Form C-141
Page 6

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2236129464
District RP	
Facility ID	fAPP2203848018
Application ID	

Closure

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

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

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

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

☒ Description of remediation activities

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

Printed Name: Justin Carlile Title: Senior Environmental Engineer

Signature: Justin Carlile Date: 4/13/2023

email: Justin.Carlile@ConocoPhillips.com Telephone: 432-202-4112

OCD Only

Received by: Jocelyn Harimon Date: 04/20/2023

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

Closure Approved by: Robert Hamlet Date: 9/8/2023

Printed Name: Robert Hamlet Title: Environmental Specialist - Advanced

ENSOLUM

April 13, 2023

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

Re: Closure Request
Cabo Wabo Federal Com 705H
Incident Number NAPP2236129464
Eddy County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of COG Operating, LLC (COG), has prepared this *Closure Request* to document assessment, excavation, and soil sampling activities performed at the Cabo Wabo Federal Com 705H (Site). The purpose of the Site assessment, excavation, and soil sampling activities was to address impacted soil resulting from a release of brackish water into the surrounding pasture area and onto the lease road. Based on field observations, excavation activities, and laboratory analytical results from soil sampling events, COG is submitting this *Closure Request*, describing remediation that has occurred and requesting no further action for Incident Number NAPP2236129464.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit L, Section 35, Township 25 South, Range 29 East, in Eddy County, New Mexico (32.0861°, -103.9633°) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM).

On December 18, 2022, a connection clamp on a production flowline failed, resulting in the release of approximately 20.90 barrels (bbls) of brackish water into the surrounding pasture area and onto the lease road. A vacuum truck was immediately dispatched to the Site to recover free-standing fluids; approximately 17 bbls of released brackish water were recovered. COG reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification Form C-141 (Form C-141) on December 27, 2022. The release was assigned Incident Number NAPP2236129464.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized for applicability of Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC). Results from the characterization desktop review are presented on page 3 of the Form C-141, Site Assessment/Characterization. Potential Site receptors are identified on Figure 1.

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is New Mexico Office of the State Engineer (NMOSE) well C-04558 POD 1, located approximately 1.6 miles north of the Site. The groundwater well has a reported depth to groundwater,

measured in July 2021, greater than 109 feet bgs. Ground surface elevation at the groundwater well location is 3,082 feet above mean sea level (amsl), which is approximately 89 feet higher in elevation than the Site. All wells used for depth to groundwater determination are presented on Figure 1. The referenced well records are included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is a riverine, located approximately 275 feet northwest of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, or church. The site is less than 300 feet from a wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (medium potential karst designation area). Site receptors are identified on Figure 1.

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

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH): 100 mg/kg
- Chloride: 600 mg/kg

DELINEATION ACTIVITIES AND LABORATORY ANALYTICAL RESULTS

On February 14, 2023, delineation activities were conducted at the Site to evaluate the release extent based on information provided on the Form C-141 and visual observations. Three delineation soil samples (SS01/SS01A through SS03/SS03A) were collected within the release extent to assess the vertical extent of the release. Delineation soil samples were collected at depths of 0.2 feet and 0.5 feet bgs. In addition, four soil samples (SS04 through SS07) were collected adjacent to the observed release extent at an approximate depth of 0.2 feet bgs to confirm the lateral extent of the release. The soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride Hach® chloride QuanTab® test strips. Field screening results and observations were logged on lithologic/soil sampling logs, which are included in Appendix B. The release extent and delineation soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Photographic documentation was completed during the Site visit and a photographic log is included in Appendix C.

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

Laboratory analytical results for delineation soil sample locations SS01 through SS03 indicate chloride concentrations exceeding the Site Closure Criteria were present up to 0.5 feet bgs. Laboratory analytical results for delineation soil samples SS04 through SS07 indicate all COC concentrations were compliant with the Site Closure Criteria and successfully defined the lateral extent of the release.

Based on visible staining in the release area, elevated field screening results, and laboratory analytical results for delineation soil samples SS01 through SS03 indicating chloride concentrations exceeding the Site Closure Criteria to a depth of approximately 0.5 feet bgs, further remedial actions appeared warranted.

EXCAVATION ACTIVITIES AND ANALYTICAL RESULTS

On March 9, 2023, Ensolum personnel were at the Site to oversee excavation activities. Impacted soil was excavated as indicated by visible staining and laboratory analytical results for the delineation soil sample locations SS01 through SS03. Excavation activities were performed using a backhoe and transport vehicles. To direct excavation activities, soil was screened for VOCs and chloride.

Following removal of impacted soil, 5-point composite excavation confirmation soil samples were collected every 200 square feet from the floor of the excavation. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Confirmation soil samples FS01 through FS13 were collected from the floor of the excavation from a depth of 0.5 feet bgs. Due to the shallow depth of the excavation, soil from the sidewalls were incorporated into the floor samples. The excavation confirmation soil samples were handled and analyzed following the same procedures as described above. The excavation extent and excavation soil sample locations were mapped utilizing a handheld GPS and are presented on Figure 3. Photographic documentation of the excavation is included in Appendix C.

Laboratory analytical results for excavation floor samples FS01 through FS13 indicate all COC concentrations were compliant with the applicable Site Closure Criteria. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Appendix D.

The final excavation area measured approximately 2,395 square feet in areal size. A total of approximately 45 cubic yards of impacted soil was removed, transported and properly disposed of at R360 Environmental Solutions in Hobbs, New Mexico. After completion of confirmation sampling, the excavation was backfilled.

CLOSURE REQUEST

Site assessment and excavation activities were conducted at the Site to address the December 18, 2022, release of brackish water. Laboratory analytical results for the final excavation confirmation soil samples indicated concentrations of all COCs were compliant with the Site Closure Criteria. Based on the laboratory analytical results, no further remediation appears warranted.

Excavation of impacted soil has mitigated adverse conditions at this Site. COG believes the remedial actions are protective of human health, the environment, and groundwater. As such, COG respectfully requests closure for Incident Number NAPP2236129464. The Final C-141 is included in Appendix F.

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

Sincerely,
Ensolum, LLC

Hadlie Green
Project Geologist

Kalei Jennings
Senior Scientist

cc: Justin Carlile, COG Operating, LLC
Bureau of Land Management

Appendices:

Figure 1	Site Receptor Map
Figure 2	Delineation Soil Sample Locations
Figure 3	Excavation Soil Sample Locations
Table 1	Soil Sample Analytical Results
Appendix A	Referenced Well Records
Appendix B	Lithologic/Soil Sampling Logs
Appendix C	Photographic Log
Appendix D	Laboratory Analytical Reports & Chain-of-Custody Documentation
Appendix E	NMOCD Correspondence and Sample Notifications
Appendix F	Final C-141

