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	NAPP2218940551
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Armstrong Energy Corporation	OGRID 1092
Contact Name Kyle Alpers	Contact Telephone 575-625-2222
Contact email kalpers@aecnm.com	Incident # *(assigned by OCD)* nAPP2218940551
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 7/8/22	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)

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☑ Produced Water	Volume Released (bbls) 40 bbl	Volume Recovered (bbls) 0 bbl
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☑ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release Lightning struck the produced water tank, causing it to rupture and release 40 bbl of produced water into the containment.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2218940551
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☑ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? Unauthorized release of a volume, excluding gases, of 25 barrels or more

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
Yes, verbal notice given to Kerry Fortner via phone call on 7/8/22

Initial Response

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

☑ The source of the release has been stopped.
☑ The impacted area has been secured to protect human health and the environment.
☑ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
☑ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

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

Printed Name: Kyle Alpers Title: VP Engineering

Signature: Kyle Alpers Date: 12/2/22

email: kalpers@aecnm.com Telephone: 575-625-2222

OCD Only

Received by: _____ Date: _____

Form C-141
Page 3

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2218940551
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2218940551
District RP	
Facility ID	
Application ID	

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

Printed Name: Kyle Alpers Title: VP Engineering

Signature: Kyle Alpers Date: 12/2/22

email: kalpers@aecnm.com Telephone: 575-625-2222

OCD Only

Received by: Jocelyn Harimon Date: 12/06/2022

Incident ID	NAPP2218940551
District RP	
Facility ID	
Application ID	

Closure

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

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

[x] A scaled site and sampling diagram as described in 19.15.29.11 NMAC

[x] 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)

[x] Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

[x] 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: Kyle Alpers Title: VP Eningeering

Signature: Kyle Alpers Date: 12/2/22

email: kalpers@aecnm.com Telephone: 575-625-2222

OCD Only

Received by: Jocelyn Harimon Date: 12/06/2022

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: 01/05/2023

Printed Name: Jennifer Nobui Title: Environmental Specialist A

ENSOLUM

November 30, 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 Addendum
SV Kim Harris #003
Incident Number nAPP2218940551
Lea County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of Armstrong Energy Corporation (AEC), has prepared this *Closure Request Addendum (Addendum)* letter following a *Closure Request* report denial by the New Mexico Oil Conservation Division (NMOD) related to 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 this *Addendum* is to present the results of additional delineation activities completed to address the October 3, 2022 denial comments. AEC is submitting this Addendum for Incident Number nAPP2218940551 and requesting no further action (NFA).

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 July 8, 2022, lightning struck a produced water tank, causing a rupture in the tank and a release of 40 barrels (bbls) of produced water into the earthen secondary containment berm. Fluids were not able to be recovered. AEC notified the NMOCD of the release through the Notification of Release portal on July 8, 2022 and subsequently on a Release Notification Form C-141 (Form C-141). NMOCD assigned the release with Incident Number nAPP2218940551.

REMEDIATION SUMMARY

On July 26, 2022, Site assessment activities were conducted to evaluate the release based on information provided by Armstrong and visual observations during the assessment. The release was visually confirmed to be contained within the earthen secondary containment. Based on soil analytical results of samples collected within the earthen secondary containment, excavation of impacted soil appeared warranted. As a result, Ensolum oversaw the excavation and proper disposal of impacted soil on September 14, 2022. The total areal extent of the excavation was approximately 1,100 square feet in size and with total excavated depths ranging from 4 feet to 5 feet bgs, totaling approximately 280 cubic yards of impacted material removed from the Site. The impacted soil was properly disposed of at a New Mexico-permitted land farm.

Based on initial delineation and follow-up excavation activities, and results of the confirmation soil samples, it appeared the remediation actions had been protective of human health, the environment, and groundwater and as such, AEC respectfully requested closure for Incident Number nAPP2218940551.

NMOCD CLOSURE REQUEST DENIAL

AEC submitted the *Closure Request* report on October 3, 2022 through the NMOCD web portal along with the Final Form C-141. Per the NMOCD's Permitting webpage, the closure request was denied for the following reason:

> *Sidewall samples need to be delineated/excavated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release. In addition, OCD is requesting shallow soil samples from location PH-04 at 0.5 and 2'. Please resubmit a revised Closure Request to the OCD portal by November 4, 2022.*

SITE CHARACTERIZATION AND CLOSURE CRITERIA

As documented in the *Closure Request*, 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 and the previously submitted *Closure Request*. Potential site receptors are identified on **Figure 1**.

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

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH) – Gasoline Range Organics (GRO) and TPH – Diesel Range Organics (DRO) Combined: 1,500 mg/kg
- TPH: 2,500 mg/kg
- Chloride: 10,000 mg/kg

ADDITIONAL DELINEATION ACTIVITIES AND ANALYTICAL RESULTS

Based on language from NMOCD's October 2022 denial letter, AEC met with NMOCD to discuss additional Site activities required to be completed in order to achieve NFA. On November 7, 2022, AEC, NMOCD, and Ensolum met to discuss additional delineation data NMOCD wanted for NFA. As a result of the meeting and previous plans to complete delineation activities per the October 14, 2022 *Closure Request Denial Response* letter, Ensolum was onsite to complete soil sampling activities on October 28, 2022 and November 18, 2022. Ensolum collected the following lateral delineation pothole soil samples:

- PH08 – located north of the release and just north of pothole sample PH04. Pothole PH08 was located at the pad boundary to verify the release did not extend off pad into the pasture to the north.
- PH09 – located east of the excavation extent and at the pad boundary to verify the release did not extend off pad into the pasture to the east.
- PH10 – located west of the excavation extent within the pad to help better define the release extent.

- PH11 – located east of the excavation extent, east of sidewall soil sample location SW04. This pothole was collected at the pad boundary to verify the release did not extend off pad into the pasture to the east.

Soil from the potholes were described on lithologic / soil sampling logs (Appendix A), which included field screening results for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride utilizing Hach® chloride QuanTab® test strips. Soil samples from the four potholes were collected at 0.5 feet, 1-foot, and 4 feet bgs (as well as a 2 feet bgs for pothole soil sample PH11). The locations of the samples were marked utilizing a hand-held global positioning system (GPS). Figure 2 depicts the delineation soil sample locations.

All soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported at or below 4 degrees Celsius (°C) under strict chain-of-custody procedures to Eurofins Laboratories (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.

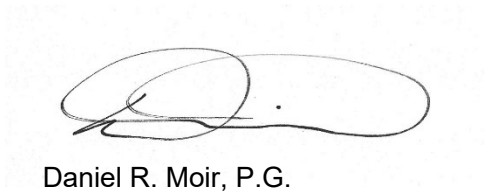
Laboratory analytical results indicated concentrations of all COCs in the four pothole locations were compliant with the Table I Closure Criteria as well as the most stringent Closure Criteria. Table 1 summarizes the analytical results. Appendix A includes the laboratory analytical reports and chain-of-custody documentation.

