8015NM Prep	
890-3511-3	BH07C	Total/NA	Solid	8015NM Prep	
890-3511-4	BH09A	Total/NA	Solid	8015NM Prep	
890-3511-5	BH09B	Total/NA	Solid	8015NM Prep	
890-3511-6	BH09C	Total/NA	Solid	8015NM Prep	
890-3511-7	BH01C	Total/NA	Solid	8015NM Prep	
890-3511-8	BH08A	Total/NA	Solid	8015NM Prep	
890-3511-9	BH08B	Total/NA	Solid	8015NM Prep	
890-3511-10	BH08C	Total/NA	Solid	8015NM Prep	
MB 880-40271/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-40271/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: Ensolum
Project/Site: SV KIM HARRIS #003

Job ID: 890-3511-1
SDG: 09C2041003

GC Semi VOA (Continued)

Prep Batch: 40271 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-40271/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3511-1 MS	BH07A	Total/NA	Solid	8015NM Prep	
890-3511-1 MSD	BH07A	Total/NA	Solid	8015NM Prep	

Analysis Batch: 40457

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3511-1	BH07A	Total/NA	Solid	8015 NM	
890-3511-2	BH07B	Total/NA	Solid	8015 NM	
890-3511-3	BH07C	Total/NA	Solid	8015 NM	
890-3511-4	BH09A	Total/NA	Solid	8015 NM	
890-3511-5	BH09B	Total/NA	Solid	8015 NM	
890-3511-6	BH09C	Total/NA	Solid	8015 NM	
890-3511-7	BH01C	Total/NA	Solid	8015 NM	
890-3511-8	BH08A	Total/NA	Solid	8015 NM	
890-3511-9	BH08B	Total/NA	Solid	8015 NM	
890-3511-10	BH08C	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 40006

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3511-1	BH07A	Soluble	Solid	DI Leach	
890-3511-2	BH07B	Soluble	Solid	DI Leach	
890-3511-3	BH07C	Soluble	Solid	DI Leach	
890-3511-4	BH09A	Soluble	Solid	DI Leach	
890-3511-5	BH09B	Soluble	Solid	DI Leach	
890-3511-6	BH09C	Soluble	Solid	DI Leach	
890-3511-7	BH01C	Soluble	Solid	DI Leach	
890-3511-8	BH08A	Soluble	Solid	DI Leach	
890-3511-9	BH08B	Soluble	Solid	DI Leach	
890-3511-10	BH08C	Soluble	Solid	DI Leach	
MB 880-40006/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-40006/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-40006/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3511-2 MS	BH07B	Soluble	Solid	DI Leach	
890-3511-2 MSD	BH07B	Soluble	Solid	DI Leach	

Analysis Batch: 40248

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3511-1	BH07A	Soluble	Solid	300.0	40006
890-3511-2	BH07B	Soluble	Solid	300.0	40006
890-3511-3	BH07C	Soluble	Solid	300.0	40006
890-3511-4	BH09A	Soluble	Solid	300.0	40006
890-3511-5	BH09B	Soluble	Solid	300.0	40006
890-3511-6	BH09C	Soluble	Solid	300.0	40006
890-3511-7	BH01C	Soluble	Solid	300.0	40006
890-3511-8	BH08A	Soluble	Solid	300.0	40006
890-3511-9	BH08B	Soluble	Solid	300.0	40006
890-3511-10	BH08C	Soluble	Solid	300.0	40006
MB 880-40006/1-A	Method Blank	Soluble	Solid	300.0	40006
LCS 880-40006/2-A	Lab Control Sample	Soluble	Solid	300.0	40006

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QC Association Summary

Client: Ensolum
Project/Site: SV KIM HARRIS #003

Job ID: 890-3511-1
SDG: 09C2041003

HPLC/IC (Continued)

Analysis Batch: 40248 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-40006/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	40006
890-3511-2 MS	BH07B	Soluble	Solid	300.0	40006
890-3511-2 MSD	BH07B	Soluble	Solid	300.0	40006

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Lab Chronicle

Client: Ensolum
Project/Site: SV KIM HARRIS #003

Job ID: 890-3511-1
SDG: 09C2041003

Client Sample ID: BH07A

Lab Sample ID: 890-3511-1

Date Collected: 11/17/22 09:20

Matrix: Solid

Date Received: 11/17/22 16:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	40434	11/28/22 11:03	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40362	11/29/22 03:57	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40561	11/29/22 09:20	SM	EET MID
Total/NA	Analysis	8015 NM		1			40457	11/28/22 12:39	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	40271	11/23/22 08:58	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40260	11/23/22 11:38	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	40006	11/20/22 12:14	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40248	11/23/22 07:14	SMC	EET MID

Client Sample ID: BH07B

Lab Sample ID: 890-3511-2

Date Collected: 11/17/22 09:30

Matrix: Solid

Date Received: 11/17/22 16:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	40434	11/28/22 11:03	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40362	11/29/22 04:18	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40561	11/29/22 09:20	SM	EET MID
Total/NA	Analysis	8015 NM		1			40457	11/28/22 12:39	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	40271	11/23/22 08:58	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40260	11/23/22 12:44	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	40006	11/20/22 12:14	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40248	11/23/22 07:20	SMC	EET MID

Client Sample ID: BH07C

Lab Sample ID: 890-3511-3

Date Collected: 11/17/22 09:45

Matrix: Solid

Date Received: 11/17/22 16:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	40434	11/28/22 11:03	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40362	11/29/22 04:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40561	11/29/22 09:20	SM	EET MID
Total/NA	Analysis	8015 NM		1			40457	11/28/22 12:39	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	40271	11/23/22 08:58	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40260	11/23/22 13:06	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	40006	11/20/22 12:14	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40248	11/23/22 07:37	SMC	EET MID

Client Sample ID: BH09A

Lab Sample ID: 890-3511-4

Date Collected: 11/17/22 11:30

Matrix: Solid

Date Received: 11/17/22 16:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	40434	11/28/22 11:03	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40362	11/29/22 04:59	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40561	11/29/22 09:20	SM	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: SV KIM HARRIS #003

Job ID: 890-3511-1
SDG: 09C2041003

Client Sample ID: BH09A

Lab Sample ID: 890-3511-4

Date Collected: 11/17/22 11:30

Matrix: Solid

Date Received: 11/17/22 16:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			40457	11/28/22 12:39	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	40271	11/23/22 08:58	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40260	11/23/22 13:28	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	40006	11/20/22 12:14	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40248	11/23/22 07:42	SMC	EET MID

Client Sample ID: BH09B

Lab Sample ID: 890-3511-5

Date Collected: 11/17/22 11:40

Matrix: Solid

Date Received: 11/17/22 16:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	40434	11/28/22 11:03	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40362	11/29/22 05:19	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40561	11/29/22 09:20	SM	EET MID
Total/NA	Analysis	8015 NM		1			40457	11/28/22 12:39	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	40271	11/23/22 08:58	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40260	11/23/22 13:49	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	40006	11/20/22 12:14	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40248	11/23/22 07:59	SMC	EET MID

Client Sample ID: BH09C

Lab Sample ID: 890-3511-6

Date Collected: 11/17/22 11:50

Matrix: Solid

Date Received: 11/17/22 16:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	40434	11/28/22 11:03	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40362	11/29/22 05:40	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40561	11/29/22 09:20	SM	EET MID
Total/NA	Analysis	8015 NM		1			40457	11/28/22 12:39	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	40271	11/23/22 08:58	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40260	11/23/22 14:11	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	40006	11/20/22 12:14	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40248	11/23/22 08:05	SMC	EET MID

Client Sample ID: BH01C

Lab Sample ID: 890-3511-7

Date Collected: 11/17/22 13:10

Matrix: Solid

Date Received: 11/17/22 16:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	40434	11/28/22 11:03	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40362	11/29/22 06:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40561	11/29/22 09:20	SM	EET MID
Total/NA	Analysis	8015 NM		1			40457	11/28/22 12:39	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	40271	11/23/22 08:58	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40260	11/23/22 14:33	SM	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: SV KIM HARRIS #003

Job ID: 890-3511-1
SDG: 09C2041003

Client Sample ID: BH01C

Lab Sample ID: 890-3511-7

Date Collected: 11/17/22 13:10

Matrix: Solid

Date Received: 11/17/22 16:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	40006	11/20/22 12:14	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40248	11/23/22 08:11	SMC	EET MID

Client Sample ID: BH08A

Lab Sample ID: 890-3511-8

Date Collected: 11/17/22 13:30

Matrix: Solid

Date Received: 11/17/22 16:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	40434	11/28/22 11:03	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40362	11/29/22 06:20	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40561	11/29/22 09:20	SM	EET MID
Total/NA	Analysis	8015 NM		1			40457	11/28/22 12:39	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	40271	11/23/22 08:58	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40260	11/23/22 14:55	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	40006	11/20/22 12:14	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40248	11/23/22 08:16	SMC	EET MID

Client Sample ID: BH08B

Lab Sample ID: 890-3511-9

Date Collected: 11/17/22 13:40

Matrix: Solid

Date Received: 11/17/22 16:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	40434	11/28/22 11:03	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40362	11/29/22 06:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40561	11/29/22 09:20	SM	EET MID
Total/NA	Analysis	8015 NM		1			40457	11/28/22 12:39	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	40271	11/23/22 08:58	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40260	11/23/22 15:17	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	40006	11/20/22 12:14	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40248	11/23/22 08:22	SMC	EET MID

Client Sample ID: BH08C

Lab Sample ID: 890-3511-10

Date Collected: 11/17/22 13:50

Matrix: Solid

Date Received: 11/17/22 16:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	40436	11/28/22 11:21	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40689	11/30/22 17:33	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40561	12/01/22 13:21	SM	EET MID
Total/NA	Analysis	8015 NM		1			40457	11/28/22 12:39	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	40271	11/23/22 08:58	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40260	11/23/22 15:39	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	40006	11/20/22 12:14	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40248	11/23/22 08:27	SMC	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: SV KIM HARRIS #003