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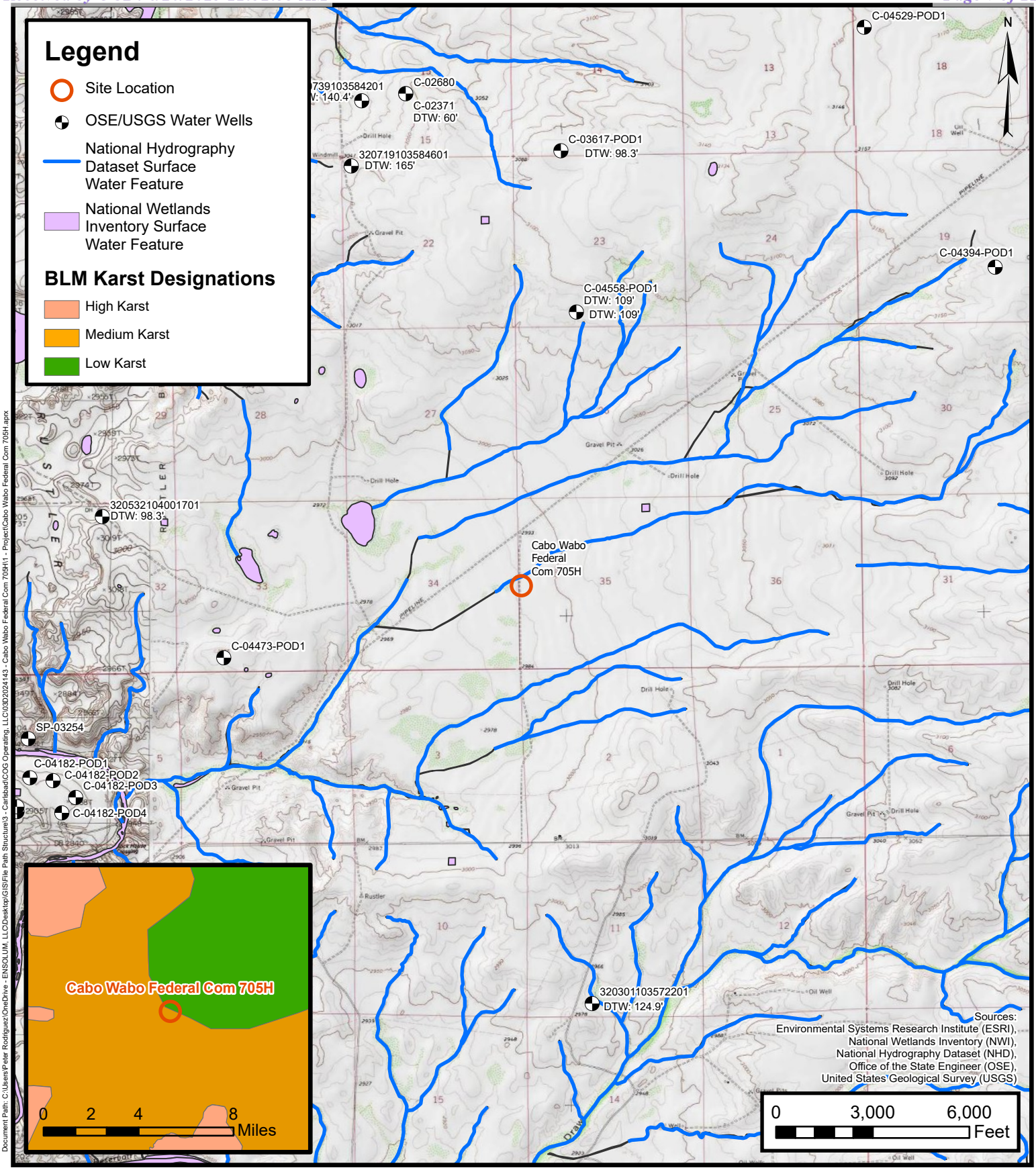
FIGURES



Document Path: C:\Users\Peter Rodriguez\OneDrive - ENSOLUM, LLC\Desktop\GIS\File Path Structure\3 - Carlsbad\COG Operating, LLC\03D2024143 - Cabo Wabo Federal Com 705H\1 - Project\Cabo Wabo Federal Com 705H.aprx

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Environmental, Engineering and Hydrogeologic Consultants