CONCLUSION

Laboratory analytical results from the additional delineation activities indicated concentrations of all COCs in the four pothole locations were compliant with the Table I Closure Criteria as well as the most stringent Closure Criteria. These results provide further evidence that the release extent did not extent off pad at concentrations that would exceed the reclamation requirement and indicate remedial actions, specifically the excavation and proper disposal of approximately 280 cubic yards of impacted soil, has been protective human health, the environment, and groundwater. As a result, AEC respectfully requests NFA for Incident Number nAPP2218940551.

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

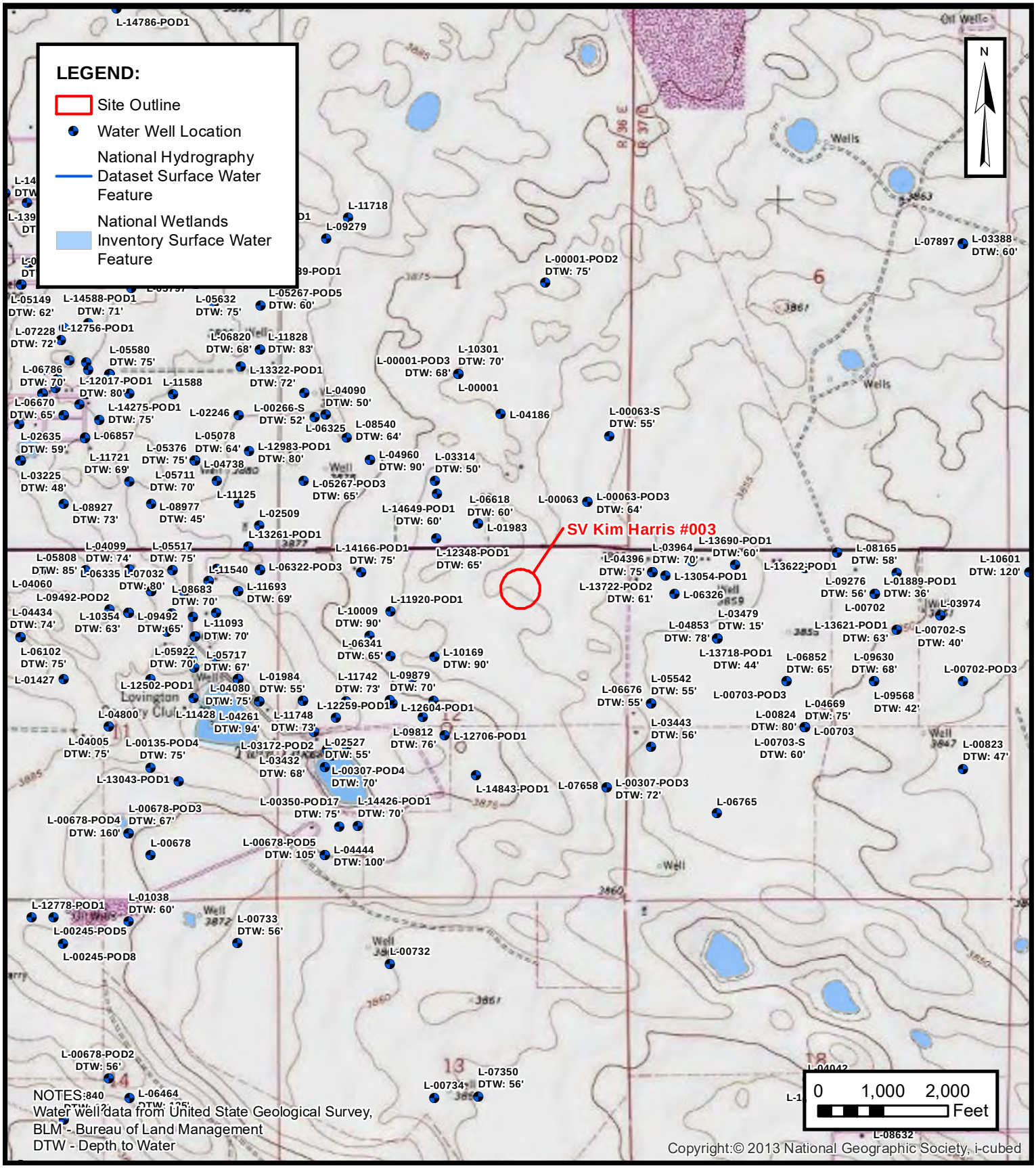
cc: Jeff Tew, Armstrong Energy Corporation

Appendices:

Figure 1	Site Receptor Map
Figure 2	Delineation Soil Sample Locations
Table 1	Soil Sample Analytical Results
Appendix A	Lithologic / Soil Sampling Logs
Appendix B	Laboratory Analytical Results and Chain of Custody Documentation