Job ID: 890-3511-1
SDG: 09C2041003

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: SV KIM HARRIS #003

Job ID: 890-3511-1
SDG: 09C2041003

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	T104704400-22-24	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: SV KIM HARRIS #003

Job ID: 890-3511-1
SDG: 09C2041003

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: SV KIM HARRIS #003

Job ID: 890-3511-1
SDG: 09C2041003

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3511-1	BH07A	Solid	11/17/22 09:20	11/17/22 16:30	6
890-3511-2	BH07B	Solid	11/17/22 09:30	11/17/22 16:30	12
890-3511-3	BH07C	Solid	11/17/22 09:45	11/17/22 16:30	24
890-3511-4	BH09A	Solid	11/17/22 11:30	11/17/22 16:30	6
890-3511-5	BH09B	Solid	11/17/22 11:40	11/17/22 16:30	12
890-3511-6	BH09C	Solid	11/17/22 11:50	11/17/22 16:30	24
890-3511-7	BH01C	Solid	11/17/22 13:10	11/17/22 16:30	36
890-3511-8	BH08A	Solid	11/17/22 13:30	11/17/22 16:30	6
890-3511-9	BH08B	Solid	11/17/22 13:40	11/17/22 16:30	12
890-3511-10	BH08C	Solid	11/17/22 13:50	11/17/22 16:30	36



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:	Don Moir	Bill to: (if different)	A.A.
Company Name:	Gasaluma LLC	Company Name:	
Address:	3122 North Park Highway	Address:	
City, State Zip:	Carlsbad, NM 88226	City, State Zip:	
Phone:	303-881-2946	Email:	dmair@gasaluma.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:	511MCH44455E003	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush
Project Number:	092011005		
Project Location:	32115345-103, 309542 Date:		
Sampler's Name:	J. Falcone	TAT starts the day received by the lab, if received by 4:30pm	
P.O. #:			

SAMPLE RECEIPT	Temp Blank: <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Wet Ice: <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Samples Received Intact:	Thermometer ID: 170003	
Cooler Custody Seals:	Correction Factor:	
Sample Custody Seals:	Temperature Reading:	
Total Containers:	Corrected Temperature:	

ANALYSIS REQUEST	
	
890-3511 Chain of Custody	

Preservative Codes	None: NO	DI Water: H ₂ O
	Cool: Cool	MeOH: Me
	HCL: HCL	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: SARC	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters	Sample Comments
RH07A	S	11-17-22	0920	6"	G	1	TPH	
RH07B	S	11-17-22	0930	12"	G	1	BTEX	
RH07C	S	11-17-22	0945	74"	G	1	Chlorides	
RH09A	S	11-17-22	1130	6"	G	1		
RH09B	S	11-17-22	1140	17"	G	1		
RH09C	S	11-17-22	1150	74"	G	1		
RH09D	S	11-17-22	1310	36"	G	1		
RH09E	S	11-17-22	1330	6"	G	1		
RH09F	S	11-17-22	1340	12"	G	1		
RH09G	S	11-17-22	1350	36"	G	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	TCIP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U		Hg: 1631 / 245.1 / 7470 / 7471

Notes: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and 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.

1	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
2						
3						
4						
5						

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3511-1

SDG Number: 09C2041003

Login Number: 3511

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: 890-3511-1

SDG Number: 09C2041003

Login Number: 3511

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 11/21/22 08:46 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

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ANALYTICAL REPORT

PREPARED FOR

Attn: Daniel Moir
Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Generated 11/29/2022 9:00:53 AM

JOB DESCRIPTION

SV KIM HARRIS #003
SDG NUMBER 09C2041003


JOB NUMBER

890-3539-1

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
11/29/2022 9:00:53 AM

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

Client: Ensolum
Project/Site: SV KIM HARRIS #003

Laboratory Job ID: 890-3539-1
SDG: 09C2041003

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Definitions/Glossary

Client: Ensolum
Project/Site: SV KIM HARRIS #003

Job ID: 890-3539-1
SDG: 09C2041003

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery 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
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: SV KIM HARRIS #003

Job ID: 890-3539-1
SDG: 09C2041003

Job ID: 890-3539-1**Laboratory: Eurofins Carlsbad****Narrative****Job Narrative
890-3539-1****Receipt**

The samples were received on 11/18/2022 4:00 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 2.2°C

GC VOA

Method 8021B: The matrix spike duplicate (MSD) recoveries for preparation batch 880-40466 and analytical batch 880-40361 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (880-21941-A-1-E MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (880-21941-A-1-F). 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: The surrogate recovery for the blank associated with preparation batch 880-40210 and analytical batch 880-40168 was outside the upper control limits.

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: SV KIM HARRIS #003

Job ID: 890-3539-1
SDG: 09C2041003

Client Sample ID: FS01

Lab Sample ID: 890-3539-1

Date Collected: 11/17/22 12:50

Matrix: Solid

Date Received: 11/18/22 16:00

Sample Depth: 6

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		11/28/22 12:53	11/29/22 07:10	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/28/22 12:53	11/29/22 07:10	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/28/22 12:53	11/29/22 07:10	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		11/28/22 12:53	11/29/22 07:10	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/28/22 12:53	11/29/22 07:10	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/28/22 12:53	11/29/22 07:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	74		70 - 130	11/28/22 12:53	11/29/22 07:10	1
1,4-Difluorobenzene (Surr)	96		70 - 130	11/28/22 12:53	11/29/22 07:10	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			11/29/22 09:34	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	318		50.0	mg/Kg			11/23/22 11:46	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		11/22/22 11:24	11/23/22 03:52	1
Diesel Range Organics (Over C10-C28)	318		50.0	mg/Kg		11/22/22 11:24	11/23/22 03:52	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/22/22 11:24	11/23/22 03:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130	11/22/22 11:24	11/23/22 03:52	1
o-Terphenyl	98		70 - 130	11/22/22 11:24	11/23/22 03:52	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	58.6		5.05	mg/Kg			11/24/22 05:00	1

Client Sample ID: FS02

Lab Sample ID: 890-3539-2

Date Collected: 11/17/22 13:00

Matrix: Solid

Date Received: 11/18/22 16:00

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		11/28/22 12:53	11/29/22 07:30	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/28/22 12:53	11/29/22 07:30	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/28/22 12:53	11/29/22 07:30	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/28/22 12:53	11/29/22 07:30	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/28/22 12:53	11/29/22 07:30	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/28/22 12:53	11/29/22 07:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	74		70 - 130	11/28/22 12:53	11/29/22 07:30	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: SV KIM HARRIS #003

Job ID: 890-3539-1
SDG: 09C2041003

Client Sample ID: FS02

Lab Sample ID: 890-3539-2

Date Collected: 11/17/22 13:00

Matrix: Solid

Date Received: 11/18/22 16:00

Sample Depth: 6

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	111		70 - 130	11/28/22 12:53	11/29/22 07:30	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			11/29/22 09:34	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	110		49.8	mg/Kg			11/23/22 11:46	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		11/22/22 11:24	11/23/22 04:14	1
Diesel Range Organics (Over C10-C28)	110		49.8	mg/Kg		11/22/22 11:24	11/23/22 04:14	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		11/22/22 11:24	11/23/22 04:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	104		70 - 130			11/22/22 11:24	11/23/22 04:14	1
o-Terphenyl	102		70 - 130			11/22/22 11:24	11/23/22 04:14	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	164		5.04	mg/Kg			11/24/22 05:06	1

Surrogate Summary

Client: Ensolum
Project/Site: SV KIM HARRIS #003

Job ID: 890-3539-1
SDG: 09C2041003

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)
880-21941-A-1-D MS	Matrix Spike	76	105
880-21941-A-1-E MSD	Matrix Spike Duplicate	69 S1-	102
890-3539-1	FS01	74	96
890-3539-2	FS02	74	111
LCS 880-40466/1-A	Lab Control Sample	84	111
LCSD 880-40466/2-A	Lab Control Sample Dup	82	94
MB 880-40412/5-A	Method Blank	74	110
MB 880-40466/5-A	Method Blank	73	97
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
820-6564-A-1-E MS	Matrix Spike	99	95
820-6564-A-1-F MSD	Matrix Spike Duplicate	117	97
890-3539-1	FS01	98	98
890-3539-2	FS02	104	102
LCS 880-40210/2-A	Lab Control Sample	104	103
LCSD 880-40210/3-A	Lab Control Sample Dup	115	102
MB 880-40210/1-A	Method Blank	135 S1+	135 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Ensolum
Project/Site: SV KIM HARRIS #003

Job ID: 890-3539-1
SDG: 09C2041003

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-40412/5-A

Matrix: Solid

Analysis Batch: 40361

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 40412

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/28/22 10:23	11/28/22 12:29	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/28/22 10:23	11/28/22 12:29	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/28/22 10:23	11/28/22 12:29	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/28/22 10:23	11/28/22 12:29	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/28/22 10:23	11/28/22 12:29	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/28/22 10:23	11/28/22 12:29	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	74		70 - 130	11/28/22 10:23	11/28/22 12:29	1
1,4-Difluorobenzene (Surr)	110		70 - 130	11/28/22 10:23	11/28/22 12:29	1

Lab Sample ID: MB 880-40466/5-A

Matrix: Solid

Analysis Batch: 40361

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 40466

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/28/22 12:53	11/29/22 00:05	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/28/22 12:53	11/29/22 00:05	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/28/22 12:53	11/29/22 00:05	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/28/22 12:53	11/29/22 00:05	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/28/22 12:53	11/29/22 00:05	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/28/22 12:53	11/29/22 00:05	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	73		70 - 130	11/28/22 12:53	11/29/22 00:05	1
1,4-Difluorobenzene (Surr)	97		70 - 130	11/28/22 12:53	11/29/22 00:05	1