Site Receptor Map

Cabo Wabo Federal Com 705H
COG Operating, LLC

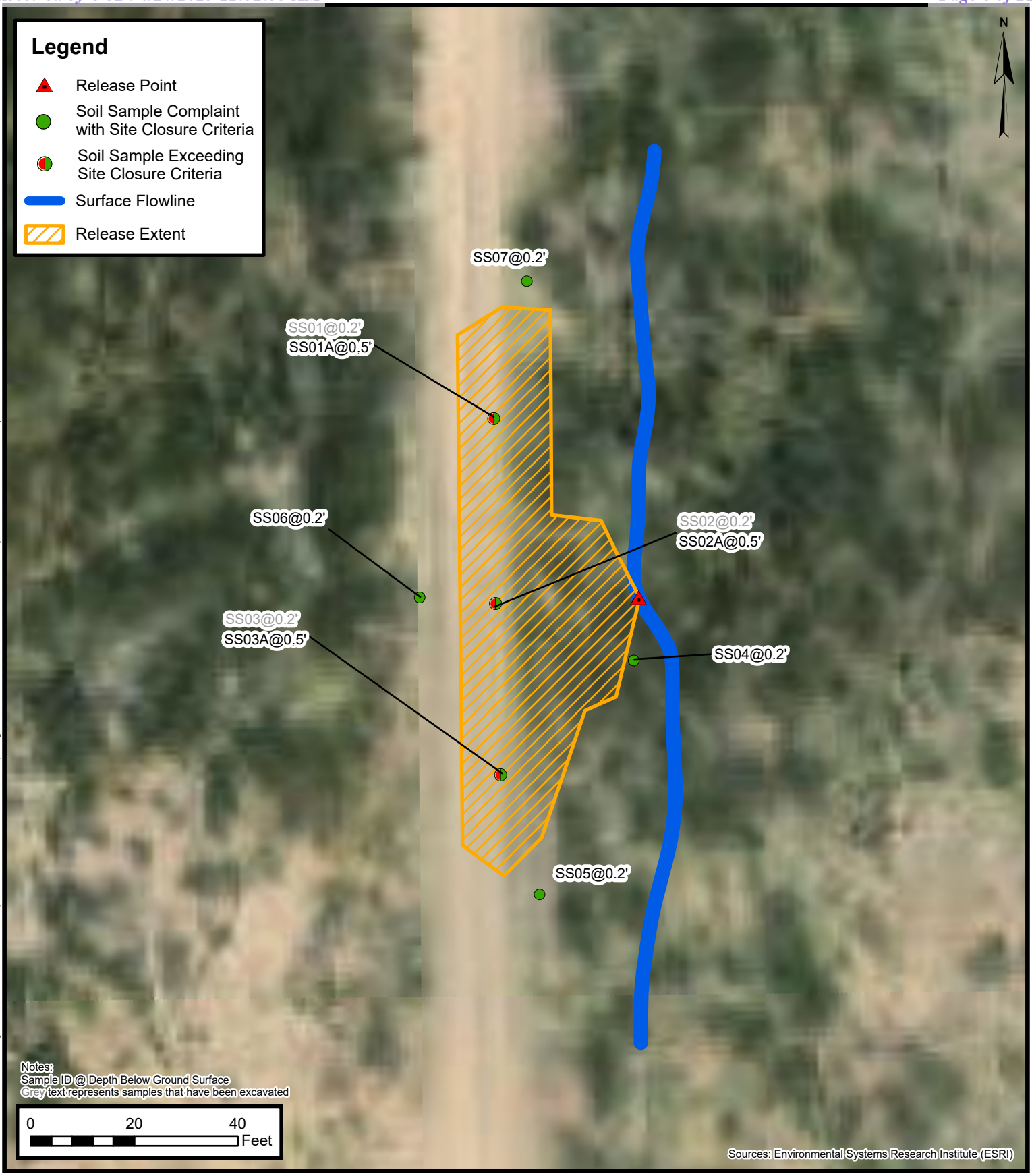
Incident Number: NAPP2236129464

Unit L, Section 35, Township 25S, Range 29E

Eddy County, New Mexico

FIGURE

1



Document Path: C:\Users\Peter Rodriguez\OneDrive - ENSOLUM, LLC\Desktop\GIS\File Path Structure\3 - Carlsbad\COG Operating, LLC\03D2024143 - Cabo Wabo Federal Com 705H\1 - Project\Cabo Wabo Federal Com 705H.aprx

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Delineation Soil Sample Locations

Cabo Wabo Federal Com 705H
COG Operating, LLC

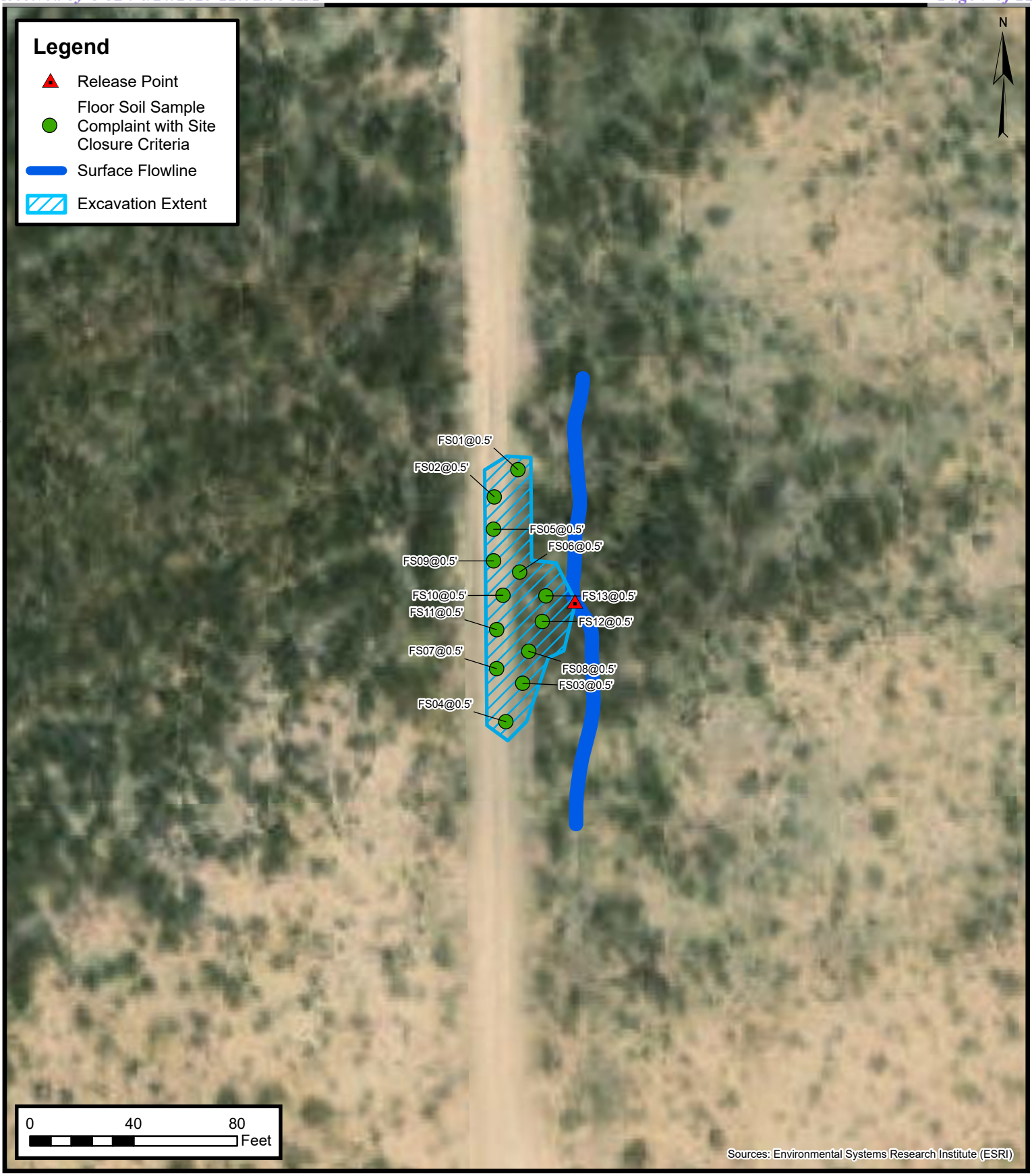
Incident Number: NAPP2236129464

Unit L, Section 35, Township 25S, Range 29E

Eddy County, New Mexico

FIGURE

2



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Excavation Soil Sample Locations

Cabo Wabo Federal Com 705H
COG Operating, LLC

Incident Number: NAPP2236129464

Unit L, Section 35, Township 25S, Range 29E

Eddy County, New Mexico

FIGURE

3

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TABLES

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Cabo Wabo Federal Com 705H
COG Operating, LLC
Eddy County, New Mexico

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			**10**	**50**	**NE**	**NE**	**NE**	**NE**	**100**	**600**
Delineation Soil Samples										
SS01	02/14/2023	0.2	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	**2,720**
SS01A	02/14/2023	0.5	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	49.5
SS02	02/14/2023	0.2	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	**1,140**
SS02A	02/14/2023	0.5	<0.00198	<0.00397	<49.9	<49.9	<49.9	<49.9	<49.9	42.3
SS03	02/14/2023	0.2	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	**736**
SS03A	02/14/2023	0.5	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	13.5
SS04	02/14/2023	0.2	<0.00198	<0.00397	<49.8	<49.8	<49.8	<49.8	<49.8	15.3
SS05	02/14/2023	0.2	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	13.0
SS06	02/14/2023	0.2	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	48.0
SS07	02/14/2023	0.2	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	19.7
Excavation Floor Soil Samples										
FS01	03/09/2023	0.5	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	<4.97
FS02	03/09/2023	0.5	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	99.3
FS03	03/09/2023	0.5	<0.0401	<0.0802	<49.9	<49.9	<49.9	<49.9	<49.9	183
FS04	03/09/2023	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	398
FS05	03/09/2023	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	228
FS06	03/09/2023	0.5	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	13.3
FS07	03/09/2023	0.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	5.64
FS08	03/09/2023	0.5	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	<4.95
FS09	03/09/2023	0.5	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	31.2
FS10	03/09/2023	0.5	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	<5.04
FS11	03/09/2023	0.5	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	395
FS12	03/09/2023	0.5	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	40.9
FS13	03/09/2023	0.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	<4.99