ENSOLUM

Figures

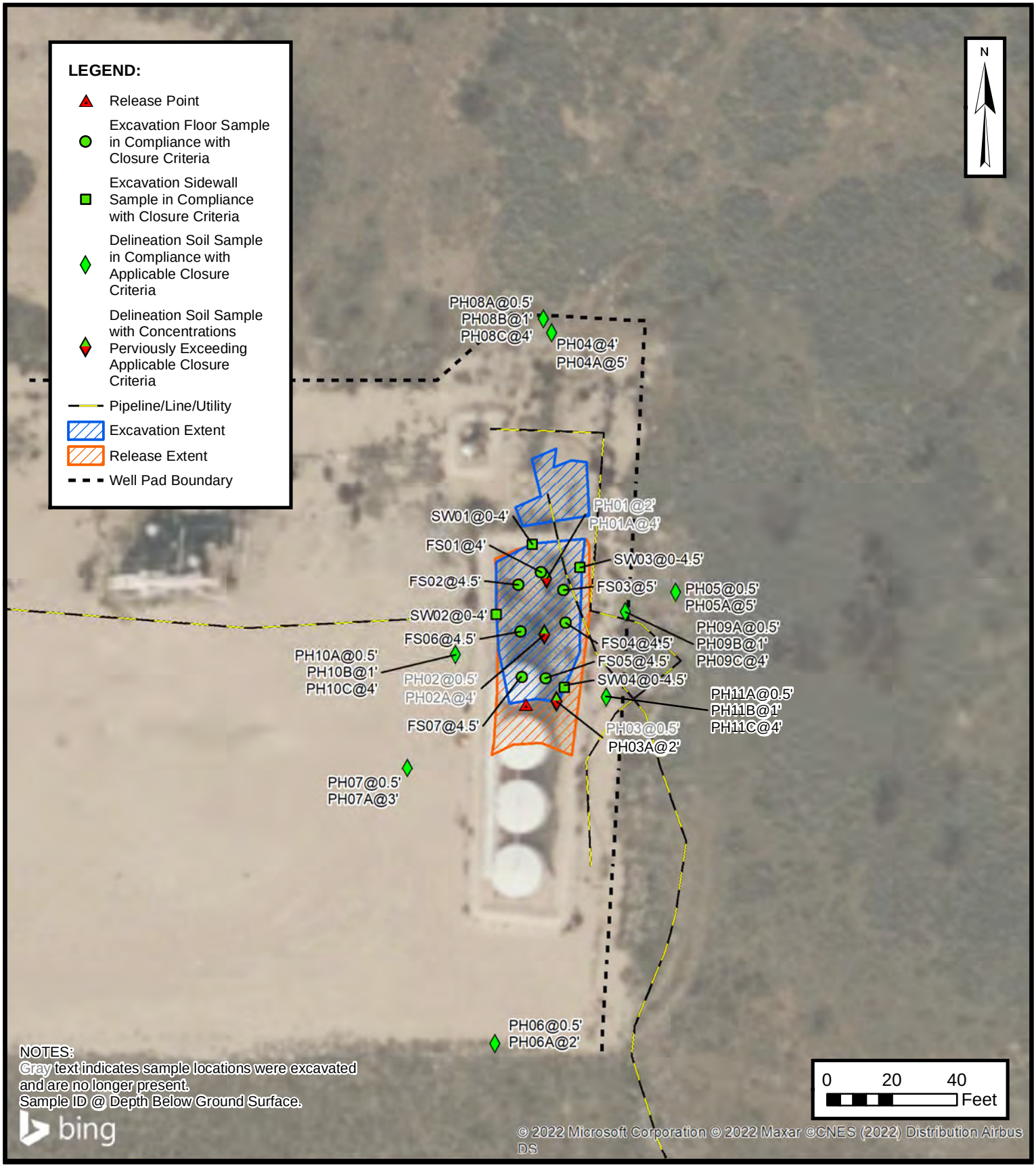


ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

SITE RECEPTOR MAP

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

FIGURE
1



ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

DELINEATION SOIL SAMPLE LOCATIONS

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

FIGURE
2

ENSOLUM

Table

ENSOLUM

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 <50 feet)			**10**	**50**	NE	NE	NE	**1,500**	**2,500**	**10,000**
Delineation Soil Sample Analytical Results										
PH01	07/26/2022	2'	1.12	**60.9**	226	1,140	114	1,366	1,480	499
PH01A	07/26/2022	4'	0.106	3.8	<49.8	510	<49.8	510	510	1,170
PH02	07/26/2022	0.5'	<0.00198	0.0420	<49.9	<49.9	<49.9	<49.9	<49.9	8,940
PH02A	07/26/2022	4'	<0.0402	0.359	<49.9	<49.9	<49.9	<49.9	<49.9	452
PH03	07/26/2022	0.5'	<0.0402	3.20	<50.0	1,150	201	1,150	1350	**19,100**
PH03A	07/26/2022	2'	<0.0404	0.513	<50.0	159	<50.0	159	159	4,020
PH04	07/26/2022	4'	<0.00199	<0.00398	<50.0	66.5	<50.0	66.5	66.5	878
PH04A	07/26/2022	5'	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	1,450
PH05	07/26/2022	0.5'	0.00561	0.213	<49.9	<49.9	<49.9	<49.9	<49.9	40.2
PH05A	07/26/2022	5'	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	33
PH06	07/26/2022	0.5'	<0.00199	0.0325	<50.0	<50.0	<50.0	<50.0	<50.0	16.1
PH06A	07/26/2022	2'	<0.00200	0.0609	<49.9	<49.9	<49.9	<49.9	<49.9	36.5
PH07	07/26/2022	0.5'	<0.0397	<0.0794	<49.9	<49.9	<49.9	<49.9	<49.9	90.1
PH07A	07/26/2022	3'	<0.00201	0.018	<49.9	<49.9	<49.9	<49.9	<49.9	18
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
PH09A	10/28/2022	0.5'	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	18.9
PH09B	10/28/2022	1'	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	29.6
PH09C	10/28/2022	4'	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	55.6
PH10A	10/28/2022	0.5'	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	49.7
PH10B	10/28/2022	1'	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	29.3
PH10C	10/28/2022	4'	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	65.3
PH11A	11/17/2022	0.5'	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	18.7
PH11B	11/17/2022	1'	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	20.3
PH11C	11/17/2022	2'	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	22.1
PH11D	11/17/2022	4'	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	47.3
Excavation Confirmation Soil Sample Analytical Results										
FS01	9/14/2022	4'	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	227
FS02	9/14/2022	4.5'	<0.00199	<0.00398	<50.0	308	80.5	388.5	389	142
FS03	9/14/2022	5'	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	411
FS04	9/14/2022	4.5'	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	827
FS05	9/14/2022	4.5'	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	893
FS06	9/14/2022	4.5'	<0.00200	<0.00399	<49.9	92	<49.9	92	92	1,440
FS07	9/14/2022	4.5'	<0.00199	<0.00398	<50.0	173	<50.0	173	173	532
SW01	9/14/2022	0-4'	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	1,390
SW02	9/14/2022	0-4'	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	1,170
SW03	9/14/2022	0-4.5'	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	62.4
SW04	9/14/2022	0-4.5'	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	2,400

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

ENSOLUM

APPENDIX A

Lithologic Soil Sampling Logs

ENSOLUM	Sample Name: PH08	Date: 10/28/2022
	Site Name: SV Kim Harris #003	
	Incident Number: nAPP2218940551	
	Job Number: 09C2041003	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: JF	Method: backhoe
Coordinates: 32.942522, -103.304927	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
						1.5		
m						2		
						2.5		
m	<168	0.0	n	PH08C	@3'	3	SW	SAA
						3.5		
						4		
						4.5		
						5		
						5.5		TD = 3 feet bgs
						6		

ENSOLUM	Sample Name: PH09	Date: 10/28/2022
	Site Name: SV Kim Harris #003	
	Incident Number: nAPP2218940551	
	Job Number: 09C2041003	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: JF	Method: backhoe
Coordinates: 32.942522, -103.304927	Hole Diameter: N/A	Total Depth: 4 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	0.1	n	PH09A	@0.5'	0.5	cche	CALICHE, fg-cg sand, silty, clayey, brown-dk brown, moist, no staining and no odor
m	<168	0	n	PH09B	@1'	1	SW	SAND, fg-cg, trace silt and clay, dark brown, moist, no staining, no odor
						1.5		
m						2		
						2.5		
						3	SW	SAA
						3.5		
m	<168	0.0	n	PH09C	@4'	4		
						4.5		
						5		
						5.5		TD = 4 feet bgs
						6		