Lab Sample ID: LCS 880-40466/1-A

Matrix: Solid

Analysis Batch: 40361

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 40466

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1040		mg/Kg		104	70 - 130
Toluene	0.100	0.1006		mg/Kg		101	70 - 130
Ethylbenzene	0.100	0.09217		mg/Kg		92	70 - 130
m-Xylene & p-Xylene	0.200	0.1598		mg/Kg		80	70 - 130
o-Xylene	0.100	0.07997		mg/Kg		80	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	84		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: LCSD 880-40466/2-A

Matrix: Solid

Analysis Batch: 40361

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 40466

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08207		mg/Kg		82	70 - 130	24	35

Eurofins Carlsbad

QC Sample Results

Client: Ensolum
Project/Site: SV KIM HARRIS #003

Job ID: 890-3539-1
SDG: 09C2041003

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

Lab Sample ID: LCSD 880-40466/2-A

Matrix: Solid

Analysis Batch: 40361

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 40466

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene	0.100	0.1103		mg/Kg		110	70 - 130	9	35
Ethylbenzene	0.100	0.1123		mg/Kg		112	70 - 130	20	35
m-Xylene & p-Xylene	0.200	0.2024		mg/Kg		101	70 - 130	24	35
o-Xylene	0.100	0.09966		mg/Kg		100	70 - 130	22	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	82		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: 880-21941-A-1-D MS

Matrix: Solid

Analysis Batch: 40361

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 40466

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U F1	0.0996	0.03139	F1	mg/Kg		32	70 - 130
Toluene	<0.00200	U F1	0.0996	0.02826	F1	mg/Kg		28	70 - 130
Ethylbenzene	<0.00200	U F1	0.0996	0.02733	F1	mg/Kg		27	70 - 130
m-Xylene & p-Xylene	<0.00401	U F1	0.199	0.04741	F1	mg/Kg		24	70 - 130
o-Xylene	<0.00200	U F1	0.0996	0.02598	F1	mg/Kg		26	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	76		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: 880-21941-A-1-E MSD

Matrix: Solid

Analysis Batch: 40361

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 40466

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U F1	0.0996	0.03831	F1	mg/Kg		38	70 - 130	20	35
Toluene	<0.00200	U F1	0.0996	0.02919	F1	mg/Kg		29	70 - 130	3	35
Ethylbenzene	<0.00200	U F1	0.0996	0.02670	F1	mg/Kg		27	70 - 130	2	35
m-Xylene & p-Xylene	<0.00401	U F1	0.199	0.04101	F1	mg/Kg		21	70 - 130	14	35
o-Xylene	<0.00200	U F1	0.0996	0.02211	F1	mg/Kg		22	70 - 130	16	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	69	S1-	70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

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

Lab Sample ID: MB 880-40210/1-A

Matrix: Solid

Analysis Batch: 40168

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 40210

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		11/22/22 11:24	11/22/22 19:48	1

Eurofins Carlsbad

QC Sample Results

Client: Ensolum
Project/Site: SV KIM HARRIS #003

Job ID: 890-3539-1
SDG: 09C2041003

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

Lab Sample ID: MB 880-40210/1-A

Matrix: Solid

Analysis Batch: 40168

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 40210

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/22/22 11:24	11/22/22 19:48	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/22/22 11:24	11/22/22 19:48	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	135	S1+	70 - 130			11/22/22 11:24	11/22/22 19:48	1
o-Terphenyl	135	S1+	70 - 130			11/22/22 11:24	11/22/22 19:48	1

Lab Sample ID: LCS 880-40210/2-A

Matrix: Solid

Analysis Batch: 40168

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 40210

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	994.7		mg/Kg		99	70 - 130
Diesel Range Organics (Over C10-C28)	1000	955.7		mg/Kg		96	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	104		70 - 130				
o-Terphenyl	103		70 - 130				

Lab Sample ID: LCSD 880-40210/3-A

Matrix: Solid

Analysis Batch: 40168

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 40210

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	869.2		mg/Kg		87	70 - 130	13	20
Diesel Range Organics (Over C10-C28)	1000	926.3		mg/Kg		93	70 - 130	3	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	115		70 - 130						
o-Terphenyl	102		70 - 130						

Lab Sample ID: 820-6564-A-1-E MS

Matrix: Solid

Analysis Batch: 40168

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 40210

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	822.5		mg/Kg		80	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	999	906.5		mg/Kg		88	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	99		70 - 130						
o-Terphenyl	95		70 - 130						

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QC Sample Results

Client: Ensolum
Project/Site: SV KIM HARRIS #003

Job ID: 890-3539-1
SDG: 09C2041003

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

Lab Sample ID: 820-6564-A-1-F MSD

Matrix: Solid

Analysis Batch: 40168

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 40210

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	998	818.0		mg/Kg		80	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<49.9	U	998	934.6		mg/Kg		91	70 - 130	3	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	117		70 - 130								
o-Terphenyl	97		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-40013/1-A

Matrix: Solid

Analysis Batch: 40328

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			11/24/22 02:13	1

Lab Sample ID: LCS 880-40013/2-A

Matrix: Solid

Analysis Batch: 40328

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	262.4		mg/Kg		105	90 - 110

Lab Sample ID: LCSD 880-40013/3-A

Matrix: Solid

Analysis Batch: 40328

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	262.6		mg/Kg		105	90 - 110	0	20

Lab Sample ID: 880-21769-A-7-B MS

Matrix: Solid

Analysis Batch: 40328

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	19.3		252	276.3		mg/Kg		102	90 - 110

Lab Sample ID: 880-21769-A-7-C MSD

Matrix: Solid

Analysis Batch: 40328

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	19.3		252	277.0		mg/Kg		102	90 - 110	0	20

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QC Association Summary

Client: Ensolum
Project/Site: SV KIM HARRIS #003

Job ID: 890-3539-1
SDG: 09C2041003

GC VOA

Analysis Batch: 40361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3539-1	FS01	Total/NA	Solid	8021B	40466
890-3539-2	FS02	Total/NA	Solid	8021B	40466
MB 880-40412/5-A	Method Blank	Total/NA	Solid	8021B	40412
MB 880-40466/5-A	Method Blank	Total/NA	Solid	8021B	40466
LCS 880-40466/1-A	Lab Control Sample	Total/NA	Solid	8021B	40466
LCSD 880-40466/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	40466
880-21941-A-1-D MS	Matrix Spike	Total/NA	Solid	8021B	40466
880-21941-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	40466

Prep Batch: 40412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-40412/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 40466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3539-1	FS01	Total/NA	Solid	5035	
890-3539-2	FS02	Total/NA	Solid	5035	
MB 880-40466/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-40466/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-40466/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-21941-A-1-D MS	Matrix Spike	Total/NA	Solid	5035	
880-21941-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 40573

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3539-1	FS01	Total/NA	Solid	Total BTEX	
890-3539-2	FS02	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 40168

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3539-1	FS01	Total/NA	Solid	8015B NM	40210
890-3539-2	FS02	Total/NA	Solid	8015B NM	40210
MB 880-40210/1-A	Method Blank	Total/NA	Solid	8015B NM	40210
LCS 880-40210/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	40210
LCSD 880-40210/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	40210
820-6564-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	40210
820-6564-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	40210

Prep Batch: 40210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3539-1	FS01	Total/NA	Solid	8015NM Prep	
890-3539-2	FS02	Total/NA	Solid	8015NM Prep	
MB 880-40210/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-40210/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-40210/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
820-6564-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
820-6564-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: Ensolum
Project/Site: SV KIM HARRIS #003

Job ID: 890-3539-1
SDG: 09C2041003

GC Semi VOA

Analysis Batch: 40302

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3539-1	FS01	Total/NA	Solid	8015 NM	
890-3539-2	FS02	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 40013

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3539-1	FS01	Soluble	Solid	DI Leach	
890-3539-2	FS02	Soluble	Solid	DI Leach	
MB 880-40013/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-40013/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-40013/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-21769-A-7-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-21769-A-7-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 40328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3539-1	FS01	Soluble	Solid	300.0	40013
890-3539-2	FS02	Soluble	Solid	300.0	40013
MB 880-40013/1-A	Method Blank	Soluble	Solid	300.0	40013
LCS 880-40013/2-A	Lab Control Sample	Soluble	Solid	300.0	40013
LCSD 880-40013/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	40013
880-21769-A-7-B MS	Matrix Spike	Soluble	Solid	300.0	40013
880-21769-A-7-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	40013

Lab Chronicle

Client: Ensolum
Project/Site: SV KIM HARRIS #003

Job ID: 890-3539-1
SDG: 09C2041003

Client Sample ID: FS01

Lab Sample ID: 890-3539-1

Date Collected: 11/17/22 12:50

Matrix: Solid

Date Received: 11/18/22 16:00

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	40466	11/28/22 12:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40361	11/29/22 07:10	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40573	11/29/22 09:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			40302	11/23/22 11:46	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	40210	11/22/22 11:24	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40168	11/23/22 03:52	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	40013	11/20/22 12:25	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40328	11/24/22 05:00	CH	EET MID

Client Sample ID: FS02

Lab Sample ID: 890-3539-2

Date Collected: 11/17/22 13:00

Matrix: Solid

Date Received: 11/18/22 16:00

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	40466	11/28/22 12:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40361	11/29/22 07:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40573	11/29/22 09:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			40302	11/23/22 11:46	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	40210	11/22/22 11:24	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40168	11/23/22 04:14	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	40013	11/20/22 12:25	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	40328	11/24/22 05:06	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: SV KIM HARRIS #003

Job ID: 890-3539-1
SDG: 09C2041003

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	T104704400-22-24	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
6
7
8
9
10
11
12
13
14

Method Summary

Client: Ensolum
Project/Site: SV KIM HARRIS #003

Job ID: 890-3539-1
SDG: 09C2041003

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: SV KIM HARRIS #003

Job ID: 890-3539-1
SDG: 09C2041003

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3539-1	FS01	Solid	11/17/22 12:50	11/18/22 16:00	6
890-3539-2	FS02	Solid	11/17/22 13:00	11/18/22 16:00	6