Notes:

bgs: below ground surface
mg/kg: milligrams per kilogram
NMOCD: New Mexico Oil Conservation Division
NMAC: New Mexico Administrative Code
BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes
GRO: Gasoline Range Organics
DRO: Diesel Range Organics
ORO: Oil Range Organics
TPH: Total Petroleum Hydrocarbon

*Concentrations in **bold** exceed the NMOCD Table I Closure Criteria or reclamation standard where applicable.*
Grey text represents samples that have been excavated

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APPENDIX A

Referenced Well Records

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

OSE DIT AUG 17 2021 PM3:21

1. GENERAL AND WELL LOCATION

OSE POD NO. (WELL NO.): POD1 (BH-01)	WELL TAG ID NO.: n/a	OSE FILE NO(S).: C-4558
WELL OWNER NAME(S): XTO Energy (Kyle Littrell)		PHONE (OPTIONAL):
WELL OWNER MAILING ADDRESS: 6401 Holiday Hill Dr.	CITY: Midland	STATE: TX ZIP: 79707

WELL LOCATION (FROM GPS)	DEGREES	MINUTES	SECONDS	
LATITUDE	32	6	33.90	N
LONGITUDE	103	57	27.03	W

* ACCURACY REQUIRED: ONE TENTH OF A SECOND

* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE: SE SW Sec. 23 T25S R29E

2. DRILLING & CASING INFORMATION

LICENSE NO.	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
1249	Jackie D. Atkins	Atkins Engineering Associates, Inc.

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
07/21/2021	07/21/2021	temporary well material	109	n/a

COMPLETED WELL IS: ☐ ARTESIAN ☑ DRY HOLE ☐ SHALLOW (UNCONFINED) — STATIC WATER LEVEL IN COMPLETED WELL (FT): n/a

DRILLING FLUID: ☐ AIR ☐ MUD ADDITIVES – SPECIFY:

DRILLING METHOD: ☐ ROTARY ☐ HAMMER ☐ CABLE TOOL ☑ OTHER – SPECIFY: Hollow Stem Auger

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
0	109	±6.5	Boring- HSA	--	--	--	--

3. ANNULAR MATERIAL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 06/30/17)

FILE NO. C-4558	POD NO. 1	TRN NO. 699798	
LOCATION 25S-29E-23 343		WELL TAG ID NO.	PAGE 1 OF 2

OSE DIT AUG 17 2021 PM3:21

4. HYDROGEOLOGIC LOG OF WELL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
0	5	5	Calichem moderate consolidation, Off White	Y ✓ N	
5	23	18	Sand, poorly graded, some silt, Light Brown	Y ✓ N	
23	39	16	Sand, Fine-medium grain, poorly graded, some gravel, Light Brown	Y ✓ N	
39	44	5	Sand, Fine-medium grain, poorly graded, some gravel and clay, Light Brown	Y ✓ N	
44	65	21	Sand, Fine-medium grain, poorly graded, Light Brown	Y ✓ N	
65	70	5	Clay Sand, poorly graded, Light Brown, moist	Y ✓ N	
70	108	28	Sand, Fine-medium grain, poorly graded, Light Brown	Y ✓ N	
108	109	1	Sandstone, poorly sorted, interbedded with clay , moist	Y ✓ N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:

☐ PUMP ☐ AIR LIFT ☐ BAILER ☐ OTHER – SPECIFY:

TOTAL ESTIMATED WELL YIELD (gpm): 0.00

5. TEST; RIG SUPERVISION

WELL TEST: TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

MISCELLANEOUS INFORMATION: Temporary well materials removed and the soil boring backfilled using drill cuttings from total depth to ten feet below ground surface, then hydrated bentonite chips from ten feet below ground surface to surface. Logs adapted from WSP on-site geologist.

PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:

Shane Eldridge, Carmelo Trevino, Cameron Pruitt

6. SIGNATURE

THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:

Jack Atkins — Jackie D. Atkins — 08/16/2021

SIGNATURE OF DRILLER / PRINT SIGNEE NAME — DATE

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 06/30/2017)

FILE NO. C-4558	POD NO. 1	TRN NO. 699798	
LOCATION 255-29E-23 343		WELL TAG ID NO.	PAGE 2 OF 2

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater | Geographic Area: United States | GO

Click to hideNews Bulletins

- Explore the *NEW* USGS National Water Dashboard interactive map to access real-time water data from over 13,500 stations nationwide.
- Full News

Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 320532104001701

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

USGS 320532104001701 25S.29E.32.21111

Eddy County, New Mexico
Latitude 32°05'32", Longitude 104°00'17" NAD27
Land-surface elevation 2,988 feet above NAVD88
The depth of the well is 128 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1949-03-11		D	62610		2871.10	NGVD29	1	Z			A
1949-03-11		D	62611		2872.66	NAVD88	1	Z			A
1949-03-11		D	72019	115.34			1	Z			A
1958-08-19		D	62610		2887.81	NGVD29	1	Z			A
1958-08-19		D	62611		2889.37	NAVD88	1	Z			A
1958-08-19		D	72019	98.63			1	Z			A
1959-03-24		D	62610		2887.84	NGVD29	1	Z			A
1959-03-24		D	62611		2889.40	NAVD88	1	Z			A
1959-03-24		D	72019	98.60			1	Z			A
1978-01-13		D	62610		2891.21	NGVD29	1	Z			A
1978-01-13		D	62611		2892.77	NAVD88	1	Z			A
1978-01-13		D	72019	95.23			1	Z			A
1983-02-01		D	62610		2890.81	NGVD29	1	Z			A
1983-02-01		D	62611		2892.37	NAVD88	1	Z			A
1983-02-01		D	72019	95.63			1	Z			A
1987-10-14		D	62610		2889.75	NGVD29	1	Z			A
1987-10-14		D	62611		2891.31	NAVD88	1	Z			A
1987-10-14		D	72019	96.69			1	Z			A
1988-04-06		D	62610		2889.51	NGVD29	1	Z			A
1988-04-06		D	62611		2891.07	NAVD88	1	Z			A
1988-04-06		D	72019	96.93			1	Z			A
1992-11-03		D	62610		2888.31	NGVD29	1	S			A
1992-11-03		D	62611		2889.87	NAVD88	1	S			A
1992-11-03		D	72019	98.13			1	S			A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet

Section	Code	Description
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Method of measurement	S	Steel-tape measurement.
Method of measurement	Z	Other.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	A	Approved for publication -- Processing and review completed.