ENSOLUM

	Sample Name: PH10	Date: 10/28/2022
	Site Name: SV Kim Harris #003	
	Incident Number: nAPP2218940551	
	Job Number: 09C2041003	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: JF	Method: backhoe
Coordinates: 32.942522, -103.304927	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	0.2	n	PH10A	@0.5'	0.5	cche	CALICHE, fg-cg sand, silty, clayey, brown-dk brown, moist, no staining and no odor
m	<168	0.1	n	PH10B	@1'	1	SW	SAND, fg-cg, trace silt and clay, dark brown, moist, no staining, no odor
						1.5		
						2		
						2.5		
m	<168	0.1	n	PH10C	@3'	3	SW	SAA
						3.5		
						4		
						4.5		
						5		
						5.5		TD = 3 feet bgs
						6		

ENSOLUM	Sample Name: PH11	Date: 10/28/2022
	Site Name: SV Kim Harris #003	
	Incident Number: nAPP2218940551	
	Job Number: 09C2041003	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: JF	Method: backhoe
Coordinates: 32.942522, -103.304927	Hole Diameter: N/A	Total Depth: 4 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	0.3	n	PH11A	@0.5'	0.5	cche	CALICHE, fg-cg sand, silty, clayey, brown-dk brown, moist, no staining and no odor
m	<168	0.2	n	PH11B	@1'	1	SW	SAND, fg-cg, trace silt and clay, dark brown, moist, no staining, no odor
						1.5		
m	<168	0	n	PH11C	@2'	2		
						2.5		
						3	SW	SAA
						3.5		
m	<168	0.0	n	PH11D	@4'	4		
						4.5		
						5		
						5.5		TD = 4 feet bgs
						6		

ENSOLUM

APPENDIX B

Laboratory Analytical Reports & Chain-of-Custody Documentation

eurofins | 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

JKramer

Authorized for release by:
11/3/2022 12:32:46 PM

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

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

Table of Contents

Definitions/Glossary

Client: Ensolum Job ID: 890-3334-1
Project/Site: SV Kim Harris #003 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

Date Collected: 10/28/22 08:50
Date Received: 10/28/22 16:15
Sample Depth: 6

Lab Sample ID: 890-3334-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		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
OII 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

Date Collected: 10/28/22 08:55
Date Received: 10/28/22 16:15
Sample Depth: 12

Lab Sample ID: 890-3334-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		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*

Client Sample Results

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

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

Client Sample ID: PH10B

Date Collected: 10/28/22 08:55
Date Received: 10/28/22 16:15
Sample Depth: 12

Lab Sample ID: 890-3334-2

Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*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
OII 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

Date Collected: 10/28/22 09:05
Date Received: 10/28/22 16:15
Sample Depth: 36

Lab Sample ID: 890-3334-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		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

Date Collected: 10/28/22 09:05
Date Received: 10/28/22 16:15
Sample Depth: 36

Lab Sample ID: 890-3334-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<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

Date Collected: 10/28/22 09:30
Date Received: 10/28/22 16:15
Sample Depth: 6

Lab Sample ID: 890-3334-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		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*

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
Matrix: Solid
Date Collected: 10/28/22 09:30
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
Matrix: Solid
Date Collected: 10/28/22 09:35
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
OII 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

Client Sample Results

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

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

Client Sample ID: PH08C

Date Collected: 10/28/22 09:45
Date Received: 10/28/22 16:15
Sample Depth: 48

Lab Sample ID: 890-3334-6
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		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
OII 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

Date Collected: 10/28/22 10:10
Date Received: 10/28/22 16:15
Sample Depth: 6

Lab Sample ID: 890-3334-7
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		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*

Eurofins Carlsbad

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
Matrix: Solid
Date Collected: 10/28/22 10:10
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
OII 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
Matrix: Solid
Date Collected: 10/28/22 10:15
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

Eurofins Carlsbad

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
Matrix: Solid
Date Collected: 10/28/22 10:15
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
OII 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
Matrix: Solid
Date Collected: 10/28/22 10:25
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
OII 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*

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 (70-130)	DFBZ1 (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 (70-130)	OTPH1 (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

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

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	RPD Limit
Benzene			0.100	0.09381		mg/Kg		94	70 - 130	2	35

Eurofins Carlsbad

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

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
OII 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*

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 — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 38323 — **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 — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 38323 — **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
OII 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 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 38323 — **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 — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 38323 — **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

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

Surrogate	LCSD %Recovery	LCSD 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

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

Surrogate	MS %Recovery	MS 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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	999	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	MSD %Recovery	MSD 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

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 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
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/01/22 16:40	11/02/22 22:03	1

Surrogate	MB %Recovery	MB 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

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 Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
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		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*107*		*70 - 130*
o-Terphenyl	*133*	*S1+*	*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

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

Surrogate	*LCSD %Recovery*	*LCSD 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

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

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*90*		*70 - 130*
o-Terphenyl	*85*		*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

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	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*

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

Surrogate	MSD %Recovery	MSD Qualifier	Limits
o-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

Analyte	MB Result	MB 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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%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

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

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

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 880-38262/1-A
Matrix: Solid
Analysis Batch: 38428

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			11/01/22 22:29	1

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	

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	

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	

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
Date Collected: 10/28/22 08:50
Date Received: 10/28/22 16:15

Lab Sample ID: 890-3334-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	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
Date Collected: 10/28/22 08:55
Date Received: 10/28/22 16:15

Lab Sample ID: 890-3334-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 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
Date Collected: 10/28/22 09:05
Date Received: 10/28/22 16:15

Lab Sample ID: 890-3334-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	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
Date Collected: 10/28/22 09:30
Date Received: 10/28/22 16:15

Lab Sample ID: 890-3334-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	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

Lab Chronicle

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

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

Client Sample ID: PH08A
Date Collected: 10/28/22 09:30
Date Received: 10/28/22 16:15

Lab Sample ID: 890-3334-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			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
Date Collected: 10/28/22 09:35
Date Received: 10/28/22 16:15

Lab Sample ID: 890-3334-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 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
Date Collected: 10/28/22 09:45
Date Received: 10/28/22 16:15

Lab Sample ID: 890-3334-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	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
Date Collected: 10/28/22 10:10
Date Received: 10/28/22 16:15

Lab Sample ID: 890-3334-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 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

Lab Chronicle

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

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

Client Sample ID: PH09A
Date Collected: 10/28/22 10:10
Date Received: 10/28/22 16:15

Lab Sample ID: 890-3334-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5 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
Date Collected: 10/28/22 10:15
Date Received: 10/28/22 16:15

Lab Sample ID: 890-3334-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	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
Date Collected: 10/28/22 10:25
Date Received: 10/28/22 16:15

Lab Sample ID: 890-3334-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 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

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

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

eurofins | Environment Testing Xenco

Chain of Custody

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

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Dan Moir	Bill to: (if different)	A.a.
Company Name:	Ensolum LLC	Company Name:	
Address:	3122 National Parks Hwy	Address:	
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	
Phone:	303-887-2946 Email:	dmoir@ensolum.com	