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



Environment Testing
Xenco

Chain of Custody

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

Work Order No: _____

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Project Manager:	Don Mott	Bill to: (if different)	A.A.
Company Name:	ASULUM LLC	Company Name:	
Address:	3171 North Parks Hwy	Address:	
City, State ZIP:	Parishad, NM 88120	City, State ZIP:	
Phone:	(505) 881-9946	Email:	amott@asulum.com

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

Project Name:	3171 NORTH PARKS HWY	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	Priest Code	
Project Number:	0902011003	Due Date:			
Project Location:	3171 North Parks Hwy	TAT starts the day received by the lab, if received by 4:30pm			
Sampler's Name:	Jalcomwater				
P.O. #:					

SAMPLE RECEIPT		Parameters	
Temp Blank:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Well ke:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Samples Received intact:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Thermometer ID:	7110007
Cooler Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Correction Factor:	-0.03
Sample Custody Seals:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Temperature Reading:	0.4
Total Containers:		Corrected Temperature:	0.2



890-3539 Chain of Custody

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters	ANALYSIS REQUEST	Preservative Codes	Sample Comments
ESD1	S	11/17/22	1250	8"	C	1	IPH		None: NO	DI Water: H ₂ O
ESD2	S	11/17/22	1300	8"	C	1	BTEX		Cool: Cool	MeOH: Me
							Chlorides		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: SANC	

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
		11/15/22 1600			

Chain of Custody

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

Environment Testing

Xenco



Work Order No: _____

www.xenco.com Page _____ of _____

Project Manager: <u>Don Moir</u>		Bill to: (if different) <u>A.A.</u>	
Company Name: <u>Ensomium LLC</u>		Company Name: _____	
Address: <u>3122 Nat'l Parks Hwy</u>		Address: _____	
City, State ZIP: <u>Carlsbad, NM 88220</u>		City, State ZIP: _____	
Phone: <u>(505) 881-7946</u>		Email: <u>DMOIR@ENSOLIUM.COM</u>	

Project Name: <u>SV NIM HAR DIS HARDY</u>		Turn Around <u>11/18/2020</u>	
Project Number: <u>09C2011003</u>		Routine <input checked="" type="checkbox"/> Rush <input type="checkbox"/>	
Project Location: <u>3291554 - 108,355</u>		Due Date: _____	
Sampler's Name: <u>Yalecomata</u>		TAT starts the day received by the lab, if received by 4:30pm	
PO #: _____		TAT starts the day received by the lab, if received by 4:30pm	

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters	Preservative Codes	Sample Comments
F501	S	11-17-22	1250	6"	C	1	7PH	None: NO	
F502	S	11-17-22	1300	8"	C	1	7PH	DI Water: H ₂ O	
								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: SAPC	

Total 200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr 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
<u>[Signature]</u>	<u>[Signature]</u>	<u>11/18/2020</u>			

Revised Date: 08/23/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3539-1

SDG Number: 09C2041003

Login Number: 3539

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: 890-3539-1

SDG Number: 09C2041003

Login Number: 3539

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 11/22/22 11:47 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

ANALYTICAL REPORT

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

Laboratory Job ID: 890-3334-1

Laboratory Sample Delivery Group: 09C2041003

Client Project/Site: SV Kim Harris #003

For:

Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Daniel Moir

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

Authorized for release by:

11/3/2022 12:32:46 PM

Jessica Kramer, Project Manager
(432)704-5440

Jessica.Kramer@et.eurofinsus.com

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

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

Client: Ensolum
Project/Site: SV Kim Harris #003

Laboratory Job ID: 890-3334-1
SDG: 09C2041003

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Definitions/Glossary

Client: Ensolum
Project/Site: SV Kim Harris #003

Job ID: 890-3334-1
SDG: 09C2041003

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
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.

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: SV Kim Harris #003

Job ID: 890-3334-1
SDG: 09C2041003

Job ID: 890-3334-1**Laboratory: Eurofins Carlsbad****Narrative****Job Narrative
890-3334-1****Receipt**

The samples were received on 10/28/2022 4:15 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 2.6°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: PH10A (890-3334-1), PH10B (890-3334-2), PH10C (890-3334-3), PH08A (890-3334-4), PH08B (890-3334-5), PH08C (890-3334-6), PH09A (890-3334-7), PH09B (890-3334-8) and PH09C (890-3334-9).

GC VOA

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (890-3322-A-2-D MS). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate / sample duplicate (MS/MSD/DUP) precision for preparation batch 880-38325 and analytical batch 880-38323 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision was within acceptance limits.

Method 8015MOD_NM: The matrix spike duplicate (MSD) recoveries for preparation batch 880-38417 and analytical batch 880-38323 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (LCS 880-38436/2-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The method blank for preparation batch 880-38436 and analytical batch 880-38457 contained Gasoline Range Organics (GRO)-C6-C10 and Diesel Range Organics (Over C10-C28) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-38436 and analytical batch 880-38457 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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: SV Kim Harris #003

Job ID: 890-3334-1
SDG: 09C2041003

Client Sample ID: PH10A

Lab Sample ID: 890-3334-1

Date Collected: 10/28/22 08:50

Matrix: Solid

Date Received: 10/28/22 16:15

Sample Depth: 6

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		11/01/22 13:17	11/02/22 04:06	1
Toluene	<0.00202	U	0.00202	mg/Kg		11/01/22 13:17	11/02/22 04:06	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		11/01/22 13:17	11/02/22 04:06	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		11/01/22 13:17	11/02/22 04:06	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		11/01/22 13:17	11/02/22 04:06	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		11/01/22 13:17	11/02/22 04:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	11/01/22 13:17	11/02/22 04:06	1
1,4-Difluorobenzene (Surr)	106		70 - 130	11/01/22 13:17	11/02/22 04:06	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			11/02/22 10:02	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			11/03/22 10:18	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		11/01/22 16:40	11/03/22 02:19	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		11/01/22 16:40	11/03/22 02:19	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/01/22 16:40	11/03/22 02:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130	11/01/22 16:40	11/03/22 02:19	1
o-Terphenyl	115		70 - 130	11/01/22 16:40	11/03/22 02:19	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	49.7		4.97	mg/Kg			11/02/22 00:14	1

Client Sample ID: PH10B

Lab Sample ID: 890-3334-2

Date Collected: 10/28/22 08:55

Matrix: Solid

Date Received: 10/28/22 16:15

Sample Depth: 12

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		11/01/22 13:17	11/02/22 04:27	1
Toluene	<0.00201	U	0.00201	mg/Kg		11/01/22 13:17	11/02/22 04:27	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		11/01/22 13:17	11/02/22 04:27	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		11/01/22 13:17	11/02/22 04:27	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		11/01/22 13:17	11/02/22 04:27	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		11/01/22 13:17	11/02/22 04:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130	11/01/22 13:17	11/02/22 04:27	1

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Client Sample Results

Client: Ensolum
Project/Site: SV Kim Harris #003

Job ID: 890-3334-1
SDG: 09C2041003

Client Sample ID: PH10B

Lab Sample ID: 890-3334-2

Date Collected: 10/28/22 08:55

Matrix: Solid

Date Received: 10/28/22 16:15

Sample Depth: 12

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	109		70 - 130	11/01/22 13:17	11/02/22 04:27	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			11/02/22 10:02	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			11/03/22 10:18	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		11/01/22 16:40	11/03/22 02:40	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/01/22 16:40	11/03/22 02:40	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/01/22 16:40	11/03/22 02:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130			11/01/22 16:40	11/03/22 02:40	1
o-Terphenyl	123		70 - 130			11/01/22 16:40	11/03/22 02:40	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	29.3		5.00	mg/Kg			11/02/22 00:29	1

Client Sample ID: PH10C

Lab Sample ID: 890-3334-3

Date Collected: 10/28/22 09:05

Matrix: Solid

Date Received: 10/28/22 16:15

Sample Depth: 36

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		11/01/22 13:17	11/02/22 04:48	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/01/22 13:17	11/02/22 04:48	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/01/22 13:17	11/02/22 04:48	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/01/22 13:17	11/02/22 04:48	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/01/22 13:17	11/02/22 04:48	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/01/22 13:17	11/02/22 04:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130	11/01/22 13:17	11/02/22 04:48	1
1,4-Difluorobenzene (Surr)	106		70 - 130	11/01/22 13:17	11/02/22 04:48	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			11/02/22 10:02	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			11/03/22 10:18	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: SV Kim Harris #003

Job ID: 890-3334-1
SDG: 09C2041003

Client Sample ID: PH10C

Lab Sample ID: 890-3334-3

Date Collected: 10/28/22 09:05

Matrix: Solid

Date Received: 10/28/22 16:15

Sample Depth: 36

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		11/01/22 16:40	11/03/22 03:01	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/01/22 16:40	11/03/22 03:01	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/01/22 16:40	11/03/22 03:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130			11/01/22 16:40	11/03/22 03:01	1
o-Terphenyl	106		70 - 130			11/01/22 16:40	11/03/22 03:01	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	65.3		5.00	mg/Kg			11/02/22 00:34	1

Client Sample ID: PH08A

Lab Sample ID: 890-3334-4

Date Collected: 10/28/22 09:30

Matrix: Solid

Date Received: 10/28/22 16:15

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		11/01/22 13:17	11/02/22 05:09	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/01/22 13:17	11/02/22 05:09	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/01/22 13:17	11/02/22 05:09	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/01/22 13:17	11/02/22 05:09	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/01/22 13:17	11/02/22 05:09	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/01/22 13:17	11/02/22 05:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130			11/01/22 13:17	11/02/22 05:09	1
1,4-Difluorobenzene (Surr)	103		70 - 130			11/01/22 13:17	11/02/22 05:09	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			11/02/22 10:02	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			11/03/22 10:18	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		11/01/22 16:40	11/03/22 03:44	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		11/01/22 16:40	11/03/22 03:44	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/01/22 16:40	11/03/22 03:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130			11/01/22 16:40	11/03/22 03:44	1
o-Terphenyl	114		70 - 130			11/01/22 16:40	11/03/22 03:44	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: SV Kim Harris #003