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms
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U.S. Department of the Interior | U.S. Geological Survey
Title: Groundwater for USA: Water Levels
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2023-02-10 14:24:59 EST
0.34 0.25 nadww01

ENSOLUM

APPENDIX B

Lithologic Soil Sampling Logs

ENSOLUM	Sample Name: SS01	Date: 02/14/2023
	Site Name: Cabo Wabo Federal 705H	
	Incident Number: NAPP2236129464	
	Job Number: 03D2024143	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Peter Van Patten	Method: Hand Auger
Coordinates: 32.086373,-103.963575	Hole Diameter: 4"	Total Depth: 0.5'

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

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
Dry	3421	1.4	N	SS01	0.2	0	CCHE	Caliche: tan, pink, off white, some sand/gravel
M	ND	1.1	N	SS01A	0.5	1	SP-SM	Sand: tan to brown, medium to fine grain, poorly graded with silt, some gravel
						2		
						3		
						4		
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		

ENSOLUM

	Sample Name: SS02	Date: 02/14/2023
	Site Name: Cabo Wabo Federal 705H	
	Incident Number: NAPP2236129464	
	Job Number: 03D2024143	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Peter Van Patten	Method: Hand Auger
Coordinates: 32.086273,-103.963575	Hole Diameter: 4"	Total Depth: 0.5'

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

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
Dry	1276	1.6	N	SS02	0.2	0	CCHE	Caliche: tan, pink, off white, some sand/gravel
M	ND	1.5	N	SS02A	0.5	1	SP-SM	Sand: tan to brown, medium to fine grain, poorly graded with silt, some gravel
						2		
						3		
						4		
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		

ENSOLUM	Sample Name: SS03	Date: 02/14/2023
	Site Name: Cabo Wabo Federal 705H	
	Incident Number: NAPP2236129464	
	Job Number: 03D2024143	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: Peter Van Patten	Method: Hand Auger
Coordinates: 32.086182,-103.963572	Hole Diameter: 4"	Total Depth: 0.5'

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

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
Dry	571	1.3	N	SS03	0.2	0	CCHE	Caliche: tan, pink, off white, some sand/gravel
M	ND	1.3	N	SS03A	0.5	1	SP-SM	Sand: tan to brown, medium to fine grain, poorly graded with silt, some gravel
						2		
						3		
						4		
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		

ENSOLUM

APPENDIX C

Photographic Log

ENSOLUM

Photographic Log
COG Operating, LLC
Cabo Wabo Federal Com 705H
Incident Number NAPP2236129464

Photograph: 1 Date: 1/15/2023
Description: Soil staining in release footprint.
View: South

Photograph: 2 Date: 2/14/2023
Description: Delineation activities.
View: North

Photograph: 3 Date: 3/9/2023
Description: Excavation activities.
View: South

Photograph: 4 Date: 3/13/2023
Description: Backfill Activities
View: South

ENSOLUM

APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 2/20/2023 2:49:57 PM

JOB DESCRIPTION

Cabo Wabo Federal Com 705H
SDG NUMBER 03D2024143

JOB NUMBER

890-4106-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

my EOL

Eurofins Carlsbad

Job Notes

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

Authorization

Generated
2/20/2023 2:49:57 PM

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

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Laboratory Job ID: 890-4106-1
SDG: 03D2024143

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4106-1
SDG: 03D2024143

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4106-1
SDG: 03D2024143

Job ID: 890-4106-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-4106-1

Receipt
The samples were received on 2/14/2023 2:30 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.4°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: SS01 (890-4106-1), SS02 (890-4106-2), SS03 (890-4106-3), SS04 (890-4106-4), SS05 (890-4106-5), SS06 (890-4106-6), SS07 (890-4106-7), SS01A (890-4106-8), SS02A (890-4106-9) and SS03A (890-4106-10).

GC VOA
Method 8021B: Surrogate recovery for the following samples were outside control limits: SS01 (890-4106-1), SS02 (890-4106-2), SS03 (890-4106-3), SS04 (890-4106-4), SS05 (890-4106-5), SS06 (890-4106-6), SS07 (890-4106-7), SS01A (890-4106-8), SS02A (890-4106-9), SS03A (890-4106-10), (890-4110-A-4-C MS), (890-4110-A-4-D MSD), (880-24215-A-5-A MB), (880-24215-A-5-B MDLV) and (880-24215-A-6-A MDLV). Evidence of matrix interferences is not obvious.

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

GC Semi VOA
Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 880-46577 and analytical batch 880-46560 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: Cabo Wabo Federal Com 705H

Job ID: 890-4106-1
SDG: 03D2024143

Client Sample ID: SS01

Lab Sample ID: 890-4106-1
Matrix: Solid
Date Collected: 02/14/23 09:40
Date Received: 02/14/23 14:30
Sample Depth: 0.2

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U *+	0.00202		mg/Kg		02/17/23 11:13	02/17/23 19:30	1
Toluene	<0.00202	U	0.00202		mg/Kg		02/17/23 11:13	02/17/23 19:30	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		02/17/23 11:13	02/17/23 19:30	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		02/17/23 11:13	02/17/23 19:30	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		02/17/23 11:13	02/17/23 19:30	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		02/17/23 11:13	02/17/23 19:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*138*	*S1+*	*70 - 130*	*02/17/23 11:13*	*02/17/23 19:30*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*02/17/23 11:13*	*02/17/23 19:30*	*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			02/20/23 14:09	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			02/19/23 12:20	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F2	49.9		mg/Kg		02/17/23 08:57	02/17/23 21:26	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/17/23 08:57	02/17/23 21:26	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/17/23 08:57	02/17/23 21:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*02/17/23 08:57*	*02/17/23 21:26*	*1*
o-Terphenyl	*88*		*70 - 130*	*02/17/23 08:57*	*02/17/23 21:26*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2720**		24.9		mg/Kg			02/17/23 20:02	5

Client Sample ID: SS02

Lab Sample ID: 890-4106-2
Matrix: Solid
Date Collected: 02/14/23 09:30
Date Received: 02/14/23 14:30
Sample Depth: 0.2

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *+	0.00199		mg/Kg		02/17/23 11:13	02/17/23 19:50	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/17/23 11:13	02/17/23 19:50	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/17/23 11:13	02/17/23 19:50	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/17/23 11:13	02/17/23 19:50	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/17/23 11:13	02/17/23 19:50	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/17/23 11:13	02/17/23 19:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*155*	*S1+*	*70 - 130*	*02/17/23 11:13*	*02/17/23 19:50*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4106-1
SDG: 03D2024143

Client Sample ID: SS02

Lab Sample ID: 890-4106-2
Matrix: Solid
Date Collected: 02/14/23 09:30
Date Received: 02/14/23 14:30
Sample Depth: 0.2

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*02/17/23 11:13*	*02/17/23 19:50*	*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			02/20/23 14:09	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			02/19/23 12:20	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/17/23 08:57	02/17/23 22:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/17/23 08:57	02/17/23 22:31	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/17/23 08:57	02/17/23 22:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*91*		*70 - 130*	*02/17/23 08:57*	*02/17/23 22:31*	*1*
o-Terphenyl	*86*		*70 - 130*	*02/17/23 08:57*	*02/17/23 22:31*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1140**		25.0	mg/Kg			02/17/23 20:19	5

Client Sample ID: SS03

Lab Sample ID: 890-4106-3
Matrix: Solid
Date Collected: 02/14/23 09:20
Date Received: 02/14/23 14:30
Sample Depth: 0.2