Work Order Comments

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

Project Name:	SV Kim Harris #003	Turn Around	
Project Number:	09C2011003	☑ Routine ☐ Rush	
Project Location:	32.9425845, -103.3055942	Due Date:	
Sampler's Name:	Jillianne Falcomata	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	TN#007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	2.8
Total Containers:		Corrected Temperature:	2.6

Preservative Codes

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: BTX	TPH	Cl	Sample Comments
PH01A	S	10-28-22	0850	6"	G	1		✓	✓	✓	Incident #
PH01B	S	10-28-22	0855	12"	G	1		✓	✓	✓	nAPP2218940551
PH01C	S	10-28-22	0905	36"	G	1		✓	✓	✓	
PH08A	S	10-28-22	0930	6"	G	1		✓	✓	✓	
PH08B	S	10-28-22	0935	12"	G	1		✓	✓	✓	
PH08C	S	10-28-22	0945	48"	G	1		✓	✓	✓	
PH09A	S	10-28-22	1010	6"	G	1		✓	✓	✓	
PH09B	S	10-28-22	1015	17"	G	1		✓	✓	✓	
PH09C	S	10-28-22	1025	48"	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 Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		10.28.22 16	4		
3			6		
5					

Revised Date: 08/25/2020 Rev. 2020.2

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	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 11/30/2022 9:53:08 AM

JOB DESCRIPTION

SV KIM HARRIS #003
SDG NUMBER 09D2041003

JOB NUMBER

890-3540-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

Eurofins Carlsbad

Job Notes

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

Authorization

Generated
11/30/2022 9:53:08 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: 890-3540-1
SDG: 09D2041003

Table of Contents

Definitions/Glossary

Client: Ensolum Job ID: 890-3540-1
Project/Site: SV KIM HARRIS #003 SDG: 09D2041003

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

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

Job ID: 890-3540-1
SDG: 09D2041003

Job ID: 890-3540-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3540-1

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

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: PH11A (890-3540-1), PH11B (890-3540-2), PH11C (890-3540-3) and PH11D (890-3540-4).

GC VOA
Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-40456 and analytical batch 880-40542 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 880-40275 and analytical batch 880-40262 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-40275/2-A) and (LCSD 880-40275/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: PH11A (890-3540-1), PH11B (890-3540-2), PH11C (890-3540-3), (890-3540-A-1-C MS) and (890-3540-A-1-D MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-40387 and analytical batch 880-40408 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: PH11D (890-3540-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The method blank for preparation batch 880-40387 and analytical batch 880-40408 contained Gasoline Range Organics (GRO)-C6-C10 above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 880-40387 and analytical batch 880-40408 was outside control limits. Sample non-homogeneity is suspected.

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

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

Client Sample Results

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

Job ID: 890-3540-1
SDG: 09D2041003

Client Sample ID: PH11A

Lab Sample ID: 890-3540-1
Matrix: Solid
Date Collected: 11/17/22 12:00
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 12:33	11/29/22 20:51	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/28/22 12:33	11/29/22 20:51	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/28/22 12:33	11/29/22 20:51	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/28/22 12:33	11/29/22 20:51	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/28/22 12:33	11/29/22 20:51	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/28/22 12:33	11/29/22 20:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*11/28/22 12:33*	*11/29/22 20:51*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*11/28/22 12:33*	*11/29/22 20:51*	*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			11/30/22 10:01	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 11:40	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 09:52	11/23/22 11:38	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/23/22 09:52	11/23/22 11:38	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/23/22 09:52	11/23/22 11:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*11/23/22 09:52*	*11/23/22 11:38*	*1*
o-Terphenyl	*136*	*S1+*	*70 - 130*	*11/23/22 09:52*	*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	**18.7**		4.99		mg/Kg			11/24/22 05:13	1

Client Sample ID: PH11B

Lab Sample ID: 890-3540-2
Matrix: Solid
Date Collected: 11/17/22 12:10
Date Received: 11/18/22 16:00
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 12:33	11/29/22 21:18	1
Toluene	<0.00199	U	0.00199		mg/Kg		11/28/22 12:33	11/29/22 21:18	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		11/28/22 12:33	11/29/22 21:18	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		11/28/22 12:33	11/29/22 21:18	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		11/28/22 12:33	11/29/22 21:18	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		11/28/22 12:33	11/29/22 21:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*11/28/22 12:33*	*11/29/22 21:18*	*1*

Client Sample Results

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

Job ID: 890-3540-1
SDG: 09D2041003

Client Sample ID: PH11B

Date Collected: 11/17/22 12:10
Date Received: 11/18/22 16:00
Sample Depth: 12

Lab Sample ID: 890-3540-2

Matrix: Solid

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 12:33*	*11/29/22 21:18*	*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			11/30/22 10:01	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			11/28/22 11:40	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		11/23/22 09:52	11/23/22 12:44	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		11/23/22 09:52	11/23/22 12:44	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		11/23/22 09:52	11/23/22 12:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*111*		*70 - 130*	*11/23/22 09:52*	*11/23/22 12:44*	*1*
o-Terphenyl	*140*	*S1+*	*70 - 130*	*11/23/22 09:52*	*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	**20.3**		5.00	mg/Kg			11/24/22 05:20	1

Client Sample ID: PH11C

Date Collected: 11/17/22 12:20
Date Received: 11/18/22 16:00
Sample Depth: 24

Lab Sample ID: 890-3540-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		11/28/22 12:33	11/29/22 21:45	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/28/22 12:33	11/29/22 21:45	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/28/22 12:33	11/29/22 21:45	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/28/22 12:33	11/29/22 21:45	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/28/22 12:33	11/29/22 21:45	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/28/22 12:33	11/29/22 21:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*11/28/22 12:33*	*11/29/22 21:45*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*11/28/22 12:33*	*11/29/22 21:45*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/30/22 10:01	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 11:40	1

Client Sample Results

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

Job ID: 890-3540-1
SDG: 09D2041003

Client Sample ID: PH11C

Date Collected: 11/17/22 12:20
Date Received: 11/18/22 16:00
Sample Depth: 24

Lab Sample ID: 890-3540-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		11/23/22 09:52	11/23/22 13:06	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/23/22 09:52	11/23/22 13:06	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/23/22 09:52	11/23/22 13:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*11/23/22 09:52*	*11/23/22 13:06*	*1*
o-Terphenyl	*137*	*S1+*	*70 - 130*	*11/23/22 09:52*	*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	**22.1**		4.97		mg/Kg			11/24/22 05:26	1