Job ID: 890-3334-1
SDG: 09C2041003

Client Sample ID: PH08A

Lab Sample ID: 890-3334-4

Date Collected: 10/28/22 09:30

Matrix: Solid

Date Received: 10/28/22 16:15

Sample Depth: 6

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	29.6		4.99	mg/Kg			11/02/22 00:39	1

Client Sample ID: PH08B

Lab Sample ID: 890-3334-5

Date Collected: 10/28/22 09:35

Matrix: Solid

Date Received: 10/28/22 16:15

Sample Depth: 12

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		11/01/22 13:17	11/02/22 05:29	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/01/22 13:17	11/02/22 05:29	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/01/22 13:17	11/02/22 05:29	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		11/01/22 13:17	11/02/22 05:29	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/01/22 13:17	11/02/22 05:29	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/01/22 13:17	11/02/22 05:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130			11/01/22 13:17	11/02/22 05:29	1
1,4-Difluorobenzene (Surr)	105		70 - 130			11/01/22 13:17	11/02/22 05:29	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			11/02/22 10:02	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			11/02/22 10:14	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		11/01/22 15:08	11/02/22 03:58	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		11/01/22 15:08	11/02/22 03:58	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/01/22 15:08	11/02/22 03:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130			11/01/22 15:08	11/02/22 03:58	1
o-Terphenyl	100		70 - 130			11/01/22 15:08	11/02/22 03:58	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20.9		4.95	mg/Kg			11/02/22 00:44	1

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Client Sample Results

Client: Ensolum
Project/Site: SV Kim Harris #003

Job ID: 890-3334-1
SDG: 09C2041003

Client Sample ID: PH08C

Lab Sample ID: 890-3334-6

Date Collected: 10/28/22 09:45

Matrix: Solid

Date Received: 10/28/22 16:15

Sample Depth: 48

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		11/01/22 13:17	11/02/22 05:50	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/01/22 13:17	11/02/22 05:50	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/01/22 13:17	11/02/22 05:50	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/01/22 13:17	11/02/22 05:50	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/01/22 13:17	11/02/22 05:50	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/01/22 13:17	11/02/22 05:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130	11/01/22 13:17	11/02/22 05:50	1
1,4-Difluorobenzene (Surr)	107		70 - 130	11/01/22 13:17	11/02/22 05:50	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			11/02/22 10:02	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			11/02/22 10:14	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		11/01/22 08:49	11/01/22 19:21	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		11/01/22 08:49	11/01/22 19:21	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/01/22 08:49	11/01/22 19:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	82		70 - 130	11/01/22 08:49	11/01/22 19:21	1
o-Terphenyl	86		70 - 130	11/01/22 08:49	11/01/22 19:21	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19.5		5.05	mg/Kg			11/02/22 00:49	1

Client Sample ID: PH09A

Lab Sample ID: 890-3334-7

Date Collected: 10/28/22 10:10

Matrix: Solid

Date Received: 10/28/22 16:15

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		11/01/22 13:17	11/02/22 06:11	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/01/22 13:17	11/02/22 06:11	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/01/22 13:17	11/02/22 06:11	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/01/22 13:17	11/02/22 06:11	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/01/22 13:17	11/02/22 06:11	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/01/22 13:17	11/02/22 06:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	121		70 - 130	11/01/22 13:17	11/02/22 06:11	1

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Client Sample Results

Client: Ensolum
Project/Site: SV Kim Harris #003

Job ID: 890-3334-1
SDG: 09C2041003

Client Sample ID: PH09A

Lab Sample ID: 890-3334-7

Date Collected: 10/28/22 10:10

Matrix: Solid

Date Received: 10/28/22 16:15

Sample Depth: 6

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	108		70 - 130	11/01/22 13:17	11/02/22 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			11/02/22 10:02	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			11/02/22 10:14	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		11/01/22 08:49	11/01/22 19:43	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		11/01/22 08:49	11/01/22 19:43	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		11/01/22 08:49	11/01/22 19:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	80		70 - 130			11/01/22 08:49	11/01/22 19:43	1
o-Terphenyl	82		70 - 130			11/01/22 08:49	11/01/22 19:43	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18.9		5.00	mg/Kg			11/02/22 00:54	1

Client Sample ID: PH09B

Lab Sample ID: 890-3334-8

Date Collected: 10/28/22 10:15

Matrix: Solid

Date Received: 10/28/22 16:15

Sample Depth: 12

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		11/01/22 13:17	11/02/22 06:32	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/01/22 13:17	11/02/22 06:32	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/01/22 13:17	11/02/22 06:32	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		11/01/22 13:17	11/02/22 06:32	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/01/22 13:17	11/02/22 06:32	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/01/22 13:17	11/02/22 06:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130	11/01/22 13:17	11/02/22 06:32	1
1,4-Difluorobenzene (Surr)	106		70 - 130	11/01/22 13:17	11/02/22 06:32	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			11/02/22 10:02	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			11/02/22 10:14	1

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Client Sample Results

Client: Ensolum
Project/Site: SV Kim Harris #003

Job ID: 890-3334-1
SDG: 09C2041003

Client Sample ID: PH09B

Lab Sample ID: 890-3334-8

Date Collected: 10/28/22 10:15

Matrix: Solid

Date Received: 10/28/22 16:15

Sample Depth: 12

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		11/01/22 08:49	11/01/22 20:05	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/01/22 08:49	11/01/22 20:05	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/01/22 08:49	11/01/22 20:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	81		70 - 130			11/01/22 08:49	11/01/22 20:05	1
o-Terphenyl	84		70 - 130			11/01/22 08:49	11/01/22 20:05	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	29.6		4.95	mg/Kg			11/02/22 00:59	1

Client Sample ID: PH09C

Lab Sample ID: 890-3334-9

Date Collected: 10/28/22 10:25

Matrix: Solid

Date Received: 10/28/22 16:15

Sample Depth: 48

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		11/01/22 13:17	11/02/22 06:52	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/01/22 13:17	11/02/22 06:52	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/01/22 13:17	11/02/22 06:52	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/01/22 13:17	11/02/22 06:52	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/01/22 13:17	11/02/22 06:52	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/01/22 13:17	11/02/22 06:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130			11/01/22 13:17	11/02/22 06:52	1
1,4-Difluorobenzene (Surr)	107		70 - 130			11/01/22 13:17	11/02/22 06:52	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			11/02/22 10:02	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			11/02/22 10:14	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		11/01/22 08:49	11/01/22 20:26	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/01/22 08:49	11/01/22 20:26	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/01/22 08:49	11/01/22 20:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130			11/01/22 08:49	11/01/22 20:26	1
o-Terphenyl	93		70 - 130			11/01/22 08:49	11/01/22 20:26	1

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Client Sample Results

Client: Ensolum
Project/Site: SV Kim Harris #003

Job ID: 890-3334-1
SDG: 09C2041003

Client Sample ID: PH09C
Date Collected: 10/28/22 10:25
Date Received: 10/28/22 16:15
Sample Depth: 48

Lab Sample ID: 890-3334-9
Matrix: Solid

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	55.6		4.95	mg/Kg			11/01/22 21:45	1	

Surrogate Summary

Client: Ensolum
Project/Site: SV Kim Harris #003

Job ID: 890-3334-1
SDG: 09C2041003

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	BFB1	DFBZ1				
		(70-130)	(70-130)				
880-20949-A-1-C MS	Matrix Spike	93	96				
880-20949-A-1-D MSD	Matrix Spike Duplicate	95	95				
890-3334-1	PH10A	103	106				
890-3334-2	PH10B	115	109				
890-3334-3	PH10C	118	106				
890-3334-4	PH08A	125	103				
890-3334-5	PH08B	116	105				
890-3334-6	PH08C	115	107				
890-3334-7	PH09A	121	108				
890-3334-8	PH09B	126	106				
890-3334-9	PH09C	113	107				
LCS 880-38396/1-A	Lab Control Sample	86	100				
LCSD 880-38396/2-A	Lab Control Sample Dup	84	100				
MB 880-38292/5-A	Method Blank	96	101				
MB 880-38396/5-A	Method Blank	98	94				
Surrogate Legend							
BFB = 4-Bromofluorobenzene (Surr)							
DFBZ = 1,4-Difluorobenzene (Surr)							

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
Lab Sample ID	Client Sample ID	1CO1	OTPH1				
		(70-130)	(70-130)				
880-21015-A-1-D MS	Matrix Spike	90	85				
880-21015-A-1-E MSD	Matrix Spike Duplicate	94	90				
890-3322-A-2-D MS	Matrix Spike	73	69 S1-				
890-3322-A-2-E MSD	Matrix Spike Duplicate	90	85				
890-3334-1	PH10A	97	115				
890-3334-2	PH10B	107	123				
890-3334-3	PH10C	91	106				
890-3334-4	PH08A	97	114				
890-3334-5	PH08B	98	100				
890-3334-6	PH08C	82	86				
890-3334-7	PH09A	80	82				
890-3334-8	PH09B	81	84				
890-3334-9	PH09C	89	93				
890-3335-A-1-C MS	Matrix Spike	88	86				
890-3335-A-1-D MSD	Matrix Spike Duplicate	79	76				
LCS 880-38325/2-A	Lab Control Sample	112	120				
LCS 880-38417/2-A	Lab Control Sample	101	106				
LCS 880-38436/2-A	Lab Control Sample	107	133 S1+				
LCSD 880-38325/3-A	Lab Control Sample Dup	121	128				
LCSD 880-38417/3-A	Lab Control Sample Dup	90	95				
LCSD 880-38436/3-A	Lab Control Sample Dup	108	128				
MB 880-38325/1-A	Method Blank	77	83				
MB 880-38417/1-A	Method Blank	92	99				
MB 880-38436/1-A	Method Blank	87	109				