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *+	0.00200	mg/Kg		02/17/23 11:13	02/17/23 20:10	1
Toluene	<0.00200	U	0.00200	mg/Kg		02/17/23 11:13	02/17/23 20:10	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		02/17/23 11:13	02/17/23 20:10	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		02/17/23 11:13	02/17/23 20:10	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		02/17/23 11:13	02/17/23 20:10	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		02/17/23 11:13	02/17/23 20:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*145*	*S1+*	*70 - 130*	*02/17/23 11:13*	*02/17/23 20:10*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*02/17/23 11:13*	*02/17/23 20:10*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			02/20/23 14:09	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			02/19/23 12:20	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4106-1
SDG: 03D2024143

Client Sample ID: SS03

Lab Sample ID: 890-4106-3
Matrix: Solid
Date Collected: 02/14/23 09:20
Date Received: 02/14/23 14:30
Sample Depth: 0.2

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		02/17/23 08:57	02/17/23 22:53	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		02/17/23 08:57	02/17/23 22:53	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		02/17/23 08:57	02/17/23 22:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*02/17/23 08:57*	*02/17/23 22:53*	*1*
o-Terphenyl	*89*		*70 - 130*	*02/17/23 08:57*	*02/17/23 22:53*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**736**		4.99		mg/Kg			02/17/23 20:25	1

Client Sample ID: SS04

Lab Sample ID: 890-4106-4
Matrix: Solid
Date Collected: 02/14/23 11:30
Date Received: 02/14/23 14:30
Sample Depth: 0.2

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U *+	0.00198		mg/Kg		02/17/23 11:13	02/17/23 20:31	1
Toluene	<0.00198	U	0.00198		mg/Kg		02/17/23 11:13	02/17/23 20:31	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		02/17/23 11:13	02/17/23 20:31	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		02/17/23 11:13	02/17/23 20:31	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		02/17/23 11:13	02/17/23 20:31	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		02/17/23 11:13	02/17/23 20:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*144*	*S1+*	*70 - 130*	*02/17/23 11:13*	*02/17/23 20:31*	*1*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*	*02/17/23 11:13*	*02/17/23 20:31*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			02/20/23 14:09	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			02/19/23 12:20	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		02/17/23 08:57	02/17/23 23:14	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		02/17/23 08:57	02/17/23 23:14	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		02/17/23 08:57	02/17/23 23:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*77*		*70 - 130*	*02/17/23 08:57*	*02/17/23 23:14*	*1*
o-Terphenyl	*75*		*70 - 130*	*02/17/23 08:57*	*02/17/23 23:14*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4106-1
SDG: 03D2024143

Client Sample ID: SS04

Lab Sample ID: 890-4106-4
Matrix: Solid
Date Collected: 02/14/23 11:30
Date Received: 02/14/23 14:30
Sample Depth: 0.2

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	15.3		4.95		mg/Kg			02/17/23 20:31	1

Client Sample ID: SS05

Lab Sample ID: 890-4106-5
Matrix: Solid
Date Collected: 02/14/23 11:35
Date Received: 02/14/23 14:30
Sample Depth: 0.2

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *+	0.00199		mg/Kg		02/17/23 11:13	02/17/23 20:51	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/17/23 11:13	02/17/23 20:51	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/17/23 11:13	02/17/23 20:51	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/17/23 11:13	02/17/23 20:51	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/17/23 11:13	02/17/23 20:51	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/17/23 11:13	02/17/23 20:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*143*	*S1+*	*70 - 130*	*02/17/23 11:13*	*02/17/23 20:51*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*02/17/23 11:13*	*02/17/23 20:51*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			02/20/23 14:09	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			02/19/23 12:20	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/17/23 08:57	02/17/23 23:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/17/23 08:57	02/17/23 23:37	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/17/23 08:57	02/17/23 23:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*75*		*70 - 130*	*02/17/23 08:57*	*02/17/23 23:37*	*1*
o-Terphenyl	*73*		*70 - 130*	*02/17/23 08:57*	*02/17/23 23:37*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13.0		5.00		mg/Kg			02/17/23 20:36	1

Client Sample Results

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4106-1
SDG: 03D2024143

Client Sample ID: SS06

Lab Sample ID: 890-4106-6
Matrix: Solid
Date Collected: 02/14/23 11:40
Date Received: 02/14/23 14:30
Sample Depth: 0.2

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U *+	0.00198		mg/Kg		02/17/23 11:13	02/17/23 21:12	1
Toluene	<0.00198	U	0.00198		mg/Kg		02/17/23 11:13	02/17/23 21:12	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		02/17/23 11:13	02/17/23 21:12	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		02/17/23 11:13	02/17/23 21:12	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		02/17/23 11:13	02/17/23 21:12	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		02/17/23 11:13	02/17/23 21:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*146*	*S1+*	*70 - 130*	*02/17/23 11:13*	*02/17/23 21:12*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*02/17/23 11:13*	*02/17/23 21:12*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			02/20/23 14:09	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			02/19/23 12:20	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/17/23 08:57	02/17/23 23:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/17/23 08:57	02/17/23 23:59	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/17/23 08:57	02/17/23 23:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*79*		*70 - 130*	*02/17/23 08:57*	*02/17/23 23:59*	*1*
o-Terphenyl	*77*		*70 - 130*	*02/17/23 08:57*	*02/17/23 23:59*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**48.0**		4.97		mg/Kg			02/17/23 20:53	1

Client Sample ID: SS07

Lab Sample ID: 890-4106-7
Matrix: Solid
Date Collected: 02/14/23 11:50
Date Received: 02/14/23 14:30
Sample Depth: 0.2

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U *+	0.00198		mg/Kg		02/17/23 11:13	02/17/23 21:32	1
Toluene	<0.00198	U	0.00198		mg/Kg		02/17/23 11:13	02/17/23 21:32	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		02/17/23 11:13	02/17/23 21:32	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		02/17/23 11:13	02/17/23 21:32	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		02/17/23 11:13	02/17/23 21:32	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		02/17/23 11:13	02/17/23 21:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*149*	*S1+*	*70 - 130*	*02/17/23 11:13*	*02/17/23 21:32*	*1*

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4106-1
SDG: 03D2024143

Client Sample ID: SS07

Lab Sample ID: 890-4106-7
Matrix: Solid
Date Collected: 02/14/23 11:50
Date Received: 02/14/23 14:30
Sample Depth: 0.2

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*02/17/23 11:13*	*02/17/23 21:32*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			02/20/23 14:09	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			02/19/23 12:20	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		02/17/23 08:57	02/18/23 00:21	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		02/17/23 08:57	02/18/23 00:21	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		02/17/23 08:57	02/18/23 00:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*78*		*70 - 130*	*02/17/23 08:57*	*02/18/23 00:21*	*1*
o-Terphenyl	*75*		*70 - 130*	*02/17/23 08:57*	*02/18/23 00:21*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**19.7**		4.99	mg/Kg			02/17/23 20:59	1