Client Sample ID: PH11D

Date Collected: 11/17/22 12:30
Date Received: 11/18/22 16:00
Sample Depth: 48

Lab Sample ID: 890-3540-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/28/22 12:33	11/29/22 22:13	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/28/22 12:33	11/29/22 22:13	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/28/22 12:33	11/29/22 22:13	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		11/28/22 12:33	11/29/22 22:13	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/28/22 12:33	11/29/22 22:13	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		11/28/22 12:33	11/29/22 22:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*11/28/22 12:33*	*11/29/22 22:13*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*11/28/22 12:33*	*11/29/22 22:13*	*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			11/30/22 10:01	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			11/29/22 12:08	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		11/28/22 09:07	11/29/22 00:02	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		11/28/22 09:07	11/29/22 00:02	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		11/28/22 09:07	11/29/22 00:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*119*		*70 - 130*	*11/28/22 09:07*	*11/29/22 00:02*	*1*
o-Terphenyl	*131*	*S1+*	*70 - 130*	*11/28/22 09:07*	*11/29/22 00:02*	*1*

Client Sample Results

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

Job ID: 890-3540-1
SDG: 09D2041003

Client Sample ID: PH11D
Date Collected: 11/17/22 12:30
Date Received: 11/18/22 16:00
Sample Depth: 48

Lab Sample ID: 890-3540-4
Matrix: Solid

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	47.3		4.96		mg/Kg			11/24/22 05:33	1

Surrogate Summary

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

Job ID: 890-3540-1
SDG: 09D2041003

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)
880-21753-A-1-G MS	Matrix Spike	100	108
880-21753-A-1-H MSD	Matrix Spike Duplicate	98	105
890-3540-1	PH11A	99	101
890-3540-2	PH11B	104	106
890-3540-3	PH11C	102	104
890-3540-4	PH11D	98	105
LCS 880-40456/1-A	Lab Control Sample	93	108
LCSD 880-40456/2-A	Lab Control Sample Dup	95	102
MB 880-40456/5-A	Method Blank	63 S1-	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)
880-21869-A-1-F MS	Matrix Spike	109	102
880-21869-A-1-G MSD	Matrix Spike Duplicate	98	92
890-3540-1	PH11A	109	136 S1+
890-3540-1 MS	PH11A	138 S1+	151 S1+
890-3540-1 MSD	PH11A	119	140 S1+
890-3540-2	PH11B	111	140 S1+
890-3540-3	PH11C	109	137 S1+
890-3540-4	PH11D	119	131 S1+
LCS 880-40275/2-A	Lab Control Sample	206 S1+	246 S1+
LCS 880-40387/2-A	Lab Control Sample	129	126
LCSD 880-40275/3-A	Lab Control Sample Dup	208 S1+	244 S1+
LCSD 880-40387/3-A	Lab Control Sample Dup	128	126
MB 880-40275/1-A	Method Blank	129	160 S1+
MB 880-40387/1-A	Method Blank	129	149 S1+

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

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

Job ID: 890-3540-1
SDG: 09D2041003

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-40456/5-A
Matrix: Solid
Analysis Batch: 40542

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40456

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		11/28/22 12:33	11/29/22 11:44	1
Toluene	<0.00200	U	0.00200		mg/Kg		11/28/22 12:33	11/29/22 11:44	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		11/28/22 12:33	11/29/22 11:44	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		11/28/22 12:33	11/29/22 11:44	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		11/28/22 12:33	11/29/22 11:44	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		11/28/22 12:33	11/29/22 11:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*63*	*S1-*	*70 - 130*	*11/28/22 12:33*	*11/29/22 11:44*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*11/28/22 12:33*	*11/29/22 11:44*	*1*

Lab Sample ID: LCS 880-40456/1-A
Matrix: Solid
Analysis Batch: 40542

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40456

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1293		mg/Kg		129	70 - 130		
Toluene			0.100	0.1163		mg/Kg		116	70 - 130		
Ethylbenzene			0.100	0.1064		mg/Kg		106	70 - 130		
m-Xylene & p-Xylene			0.200	0.2135		mg/Kg		107	70 - 130		
o-Xylene			0.100	0.1067		mg/Kg		107	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

Lab Sample ID: LCSD 880-40456/2-A
Matrix: Solid
Analysis Batch: 40542

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 40456

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1236		mg/Kg		124	70 - 130	5	35
Toluene			0.100	0.1151		mg/Kg		115	70 - 130	1	35
Ethylbenzene			0.100	0.1072		mg/Kg		107	70 - 130	1	35
m-Xylene & p-Xylene			0.200	0.2180		mg/Kg		109	70 - 130	2	35
o-Xylene			0.100	0.1106		mg/Kg		111	70 - 130	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 880-21753-A-1-G MS
Matrix: Solid
Analysis Batch: 40542

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 40456

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00201	U	0.100	0.1277		mg/Kg		127	70 - 130		
Toluene	<0.00201	U	0.100	0.1106		mg/Kg		110	70 - 130		

QC Sample Results

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

Job ID: 890-3540-1
SDG: 09D2041003

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

Lab Sample ID: 880-21753-A-1-G MS
Matrix: Solid
Analysis Batch: 40542

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 40456

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U	0.100	0.1007		mg/Kg		101	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.200	0.2008		mg/Kg		100	70 - 130
o-Xylene	<0.00201	U	0.100	0.09717		mg/Kg		97	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*

Lab Sample ID: 880-21753-A-1-H MSD
Matrix: Solid
Analysis Batch: 40542

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 40456

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.0990	0.1215		mg/Kg		123	70 - 130	5	35
Toluene	<0.00201	U	0.0990	0.1047		mg/Kg		106	70 - 130	5	35
Ethylbenzene	<0.00201	U	0.0990	0.09196		mg/Kg		93	70 - 130	9	35
m-Xylene & p-Xylene	<0.00402	U	0.198	0.1849		mg/Kg		93	70 - 130	8	35
o-Xylene	<0.00201	U	0.0990	0.09240		mg/Kg		93	70 - 130	5	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

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

Lab Sample ID: MB 880-40275/1-A
Matrix: Solid
Analysis Batch: 40262

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40275

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 08:32	11/23/22 08:39	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/23/22 08:32	11/23/22 08:39	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/23/22 08:32	11/23/22 08:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*129*		*70 - 130*	*11/23/22 08:32*	*11/23/22 08:39*	*1*
o-Terphenyl	*160*	*S1+*	*70 - 130*	*11/23/22 08:32*	*11/23/22 08:39*	*1*

Lab Sample ID: LCS 880-40275/2-A
Matrix: Solid
Analysis Batch: 40262

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40275

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10			1000	1024		mg/Kg		102	70 - 130
Diesel Range Organics (Over C10-C28)			1000	1217		mg/Kg		122	70 - 130

QC Sample Results

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

Job ID: 890-3540-1
SDG: 09D2041003

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

Lab Sample ID: LCS 880-40275/2-A
Matrix: Solid
Analysis Batch: 40262

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40275

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	206	S1+	70 - 130
o-Terphenyl	246	S1+	70 - 130