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Surrogate Summary

Client: Ensolum
Project/Site: SV Kim Harris #003

Job ID: 890-3334-1
SDG: 09C2041003

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

1

2

3

4

5

6

7

8

9

10

11

12

13

14

QC Sample Results

Client: Ensolum
Project/Site: SV Kim Harris #003

Job ID: 890-3334-1
SDG: 09C2041003

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-38292/5-A

Matrix: Solid

Analysis Batch: 38317

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 38292

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/31/22 13:44	11/01/22 11:42	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/31/22 13:44	11/01/22 11:42	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/31/22 13:44	11/01/22 11:42	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/31/22 13:44	11/01/22 11:42	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/31/22 13:44	11/01/22 11:42	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/31/22 13:44	11/01/22 11:42	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	10/31/22 13:44	11/01/22 11:42	1
1,4-Difluorobenzene (Surr)	101		70 - 130	10/31/22 13:44	11/01/22 11:42	1

Lab Sample ID: MB 880-38396/5-A

Matrix: Solid

Analysis Batch: 38317

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 38396

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/01/22 13:17	11/01/22 22:52	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/01/22 13:17	11/01/22 22:52	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/01/22 13:17	11/01/22 22:52	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/01/22 13:17	11/01/22 22:52	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/01/22 13:17	11/01/22 22:52	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/01/22 13:17	11/01/22 22:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	11/01/22 13:17	11/01/22 22:52	1
1,4-Difluorobenzene (Surr)	94		70 - 130	11/01/22 13:17	11/01/22 22:52	1

Lab Sample ID: LCS 880-38396/1-A

Matrix: Solid

Analysis Batch: 38317

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 38396

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09196		mg/Kg		92	70 - 130
Toluene	0.100	0.09375		mg/Kg		94	70 - 130
Ethylbenzene	0.100	0.09317		mg/Kg		93	70 - 130
m-Xylene & p-Xylene	0.200	0.1708		mg/Kg		85	70 - 130
o-Xylene	0.100	0.09774		mg/Kg		98	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	86		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: LCSD 880-38396/2-A

Matrix: Solid

Analysis Batch: 38317

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 38396

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	0.100	0.09381		mg/Kg		94	70 - 130	2	35

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QC Sample Results

Client: Ensolum
Project/Site: SV Kim Harris #003

Job ID: 890-3334-1
SDG: 09C2041003

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

Lab Sample ID: LCSD 880-38396/2-A

Matrix: Solid

Analysis Batch: 38317

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 38396

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene	0.100	0.09579		mg/Kg		96	70 - 130	2	35
Ethylbenzene	0.100	0.09325		mg/Kg		93	70 - 130	0	35
m-Xylene & p-Xylene	0.200	0.1693		mg/Kg		85	70 - 130	1	35
o-Xylene	0.100	0.09677		mg/Kg		97	70 - 130	1	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	84		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 880-20949-A-1-C MS

Matrix: Solid

Analysis Batch: 38317

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 38396

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.0998	0.07863		mg/Kg		78	70 - 130
Toluene	<0.00200	U	0.0998	0.07892		mg/Kg		79	70 - 130
Ethylbenzene	<0.00200	U	0.0998	0.07719		mg/Kg		77	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.200	0.1450		mg/Kg		73	70 - 130
o-Xylene	<0.00200	U	0.0998	0.08347		mg/Kg		84	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	93		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: 880-20949-A-1-D MSD

Matrix: Solid

Analysis Batch: 38317

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 38396

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0990	0.07810		mg/Kg		78	70 - 130	1	35
Toluene	<0.00200	U	0.0990	0.07953		mg/Kg		80	70 - 130	1	35
Ethylbenzene	<0.00200	U	0.0990	0.07936		mg/Kg		80	70 - 130	3	35
m-Xylene & p-Xylene	<0.00401	U	0.198	0.1511		mg/Kg		76	70 - 130	4	35
o-Xylene	<0.00200	U	0.0990	0.08674		mg/Kg		88	70 - 130	4	35

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

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

Lab Sample ID: MB 880-38325/1-A

Matrix: Solid

Analysis Batch: 38323

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 38325

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		11/01/22 08:49	11/01/22 09:56	1

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QC Sample Results

Client: Ensolum
Project/Site: SV Kim Harris #003

Job ID: 890-3334-1
SDG: 09C2041003

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

Lab Sample ID: MB 880-38325/1-A

Matrix: Solid

Analysis Batch: 38323

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 38325

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/01/22 08:49	11/01/22 09:56	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/01/22 08:49	11/01/22 09:56	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	77		70 - 130			11/01/22 08:49	11/01/22 09:56	1
o-Terphenyl	83		70 - 130			11/01/22 08:49	11/01/22 09:56	1

Lab Sample ID: LCS 880-38325/2-A

Matrix: Solid

Analysis Batch: 38323

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 38325

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1179		mg/Kg		118	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1120		mg/Kg		112	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	112		70 - 130				
o-Terphenyl	120		70 - 130				

Lab Sample ID: LCSD 880-38325/3-A

Matrix: Solid

Analysis Batch: 38323

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 38325

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1081		mg/Kg		108	70 - 130	9	20
Diesel Range Organics (Over C10-C28)	1000	1234		mg/Kg		123	70 - 130	10	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	121		70 - 130						
o-Terphenyl	128		70 - 130						

Lab Sample ID: 890-3322-A-2-D MS

Matrix: Solid

Analysis Batch: 38323

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 38325

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F1	997	1043		mg/Kg		102	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U F1 F2	997	809.2		mg/Kg		77	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	73		70 - 130						
o-Terphenyl	69	S1-	70 - 130						

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QC Sample Results

Client: Ensolum
Project/Site: SV Kim Harris #003

Job ID: 890-3334-1
SDG: 09C2041003

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

Lab Sample ID: 890-3322-A-2-E MSD

Matrix: Solid

Analysis Batch: 38323

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 38325

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F1	999	899.6		mg/Kg		88	70 - 130	15	20
Diesel Range Organics (Over C10-C28)	<50.0	U F1 F2	999	1022	F2	mg/Kg		98	70 - 130	23	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	90		70 - 130								
o-Terphenyl	85		70 - 130								

Lab Sample ID: MB 880-38417/1-A

Matrix: Solid

Analysis Batch: 38323

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 38417

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		11/01/22 15:08	11/01/22 21:10	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/01/22 15:08	11/01/22 21:10	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/01/22 15:08	11/01/22 21:10	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130			11/01/22 15:08	11/01/22 21:10	1
o-Terphenyl	99		70 - 130			11/01/22 15:08	11/01/22 21:10	1

Lab Sample ID: LCS 880-38417/2-A

Matrix: Solid

Analysis Batch: 38323

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 38417

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	1076		mg/Kg		108	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	1008		mg/Kg		101	70 - 130		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
1-Chlorooctane	101		70 - 130						
o-Terphenyl	106		70 - 130						

Lab Sample ID: LCSD 880-38417/3-A

Matrix: Solid

Analysis Batch: 38323

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 38417

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1087		mg/Kg		109	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	910.4		mg/Kg		91	70 - 130	10	20

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QC Sample Results

Client: Ensolum
Project/Site: SV Kim Harris #003

Job ID: 890-3334-1
SDG: 09C2041003

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

Lab Sample ID: LCSD 880-38417/3-A

Matrix: Solid

Analysis Batch: 38323

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 38417

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	90		70 - 130
o-Terphenyl	95		70 - 130

Lab Sample ID: 890-3335-A-1-C MS

Matrix: Solid

Analysis Batch: 38323

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 38417

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	997	812.4		mg/Kg		79	70 - 130	
Diesel Range Organics (Over C10-C28)	77.7	F1	997	799.4		mg/Kg		72	70 - 130	
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	88		70 - 130							
o-Terphenyl	86		70 - 130							

Lab Sample ID: 890-3335-A-1-D MSD

Matrix: Solid

Analysis Batch: 38323

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 38417

	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	999	984.3		mg/Kg		96	70 - 130	19	20	
Diesel Range Organics (Over C10-C28)	77.7	F1	999	702.0	F1	mg/Kg		62	70 - 130	13	20	
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	79		70 - 130									
o-Terphenyl	76		70 - 130									

Lab Sample ID: MB 880-38436/1-A

Matrix: Solid

Analysis Batch: 38457

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 38436

	MB	MB								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/01/22 16:40	11/02/22 22:03	1		
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/01/22 16:40	11/02/22 22:03	1		
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/01/22 16:40	11/02/22 22:03	1		
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac		
1-Chlorooctane	87		70 - 130			11/01/22 16:40	11/02/22 22:03	1		
o-Terphenyl	109		70 - 130			11/01/22 16:40	11/02/22 22:03	1		

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QC Sample Results

Client: Ensolum
Project/Site: SV Kim Harris #003

Job ID: 890-3334-1
SDG: 09C2041003

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

Lab Sample ID: LCS 880-38436/2-A

Matrix: Solid

Analysis Batch: 38457

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 38436

Analyte			Spike	LCS	LCS	Unit	D	%Rec	%Rec	Limits		
			Added	Result	Qualifier							
Gasoline Range Organics (GRO)-C6-C10			1000	844.0		mg/Kg		84		70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1140		mg/Kg		114		70 - 130		

Lab Sample ID: LCSD 880-38436/3-A

Matrix: Solid

Analysis Batch: 38457

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 38436

			Spike	LCSD	LCSD				%Rec			RPD
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10			1000	881.3		mg/Kg		88	70 - 130	4	20	
Diesel Range Organics (Over C10-C28)			1000	1139		mg/Kg		114	70 - 130	0	20	
			LCSD	LCSD								
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	108		70 - 130									
o-Terphenyl	128		70 - 130									

Lab Sample ID: 880-21015-A-1-D MS

Matrix: Solid

Analysis Batch: 38457

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 38436

	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (GRO)-C6-C10	532		997	1528		mg/Kg		100	70 - 130		
Diesel Range Organics (Over C10-C28)	2380	F1	997	2896	F1	mg/Kg		52	70 - 130		