Client Sample ID: SS01A

Lab Sample ID: 890-4106-8
Matrix: Solid
Date Collected: 02/14/23 11:00
Date Received: 02/14/23 14:30
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U *+	0.00202	mg/Kg		02/17/23 11:13	02/17/23 21:53	1
Toluene	<0.00202	U	0.00202	mg/Kg		02/17/23 11:13	02/17/23 21:53	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		02/17/23 11:13	02/17/23 21:53	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		02/17/23 11:13	02/17/23 21:53	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		02/17/23 11:13	02/17/23 21:53	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		02/17/23 11:13	02/17/23 21:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*145*	*S1+*	*70 - 130*	*02/17/23 11:13*	*02/17/23 21:53*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*02/17/23 11:13*	*02/17/23 21:53*	*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			02/20/23 14:09	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			02/19/23 12:20	1

Client Sample Results

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4106-1
SDG: 03D2024143

Client Sample ID: SS01A

Lab Sample ID: 890-4106-8
Matrix: Solid
Date Collected: 02/14/23 11:00
Date Received: 02/14/23 14:30
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/17/23 08:57	02/18/23 00:43	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/17/23 08:57	02/18/23 00:43	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/17/23 08:57	02/18/23 00:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*76*		*70 - 130*	*02/17/23 08:57*	*02/18/23 00:43*	*1*
o-Terphenyl	*73*		*70 - 130*	*02/17/23 08:57*	*02/18/23 00:43*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**49.5**		5.02		mg/Kg			02/17/23 21:05	1

Client Sample ID: SS02A

Lab Sample ID: 890-4106-9
Matrix: Solid
Date Collected: 02/14/23 11:10
Date Received: 02/14/23 14:30
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U *+	0.00198		mg/Kg		02/17/23 11:13	02/17/23 22:13	1
Toluene	<0.00198	U	0.00198		mg/Kg		02/17/23 11:13	02/17/23 22:13	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		02/17/23 11:13	02/17/23 22:13	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		02/17/23 11:13	02/17/23 22:13	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		02/17/23 11:13	02/17/23 22:13	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		02/17/23 11:13	02/17/23 22:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*145*	*S1+*	*70 - 130*	*02/17/23 11:13*	*02/17/23 22:13*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*02/17/23 11:13*	*02/17/23 22:13*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			02/20/23 14:09	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			02/19/23 12:20	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/17/23 08:57	02/18/23 01:06	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/17/23 08:57	02/18/23 01:06	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/17/23 08:57	02/18/23 01:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*74*		*70 - 130*	*02/17/23 08:57*	*02/18/23 01:06*	*1*
o-Terphenyl	*71*		*70 - 130*	*02/17/23 08:57*	*02/18/23 01:06*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4106-1
SDG: 03D2024143

Client Sample ID: SS02A

Lab Sample ID: 890-4106-9
Matrix: Solid
Date Collected: 02/14/23 11:10
Date Received: 02/14/23 14:30
Sample Depth: 0.5

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	42.3		4.95		mg/Kg			02/17/23 21:10	1

Client Sample ID: SS03A

Lab Sample ID: 890-4106-10
Matrix: Solid
Date Collected: 02/14/23 11:20
Date Received: 02/14/23 14:30
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U *+	0.00201		mg/Kg		02/17/23 11:13	02/17/23 22:33	1
Toluene	<0.00201	U	0.00201		mg/Kg		02/17/23 11:13	02/17/23 22:33	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		02/17/23 11:13	02/17/23 22:33	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		02/17/23 11:13	02/17/23 22:33	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		02/17/23 11:13	02/17/23 22:33	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		02/17/23 11:13	02/17/23 22:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*145*	*S1+*	*70 - 130*	*02/17/23 11:13*	*02/17/23 22:33*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*02/17/23 11:13*	*02/17/23 22:33*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			02/20/23 14:09	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			02/19/23 12:20	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/17/23 08:57	02/18/23 01:28	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/17/23 08:57	02/18/23 01:28	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/17/23 08:57	02/18/23 01:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*76*		*70 - 130*	*02/17/23 08:57*	*02/18/23 01:28*	*1*
o-Terphenyl	*73*		*70 - 130*	*02/17/23 08:57*	*02/18/23 01:28*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13.5		5.01		mg/Kg			02/17/23 21:16	1

Surrogate Summary

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4106-1
SDG: 03D2024143

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-4106-1	SS01	138 S1+	105
890-4106-2	SS02	155 S1+	106
890-4106-3	SS03	145 S1+	109
890-4106-4	SS04	144 S1+	105
890-4106-5	SS05	143 S1+	106
890-4106-6	SS06	146 S1+	107
890-4106-7	SS07	149 S1+	108
890-4106-8	SS01A	145 S1+	106
890-4106-9	SS02A	145 S1+	103
890-4106-10	SS03A	145 S1+	106
890-4110-A-4-C MS	Matrix Spike	134 S1+	105
890-4110-A-4-D MSD	Matrix Spike Duplicate	131 S1+	104
LCS 880-46597/1-A	Lab Control Sample	119	106
LCSD 880-46597/2-A	Lab Control Sample Dup	119	106
MB 880-46597/5-A	Method Blank	126	101

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)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-4106-1	SS01	94	88
890-4106-1 MS	SS01	104	90
890-4106-1 MSD	SS01	98	79
890-4106-2	SS02	91	86
890-4106-3	SS03	94	89
890-4106-4	SS04	77	75
890-4106-5	SS05	75	73
890-4106-6	SS06	79	77
890-4106-7	SS07	78	75
890-4106-8	SS01A	76	73
890-4106-9	SS02A	74	71
890-4106-10	SS03A	76	73
LCS 880-46577/2-A	Lab Control Sample	105	106
LCSD 880-46577/3-A	Lab Control Sample Dup	103	93
MB 880-46577/1-A	Method Blank	88	91

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4106-1
SDG: 03D2024143

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-46597/5-A
Matrix: Solid
Analysis Batch: 46567

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 46597

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/17/23 11:13	02/17/23 13:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/17/23 11:13	02/17/23 13:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/17/23 11:13	02/17/23 13:38	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/17/23 11:13	02/17/23 13:38	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/17/23 11:13	02/17/23 13:38	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/17/23 11:13	02/17/23 13:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*	*02/17/23 11:13*	*02/17/23 13:38*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*02/17/23 11:13*	*02/17/23 13:38*	*1*

Lab Sample ID: LCS 880-46597/1-A
Matrix: Solid
Analysis Batch: 46567

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 46597

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1328	*+	mg/Kg		133	70 - 130		
Toluene			0.100	0.1239		mg/Kg		124	70 - 130		
Ethylbenzene			0.100	0.1222		mg/Kg		122	70 - 130		
m-Xylene & p-Xylene			0.200	0.2523		mg/Kg		126	70 - 130		
o-Xylene			0.100	0.1202		mg/Kg		120	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

Lab Sample ID: LCSD 880-46597/2-A
Matrix: Solid
Analysis Batch: 46567

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 46597

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1267		mg/Kg		127	70 - 130	5	35
Toluene			0.100	0.1183		mg/Kg		118	70 - 130	5	35
Ethylbenzene			0.100	0.1165		mg/Kg		117	70 - 130	5	35
m-Xylene & p-Xylene			0.200	0.2414		mg/Kg		121	70 - 130	4	35
o-Xylene			0.100	0.1161		mg/Kg		116	70 - 130	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