Lab Sample ID: LCSD 880-40275/3-A
Matrix: Solid
Analysis Batch: 40262

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 40275

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	998.9		mg/Kg		100	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	1210		mg/Kg		121	70 - 130	1	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	208	S1+	70 - 130
o-Terphenyl	244	S1+	70 - 130

Lab Sample ID: 890-3540-1 MS
Matrix: Solid
Analysis Batch: 40262

Client Sample ID: PH11A
Prep Type: Total/NA
Prep Batch: 40275

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	1063		mg/Kg		107	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	997	1225		mg/Kg		121	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	138	S1+	70 - 130
o-Terphenyl	151	S1+	70 - 130

Lab Sample ID: 890-3540-1 MSD
Matrix: Solid
Analysis Batch: 40262

Client Sample ID: PH11A
Prep Type: Total/NA
Prep Batch: 40275

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	999	901.4		mg/Kg		90	70 - 130	16	20
Diesel Range Organics (Over C10-C28)	<50.0	U	999	1116		mg/Kg		110	70 - 130	9	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	119		70 - 130
o-Terphenyl	140	S1+	70 - 130

QC Sample Results

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

Job ID: 890-3540-1
SDG: 09D2041003

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

Lab Sample ID: MB 880-40387/1-A
Matrix: Solid
Analysis Batch: 40408

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 40387

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		11/28/22 09:07	11/28/22 13:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/28/22 09:07	11/28/22 13:45	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/28/22 09:07	11/28/22 13:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*129*		*70 - 130*	*11/28/22 09:07*	*11/28/22 13:45*	*1*
o-Terphenyl	*149*	*S1+*	*70 - 130*	*11/28/22 09:07*	*11/28/22 13:45*	*1*

Lab Sample ID: LCS 880-40387/2-A
Matrix: Solid
Analysis Batch: 40408

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 40387

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	898.0		mg/Kg		90	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	950.0		mg/Kg		95	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*129*		*70 - 130*
o-Terphenyl	*126*		*70 - 130*

Lab Sample ID: LCSD 880-40387/3-A
Matrix: Solid
Analysis Batch: 40408

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 40387

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	990.0		mg/Kg		99	70 - 130	10	20
Diesel Range Organics (Over C10-C28)			1000	919.0		mg/Kg		92	70 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*128*		*70 - 130*
o-Terphenyl	*126*		*70 - 130*

Lab Sample ID: 880-21869-A-1-F MS
Matrix: Solid
Analysis Batch: 40408

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 40387

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 F2	999	1131		mg/Kg		110	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	999	1232		mg/Kg		123	70 - 130		

QC Sample Results

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

Job ID: 890-3540-1
SDG: 09D2041003

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

Lab Sample ID: 880-21869-A-1-F MS
Matrix: Solid
Analysis Batch: 40408

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 40387

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	109		70 - 130
o-Terphenyl	102		70 - 130

Lab Sample ID: 880-21869-A-1-G MSD
Matrix: Solid
Analysis Batch: 40408

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 40387

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 F2	997	854.3	F2	mg/Kg		83	70 - 130	28	20
Diesel Range Organics (Over C10-C28)	<50.0	U	997	1090		mg/Kg		109	70 - 130	12	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	98		70 - 130
o-Terphenyl	92		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		

QC Sample Results

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

Job ID: 890-3540-1
SDG: 09D2041003

Method: 300.0 - Anions, Ion Chromatography (Continued)

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

QC Association Summary

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

Job ID: 890-3540-1
SDG: 09D2041003

GC VOA

Prep Batch: 40456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3540-1	PH11A	Total/NA	Solid	5035	
890-3540-2	PH11B	Total/NA	Solid	5035	
890-3540-3	PH11C	Total/NA	Solid	5035	
890-3540-4	PH11D	Total/NA	Solid	5035	
MB 880-40456/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-40456/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-40456/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-21753-A-1-G MS	Matrix Spike	Total/NA	Solid	5035	
880-21753-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 40542

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3540-1	PH11A	Total/NA	Solid	8021B	40456
890-3540-2	PH11B	Total/NA	Solid	8021B	40456
890-3540-3	PH11C	Total/NA	Solid	8021B	40456
890-3540-4	PH11D	Total/NA	Solid	8021B	40456
MB 880-40456/5-A	Method Blank	Total/NA	Solid	8021B	40456
LCS 880-40456/1-A	Lab Control Sample	Total/NA	Solid	8021B	40456
LCSD 880-40456/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	40456
880-21753-A-1-G MS	Matrix Spike	Total/NA	Solid	8021B	40456
880-21753-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	40456

Analysis Batch: 40676

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3540-1	PH11A	Total/NA	Solid	Total BTEX	
890-3540-2	PH11B	Total/NA	Solid	Total BTEX	
890-3540-3	PH11C	Total/NA	Solid	Total BTEX	
890-3540-4	PH11D	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 40262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3540-1	PH11A	Total/NA	Solid	8015B NM	40275
890-3540-2	PH11B	Total/NA	Solid	8015B NM	40275
890-3540-3	PH11C	Total/NA	Solid	8015B NM	40275
MB 880-40275/1-A	Method Blank	Total/NA	Solid	8015B NM	40275
LCS 880-40275/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	40275
LCSD 880-40275/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	40275
890-3540-1 MS	PH11A	Total/NA	Solid	8015B NM	40275
890-3540-1 MSD	PH11A	Total/NA	Solid	8015B NM	40275

Prep Batch: 40275

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3540-1	PH11A	Total/NA	Solid	8015NM Prep	
890-3540-2	PH11B	Total/NA	Solid	8015NM Prep	
890-3540-3	PH11C	Total/NA	Solid	8015NM Prep	
MB 880-40275/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-40275/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-40275/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3540-1 MS	PH11A	Total/NA	Solid	8015NM Prep	

QC Association Summary

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

Job ID: 890-3540-1
SDG: 09D2041003

GC Semi VOA (Continued)

Prep Batch: 40275 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3540-1 MSD	PH11A	Total/NA	Solid	8015NM Prep	

Prep Batch: 40387

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3540-4	PH11D	Total/NA	Solid	8015NM Prep	
MB 880-40387/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-40387/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-40387/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-21869-A-1-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-21869-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 40408

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3540-4	PH11D	Total/NA	Solid	8015B NM	40387
MB 880-40387/1-A	Method Blank	Total/NA	Solid	8015B NM	40387
LCS 880-40387/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	40387
LCSD 880-40387/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	40387
880-21869-A-1-F MS	Matrix Spike	Total/NA	Solid	8015B NM	40387
880-21869-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	40387

Analysis Batch: 40440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3540-1	PH11A	Total/NA	Solid	8015 NM	
890-3540-2	PH11B	Total/NA	Solid	8015 NM	
890-3540-3	PH11C	Total/NA	Solid	8015 NM	
890-3540-4	PH11D	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 40013