Lab Sample ID: 880-21015-A-1-E MSD

Matrix: Solid

Analysis Batch: 38457

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 38436

	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	532		999	1605		mg/Kg		107	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	2380	F1	999	3061	F1	mg/Kg		69	70 - 130	6	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	94		70 - 130								

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QC Sample Results

Client: Ensolum
Project/Site: SV Kim Harris #003

Job ID: 890-3334-1
SDG: 09C2041003

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

Lab Sample ID: 880-21015-A-1-E MSD

Matrix: Solid

Analysis Batch: 38457

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 38436

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
<i>o</i> -Terphenyl	90		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-38328/1-A

Matrix: Solid

Analysis Batch: 38427

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			11/01/22 19:36		1

Lab Sample ID: LCS 880-38328/2-A

Matrix: Solid

Analysis Batch: 38427

Client Sample ID: Lab Control Sample

Prep Type: Soluble

		Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	250	260.1		mg/Kg		104	90 - 110		

Lab Sample ID: LCSD 880-38328/3-A

Matrix: Solid

Analysis Batch: 38427

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

			Spike	LCSD	LCSD				%Rec	RPD	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride			250	260.1		mg/Kg		104	90 - 110	0	20

Lab Sample ID: 880-20959-A-11-B MS

Matrix: Solid

Analysis Batch: 38427

Client Sample ID: Matrix Spike

Prep Type: Soluble

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	605		251	841.2		mg/Kg		94	90 - 110	

Lab Sample ID: 880-20959-A-11-C MSD

Matrix: Solid

Analysis Batch: 38427

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	605		251	840.5		mg/Kg		94	90 - 110	0	20

Lab Sample ID: MB 880-38262/1-A

Matrix: Solid

Analysis Batch: 38428

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			11/01/22 22:29	1

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QC Sample Results

Client: Ensolum
Project/Site: SV Kim Harris #003

Job ID: 890-3334-1
SDG: 09C2041003

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-38262/2-A

Matrix: Solid

Analysis Batch: 38428

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	262.5		mg/Kg		105	90 - 110		

Lab Sample ID: LCSD 880-38262/3-A

Matrix: Solid

Analysis Batch: 38428

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	265.5		mg/Kg		106	90 - 110	1	20

Lab Sample ID: 890-3329-A-3-B MS

Matrix: Solid

Analysis Batch: 38428

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	42.5		249	301.4		mg/Kg		104	90 - 110		

Lab Sample ID: 890-3329-A-3-C MSD

Matrix: Solid

Analysis Batch: 38428

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	42.5		249	297.0		mg/Kg		102	90 - 110	1	20

QC Association Summary

Client: Ensolum
Project/Site: SV Kim Harris #003

Job ID: 890-3334-1
SDG: 09C2041003

GC VOA

Prep Batch: 38292

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-38292/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 38317

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3334-1	PH10A	Total/NA	Solid	8021B	38396
890-3334-2	PH10B	Total/NA	Solid	8021B	38396
890-3334-3	PH10C	Total/NA	Solid	8021B	38396
890-3334-4	PH08A	Total/NA	Solid	8021B	38396
890-3334-5	PH08B	Total/NA	Solid	8021B	38396
890-3334-6	PH08C	Total/NA	Solid	8021B	38396
890-3334-7	PH09A	Total/NA	Solid	8021B	38396
890-3334-8	PH09B	Total/NA	Solid	8021B	38396
890-3334-9	PH09C	Total/NA	Solid	8021B	38396
MB 880-38292/5-A	Method Blank	Total/NA	Solid	8021B	38292
MB 880-38396/5-A	Method Blank	Total/NA	Solid	8021B	38396
LCS 880-38396/1-A	Lab Control Sample	Total/NA	Solid	8021B	38396
LCSD 880-38396/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	38396
880-20949-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	38396
880-20949-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	38396

Prep Batch: 38396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3334-1	PH10A	Total/NA	Solid	5035	
890-3334-2	PH10B	Total/NA	Solid	5035	
890-3334-3	PH10C	Total/NA	Solid	5035	
890-3334-4	PH08A	Total/NA	Solid	5035	
890-3334-5	PH08B	Total/NA	Solid	5035	
890-3334-6	PH08C	Total/NA	Solid	5035	
890-3334-7	PH09A	Total/NA	Solid	5035	
890-3334-8	PH09B	Total/NA	Solid	5035	
890-3334-9	PH09C	Total/NA	Solid	5035	
MB 880-38396/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-38396/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-38396/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-20949-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
880-20949-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 38464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3334-1	PH10A	Total/NA	Solid	Total BTEX	
890-3334-2	PH10B	Total/NA	Solid	Total BTEX	
890-3334-3	PH10C	Total/NA	Solid	Total BTEX	
890-3334-4	PH08A	Total/NA	Solid	Total BTEX	
890-3334-5	PH08B	Total/NA	Solid	Total BTEX	
890-3334-6	PH08C	Total/NA	Solid	Total BTEX	
890-3334-7	PH09A	Total/NA	Solid	Total BTEX	
890-3334-8	PH09B	Total/NA	Solid	Total BTEX	
890-3334-9	PH09C	Total/NA	Solid	Total BTEX	

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QC Association Summary

Client: Ensolum
Project/Site: SV Kim Harris #003

Job ID: 890-3334-1
SDG: 09C2041003

GC Semi VOA

Analysis Batch: 38323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3334-5	PH08B	Total/NA	Solid	8015B NM	38417
890-3334-6	PH08C	Total/NA	Solid	8015B NM	38325
890-3334-7	PH09A	Total/NA	Solid	8015B NM	38325
890-3334-8	PH09B	Total/NA	Solid	8015B NM	38325
890-3334-9	PH09C	Total/NA	Solid	8015B NM	38325
MB 880-38325/1-A	Method Blank	Total/NA	Solid	8015B NM	38325
MB 880-38417/1-A	Method Blank	Total/NA	Solid	8015B NM	38417
LCS 880-38325/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	38325
LCS 880-38417/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	38417
LCSD 880-38325/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	38325
LCSD 880-38417/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	38417
890-3322-A-2-D MS	Matrix Spike	Total/NA	Solid	8015B NM	38325
890-3322-A-2-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	38325
890-3335-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	38417
890-3335-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	38417

Prep Batch: 38325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3334-6	PH08C	Total/NA	Solid	8015NM Prep	
890-3334-7	PH09A	Total/NA	Solid	8015NM Prep	
890-3334-8	PH09B	Total/NA	Solid	8015NM Prep	
890-3334-9	PH09C	Total/NA	Solid	8015NM Prep	
MB 880-38325/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-38325/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-38325/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3322-A-2-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3322-A-2-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 38417

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3334-5	PH08B	Total/NA	Solid	8015NM Prep	
MB 880-38417/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-38417/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-38417/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3335-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3335-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 38436

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3334-1	PH10A	Total/NA	Solid	8015NM Prep	
890-3334-2	PH10B	Total/NA	Solid	8015NM Prep	
890-3334-3	PH10C	Total/NA	Solid	8015NM Prep	
890-3334-4	PH08A	Total/NA	Solid	8015NM Prep	
MB 880-38436/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-38436/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-38436/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-21015-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-21015-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: Ensolum
Project/Site: SV Kim Harris #003

Job ID: 890-3334-1
SDG: 09C2041003

GC Semi VOA

Analysis Batch: 38457

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3334-1	PH10A	Total/NA	Solid	8015B NM	38436
890-3334-2	PH10B	Total/NA	Solid	8015B NM	38436
890-3334-3	PH10C	Total/NA	Solid	8015B NM	38436
890-3334-4	PH08A	Total/NA	Solid	8015B NM	38436
MB 880-38436/1-A	Method Blank	Total/NA	Solid	8015B NM	38436
LCS 880-38436/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	38436
LCSD 880-38436/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	38436
880-21015-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	38436
880-21015-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	38436

Analysis Batch: 38469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3334-1	PH10A	Total/NA	Solid	8015 NM	
890-3334-2	PH10B	Total/NA	Solid	8015 NM	
890-3334-3	PH10C	Total/NA	Solid	8015 NM	
890-3334-4	PH08A	Total/NA	Solid	8015 NM	
890-3334-5	PH08B	Total/NA	Solid	8015 NM	
890-3334-6	PH08C	Total/NA	Solid	8015 NM	
890-3334-7	PH09A	Total/NA	Solid	8015 NM	
890-3334-8	PH09B	Total/NA	Solid	8015 NM	
890-3334-9	PH09C	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 38262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3334-1	PH10A	Soluble	Solid	DI Leach	
890-3334-2	PH10B	Soluble	Solid	DI Leach	
890-3334-3	PH10C	Soluble	Solid	DI Leach	
890-3334-4	PH08A	Soluble	Solid	DI Leach	
890-3334-5	PH08B	Soluble	Solid	DI Leach	
890-3334-6	PH08C	Soluble	Solid	DI Leach	
890-3334-7	PH09A	Soluble	Solid	DI Leach	
890-3334-8	PH09B	Soluble	Solid	DI Leach	
MB 880-38262/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-38262/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-38262/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3329-A-3-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3329-A-3-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 38328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3334-9	PH09C	Soluble	Solid	DI Leach	
MB 880-38328/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-38328/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-38328/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-20959-A-11-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-20959-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Eurofins Carlsbad

QC Association Summary

Client: Ensolum
Project/Site: SV Kim Harris #003

Job ID: 890-3334-1
SDG: 09C2041003

HPLC/IC

Analysis Batch: 38427

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3334-9	PH09C	Soluble	Solid	300.0	38328
MB 880-38328/1-A	Method Blank	Soluble	Solid	300.0	38328
LCS 880-38328/2-A	Lab Control Sample	Soluble	Solid	300.0	38328
LCSD 880-38328/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	38328
880-20959-A-11-B MS	Matrix Spike	Soluble	Solid	300.0	38328
880-20959-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	38328