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3540-1	PH11A	Soluble	Solid	DI Leach	
890-3540-2	PH11B	Soluble	Solid	DI Leach	
890-3540-3	PH11C	Soluble	Solid	DI Leach	
890-3540-4	PH11D	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
890-3540-1	PH11A	Soluble	Solid	300.0	40013
890-3540-2	PH11B	Soluble	Solid	300.0	40013
890-3540-3	PH11C	Soluble	Solid	300.0	40013
890-3540-4	PH11D	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

QC Association Summary

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

Job ID: 890-3540-1
SDG: 09D2041003

HPLC/IC (Continued)

Analysis Batch: 40328 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
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: 890-3540-1
SDG: 09D2041003

Client Sample ID: PH11A
Date Collected: 11/17/22 12:00
Date Received: 11/18/22 16:00

Lab Sample ID: 890-3540-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	40456	11/28/22 12:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40542	11/29/22 20:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40676	11/30/22 10:01	SM	EET MID
Total/NA	Analysis	8015 NM		1			40440	11/28/22 11:40	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	40275	11/23/22 09:52	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40262	11/23/22 11:38	SM	EET MID
Soluble	Leach	DI Leach			5.01 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 05:13	CH	EET MID

Client Sample ID: PH11B
Date Collected: 11/17/22 12:10
Date Received: 11/18/22 16:00

Lab Sample ID: 890-3540-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	40456	11/28/22 12:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40542	11/29/22 21:18	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40676	11/30/22 10:01	SM	EET MID
Total/NA	Analysis	8015 NM		1			40440	11/28/22 11:40	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	40275	11/23/22 09:52	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40262	11/23/22 12:44	SM	EET MID
Soluble	Leach	DI Leach			5 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 05:20	CH	EET MID

Client Sample ID: PH11C
Date Collected: 11/17/22 12:20
Date Received: 11/18/22 16:00

Lab Sample ID: 890-3540-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	40456	11/28/22 12:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40542	11/29/22 21:45	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40676	11/30/22 10:01	SM	EET MID
Total/NA	Analysis	8015 NM		1			40440	11/28/22 11:40	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	40275	11/23/22 09:52	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40262	11/23/22 13:06	SM	EET MID
Soluble	Leach	DI Leach			5.03 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 05:26	CH	EET MID

Client Sample ID: PH11D
Date Collected: 11/17/22 12:30
Date Received: 11/18/22 16:00

Lab Sample ID: 890-3540-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	40456	11/28/22 12:33	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	40542	11/29/22 22:13	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			40676	11/30/22 10:01	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

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

Job ID: 890-3540-1
SDG: 09D2041003

Client Sample ID: PH11D

Date Collected: 11/17/22 12:30
Date Received: 11/18/22 16:00

Lab Sample ID: 890-3540-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			40440	11/29/22 12:08	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	40387	11/28/22 09:07	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	40408	11/29/22 00:02	SM	EET MID
Soluble	Leach	DI Leach			5.04 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 05:33	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: 890-3540-1
SDG: 09D2041003

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: SV KIM HARRIS #003

Job ID: 890-3540-1
SDG: 09D2041003

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: 890-3540-1
SDG: 09D2041003

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3540-1	PH11A	Solid	11/17/22 12:00	11/18/22 16:00	6
890-3540-2	PH11B	Solid	11/17/22 12:10	11/18/22 16:00	12
890-3540-3	PH11C	Solid	11/17/22 12:20	11/18/22 16:00	24
890-3540-4	PH11D	Solid	11/17/22 12:30	11/18/22 16:00	48

eurofins | Environment Testing Xenco

Chain of Custody

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

Work Order No: ______

www.xenco.com Page 1 of 1

Project Manager:	Dan Moir	Bill to: (if different)	A. A.
Company Name:	Ensolum, LLC	Company Name:	
Address:	3122 Nat'l Parks Hwy	Address:	
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	
Phone:	(303) 881-2946	Email:	dmoir@ensolum.com

Work Order Comments

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

Project Name:	SV Kim Harris #003	Turn Around	
Project Number:	09C2041003	☑ Routine	☐ Rush
Project Location:	32.942554, -103.305542	Due Date:	
Sampler's Name:	J. Falcomata	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT			
Temp Blank: Yes (circled) No		Wet Ice: Yes (circled) No	
Samples Received Intact:	Yes (circled) No	Thermometer ID:	TWM007
Cooler Custody Seals:	Yes No N/A (circled)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A (circled)	Temperature Reading:	2.4
Total Containers:		Corrected Temperature:	2.2

ANALYSIS REQUEST — Parameters: TPH, BTEX, Chlorides

890-3540 Chain of Custody

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	TPH	BTEX	Chlorides	Sample Comments
PH11A	S	11-17-22	1200	6"	G	1	✓	✓	✓	
PH 11B	S	11-17-22	1210	12"	G	1	✓	✓	✓	
PH 11C	S	11-17-22	1220	24"	G	1	✓	✓	✓	
PH 11D	S	11-17-22	1230	48"	G	1	✓	✓	✓	

Preservative Codes

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

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

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 [signature]	[signature]	11-18-22 1600	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

eurofins | Environment Testing Xenco

Chain of Custody

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

Work Order No: ____________

www.xenco.com Page 1 of 1

Project Manager:	Dan Moir	Bill to: (if different)	a. a.
Company Name:	Ensolum, LLC	Company Name:	
Address:	3122 Nat'l Parks Hwy	Address:	
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	
Phone:	(303) 887-2946	Email:	dmoir@ensolum.com

Work Order Comments

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

Project Name:	SV Kim Harris #003	Turn Around	
Project Number:	09C2041003	☑ Routine	☐ Rush
Project Location:	32.942554, -103.305542	Due Date:	
Sampler's Name:	J. Falcomata	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Samples Received Intact:	(Yes) No	Thermometer ID:	TM007
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	2.4
Total Containers:		Corrected Temperature:	2.2

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	TPH	BTEX	Chlorides	Sample Comments
PH11A	S	11-17-22	1200	6"	G	1	✓	✓	✓	
PH 11B	S	11-17-22	1210	12"	G	1	✓	✓	✓	
PH 11C	S	11-17-22	1220	24"	G	1	✓	✓	✓	
PH 11D	S	11-17-22	1230	48"	G	1	✓	✓	✓	

890-3540 Chain of Custody

Preservative Codes

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

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

Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 [signature]	[signature]	11-18-22 1600	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3540-1
SDG Number: 09D2041003

Login Number: 3540
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: 890-3540-1
SDG Number: 09D2041003

Login Number: 3540
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	

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 163364

CONDITIONS

Operator: ARMSTRONG ENERGY CORP P.O. Box 1973 Roswell, NM 88202	OGRID: 1092
	Action Number: 163364
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Approved.	1/5/2023