Analysis Batch: 38428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3334-1	PH10A	Soluble	Solid	300.0	38262
890-3334-2	PH10B	Soluble	Solid	300.0	38262
890-3334-3	PH10C	Soluble	Solid	300.0	38262
890-3334-4	PH08A	Soluble	Solid	300.0	38262
890-3334-5	PH08B	Soluble	Solid	300.0	38262
890-3334-6	PH08C	Soluble	Solid	300.0	38262
890-3334-7	PH09A	Soluble	Solid	300.0	38262
890-3334-8	PH09B	Soluble	Solid	300.0	38262
MB 880-38262/1-A	Method Blank	Soluble	Solid	300.0	38262
LCS 880-38262/2-A	Lab Control Sample	Soluble	Solid	300.0	38262
LCSD 880-38262/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	38262
890-3329-A-3-B MS	Matrix Spike	Soluble	Solid	300.0	38262
890-3329-A-3-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	38262

Lab Chronicle

Client: Ensolum
Project/Site: SV Kim Harris #003

Job ID: 890-3334-1
SDG: 09C2041003

Client Sample ID: PH10A

Lab Sample ID: 890-3334-1

Date Collected: 10/28/22 08:50

Matrix: Solid

Date Received: 10/28/22 16:15

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	38396	11/01/22 13:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38317	11/02/22 04:06	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38464	11/02/22 10:02	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38469	11/03/22 10:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	38436	11/01/22 16:40	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38457	11/03/22 02:19	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	38262	10/31/22 10:26	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38428	11/02/22 00:14	CH	EET MID

Client Sample ID: PH10B

Lab Sample ID: 890-3334-2

Date Collected: 10/28/22 08:55

Matrix: Solid

Date Received: 10/28/22 16:15

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	38396	11/01/22 13:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38317	11/02/22 04:27	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38464	11/02/22 10:02	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38469	11/03/22 10:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	38436	11/01/22 16:40	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38457	11/03/22 02:40	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	38262	10/31/22 10:26	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38428	11/02/22 00:29	CH	EET MID

Client Sample ID: PH10C

Lab Sample ID: 890-3334-3

Date Collected: 10/28/22 09:05

Matrix: Solid

Date Received: 10/28/22 16:15

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	38396	11/01/22 13:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38317	11/02/22 04:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38464	11/02/22 10:02	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38469	11/03/22 10:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	38436	11/01/22 16:40	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38457	11/03/22 03:01	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	38262	10/31/22 10:26	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38428	11/02/22 00:34	CH	EET MID

Client Sample ID: PH08A

Lab Sample ID: 890-3334-4

Date Collected: 10/28/22 09:30

Matrix: Solid

Date Received: 10/28/22 16:15

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	38396	11/01/22 13:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38317	11/02/22 05:09	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38464	11/02/22 10:02	AJ	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: SV Kim Harris #003

Job ID: 890-3334-1
SDG: 09C2041003

Client Sample ID: PH08A

Lab Sample ID: 890-3334-4

Date Collected: 10/28/22 09:30

Matrix: Solid

Date Received: 10/28/22 16:15

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			38469	11/03/22 10:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	38436	11/01/22 16:40	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38457	11/03/22 03:44	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	38262	10/31/22 10:26	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38428	11/02/22 00:39	CH	EET MID

Client Sample ID: PH08B

Lab Sample ID: 890-3334-5

Date Collected: 10/28/22 09:35

Matrix: Solid

Date Received: 10/28/22 16:15

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	38396	11/01/22 13:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38317	11/02/22 05:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38464	11/02/22 10:02	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38469	11/02/22 10:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	38417	11/01/22 15:08	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38323	11/02/22 03:58	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	38262	10/31/22 10:26	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38428	11/02/22 00:44	CH	EET MID

Client Sample ID: PH08C

Lab Sample ID: 890-3334-6

Date Collected: 10/28/22 09:45

Matrix: Solid

Date Received: 10/28/22 16:15

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	38396	11/01/22 13:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38317	11/02/22 05:50	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38464	11/02/22 10:02	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38469	11/02/22 10:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	38325	11/01/22 08:49	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38323	11/01/22 19:21	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	38262	10/31/22 10:26	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38428	11/02/22 00:49	CH	EET MID

Client Sample ID: PH09A

Lab Sample ID: 890-3334-7

Date Collected: 10/28/22 10:10

Matrix: Solid

Date Received: 10/28/22 16:15

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	38396	11/01/22 13:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38317	11/02/22 06:11	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38464	11/02/22 10:02	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38469	11/02/22 10:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	38325	11/01/22 08:49	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38323	11/01/22 19:43	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: SV Kim Harris #003

Job ID: 890-3334-1
SDG: 09C2041003

Client Sample ID: PH09A

Lab Sample ID: 890-3334-7

Date Collected: 10/28/22 10:10

Matrix: Solid

Date Received: 10/28/22 16:15

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 g	50 mL	38262	10/31/22 10:26	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38428	11/02/22 00:54	CH	EET MID

Client Sample ID: PH09B

Lab Sample ID: 890-3334-8

Date Collected: 10/28/22 10:15

Matrix: Solid

Date Received: 10/28/22 16:15

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	38396	11/01/22 13:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38317	11/02/22 06:32	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38464	11/02/22 10:02	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38469	11/02/22 10:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	38325	11/01/22 08:49	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38323	11/01/22 20:05	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	38262	10/31/22 10:26	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38428	11/02/22 00:59	CH	EET MID

Client Sample ID: PH09C

Lab Sample ID: 890-3334-9

Date Collected: 10/28/22 10:25

Matrix: Solid

Date Received: 10/28/22 16:15

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	38396	11/01/22 13:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38317	11/02/22 06:52	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38464	11/02/22 10:02	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38469	11/02/22 10:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	38325	11/01/22 08:49	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38323	11/01/22 20:26	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	38328	11/01/22 09:01	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38427	11/01/22 21:45	CH	EET MID

Laboratory References:

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

Eurofins Carlsbad

Accreditation/Certification Summary

Client: Ensolum
Project/Site: SV Kim Harris #003

Job ID: 890-3334-1
SDG: 09C2041003

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	T104704400-22-24	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
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Method Summary

Client: Ensolum
Project/Site: SV Kim Harris #003

Job ID: 890-3334-1
SDG: 09C2041003

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: SV Kim Harris #003

Job ID: 890-3334-1
SDG: 09C2041003

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3334-1	PH10A	Solid	10/28/22 08:50	10/28/22 16:15	6
890-3334-2	PH10B	Solid	10/28/22 08:55	10/28/22 16:15	12
890-3334-3	PH10C	Solid	10/28/22 09:05	10/28/22 16:15	36
890-3334-4	PH08A	Solid	10/28/22 09:30	10/28/22 16:15	6
890-3334-5	PH08B	Solid	10/28/22 09:35	10/28/22 16:15	12
890-3334-6	PH08C	Solid	10/28/22 09:45	10/28/22 16:15	48
890-3334-7	PH09A	Solid	10/28/22 10:10	10/28/22 16:15	6
890-3334-8	PH09B	Solid	10/28/22 10:15	10/28/22 16:15	12
890-3334-9	PH09C	Solid	10/28/22 10:25	10/28/22 16:15	48



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 1

Project Manager:	Don Moir	Bill to: (if different)	D.A.
Company Name:	Ensolium LLC	Company Name:	
Address:	3122 North Park Blvd	Address:	
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	
Phone:	303-887-2946	Email:	dmair@ensolium.com

Work Order Comments			
Program:	UST/PT	PRP	Brownfields
State of Project:			RRC
Reporting:	Level II	Level III	PT/UST
Deliverables:	EDD	ADAPT	Other:
			Level IV

Project Name:	SVHinharnist#003	Turn Around	<input checked="" type="checkbox"/> Routine	<input type="checkbox"/> Rush	Pres. Code	
Project Number:	0902011003					
Project Location:	32 942595-103 305599	Date:				
Sampler's Name:	JULIANNA FALCONOTA	TAT starts the day received by the lab, if received by 430pm				
PO #:						
SAMPLE RECEIPT	Temp Blank:	Yes	No	Wet Ice:	Yes	No
Samples Received Intact:	Yes	No	Thermometer ID:	7N10037		
Cooler Custody Seals:	Yes	No	Correction Factor:	-0.8		
Sample Custody Seals:	Yes	No	Temperature Reading:	22.8		
Total Containers:		Corrected Temperature:	22.6			



890-3334 Chain of Custody

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters	ANALYSIS REQUEST	Preservative Codes	Sample Comments
PH10A	S	10-28-22	0850	6"	G	1	BTX		None: NO	DI Water: H ₂ O
PH10B	S	10-28-22	0855	12"	G	1	TPH		Cool: Cool	MeOH: Me
PH10C	S	10-28-22	0905	36"	G	1			HCL: HC	HNO ₃ : HN
PH08A	S	10-28-22	0930	6"	G	1			H ₂ SO ₄ : H ₂	NaOH: Na
PH08B	S	10-28-22	0935	12"	G	1			H ₃ PO ₄ : HP	
PH08C	S	10-28-22	0945	48"	G	1			NaHSO ₄ : NABIS	
PH09A	S	10-28-22	1010	6"	G	1			Na ₂ O ₂ : NaSO ₃	
PH09B	S	10-28-22	1015	12"	G	1			Zn Acetate+NaOH: Zn	
PH09C	S	10-28-22	1025	48"	G	1			NaOH+Ascorbic Acid: SAPC	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag 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
		10-28-22 16:15			

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3334-1

SDG Number: 09C2041003

Login Number: 3334

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: 890-3334-1

SDG Number: 09C2041003

Login Number: 3334

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 11/01/22 10:26 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	

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

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

CONDITIONS

Action 167923

CONDITIONS

Operator: ARMSTRONG ENERGY CORP P.O. Box 1973 Roswell, NM 88202	OGRID: 1092
	Action Number: 167923
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Report Approved. Please implement 19.15.29.13 NMAC when completing P&A.	1/13/2023