Lab Sample ID: 890-4110-A-4-C MS
Matrix: Solid
Analysis Batch: 46567

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 46597

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00202	U *+	0.101	0.1162		mg/Kg		115	70 - 130		
Toluene	<0.00202	U	0.101	0.1214		mg/Kg		120	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4106-1
SDG: 03D2024143

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

Lab Sample ID: 890-4110-A-4-C MS
Matrix: Solid
Analysis Batch: 46567

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 46597

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00202	U	0.101	0.1211		mg/Kg		120	70 - 130
m-Xylene & p-Xylene	<0.00403	U F1	0.202	0.2589		mg/Kg		128	70 - 130
o-Xylene	<0.00202	U	0.101	0.1237		mg/Kg		122	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*134*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: 890-4110-A-4-D MSD
Matrix: Solid
Analysis Batch: 46567

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 46597

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U *+	0.0996	0.1139		mg/Kg		114	70 - 130	2	35
Toluene	<0.00202	U	0.0996	0.1203		mg/Kg		121	70 - 130	1	35
Ethylbenzene	<0.00202	U	0.0996	0.1211		mg/Kg		122	70 - 130	0	35
m-Xylene & p-Xylene	<0.00403	U F1	0.199	0.2602	F1	mg/Kg		131	70 - 130	1	35
o-Xylene	<0.00202	U	0.0996	0.1236		mg/Kg		124	70 - 130	0	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*131*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

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

Lab Sample ID: MB 880-46577/1-A
Matrix: Solid
Analysis Batch: 46560

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 46577

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/17/23 08:57	02/17/23 20:20	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/17/23 08:57	02/17/23 20:20	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/17/23 08:57	02/17/23 20:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*02/17/23 08:57*	*02/17/23 20:20*	*1*
o-Terphenyl	*91*		*70 - 130*	*02/17/23 08:57*	*02/17/23 20:20*	*1*

Lab Sample ID: LCS 880-46577/2-A
Matrix: Solid
Analysis Batch: 46560

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 46577

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10			1000	1016		mg/Kg		102	70 - 130
Diesel Range Organics (Over C10-C28)			1000	1052		mg/Kg		105	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4106-1
SDG: 03D2024143

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

Lab Sample ID: LCS 880-46577/2-A
Matrix: Solid
Analysis Batch: 46560

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 46577

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	105		70 - 130
o-Terphenyl	106		70 - 130

Lab Sample ID: LCSD 880-46577/3-A
Matrix: Solid
Analysis Batch: 46560

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 46577

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	965.5		mg/Kg		97	70 - 130	5	20
Diesel Range Organics (Over C10-C28)			1000	936.3		mg/Kg		94	70 - 130	12	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	93		70 - 130

Lab Sample ID: 890-4106-1 MS
Matrix: Solid
Analysis Batch: 46560

Client Sample ID: SS01
Prep Type: Total/NA
Prep Batch: 46577

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F2	1000	1122		mg/Kg		110	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	911.1		mg/Kg		89	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	90		70 - 130

Lab Sample ID: 890-4106-1 MSD
Matrix: Solid
Analysis Batch: 46560

Client Sample ID: SS01
Prep Type: Total/NA
Prep Batch: 46577

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U F2	1000	773.8	F2	mg/Kg		75	70 - 130	37	20
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	798.8		mg/Kg		78	70 - 130	13	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	98		70 - 130
o-Terphenyl	79		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4106-1
SDG: 03D2024143

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-46531/1-A
Matrix: Solid
Analysis Batch: 46690

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			02/17/23 19:45	1

Lab Sample ID: LCS 880-46531/2-A
Matrix: Solid
Analysis Batch: 46690

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	243.7		mg/Kg		97	90 - 110		

Lab Sample ID: LCSD 880-46531/3-A
Matrix: Solid
Analysis Batch: 46690

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	244.3		mg/Kg		98	90 - 110	0	20

Lab Sample ID: 890-4106-1 MS
Matrix: Solid
Analysis Batch: 46690

Client Sample ID: SS01
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	2720		1250	4033		mg/Kg		106	90 - 110		

Lab Sample ID: 890-4106-1 MSD
Matrix: Solid
Analysis Batch: 46690

Client Sample ID: SS01
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	2720		1250	4044		mg/Kg		107	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4106-1
SDG: 03D2024143

GC VOA

Analysis Batch: 46567

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4106-1	SS01	Total/NA	Solid	8021B	46597
890-4106-2	SS02	Total/NA	Solid	8021B	46597
890-4106-3	SS03	Total/NA	Solid	8021B	46597
890-4106-4	SS04	Total/NA	Solid	8021B	46597
890-4106-5	SS05	Total/NA	Solid	8021B	46597
890-4106-6	SS06	Total/NA	Solid	8021B	46597
890-4106-7	SS07	Total/NA	Solid	8021B	46597
890-4106-8	SS01A	Total/NA	Solid	8021B	46597
890-4106-9	SS02A	Total/NA	Solid	8021B	46597
890-4106-10	SS03A	Total/NA	Solid	8021B	46597
MB 880-46597/5-A	Method Blank	Total/NA	Solid	8021B	46597
LCS 880-46597/1-A	Lab Control Sample	Total/NA	Solid	8021B	46597
LCSD 880-46597/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	46597
890-4110-A-4-C MS	Matrix Spike	Total/NA	Solid	8021B	46597
890-4110-A-4-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	46597

Prep Batch: 46597

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4106-1	SS01	Total/NA	Solid	5035	
890-4106-2	SS02	Total/NA	Solid	5035	
890-4106-3	SS03	Total/NA	Solid	5035	
890-4106-4	SS04	Total/NA	Solid	5035	
890-4106-5	SS05	Total/NA	Solid	5035	
890-4106-6	SS06	Total/NA	Solid	5035	
890-4106-7	SS07	Total/NA	Solid	5035	
890-4106-8	SS01A	Total/NA	Solid	5035	
890-4106-9	SS02A	Total/NA	Solid	5035	
890-4106-10	SS03A	Total/NA	Solid	5035	
MB 880-46597/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-46597/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-46597/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-4110-A-4-C MS	Matrix Spike	Total/NA	Solid	5035	
890-4110-A-4-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 46736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4106-1	SS01	Total/NA	Solid	Total BTEX	
890-4106-2	SS02	Total/NA	Solid	Total BTEX	
890-4106-3	SS03	Total/NA	Solid	Total BTEX	
890-4106-4	SS04	Total/NA	Solid	Total BTEX	
890-4106-5	SS05	Total/NA	Solid	Total BTEX	
890-4106-6	SS06	Total/NA	Solid	Total BTEX	
890-4106-7	SS07	Total/NA	Solid	Total BTEX	
890-4106-8	SS01A	Total/NA	Solid	Total BTEX	
890-4106-9	SS02A	Total/NA	Solid	Total BTEX	
890-4106-10	SS03A	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4106-1
SDG: 03D2024143

GC Semi VOA

Analysis Batch: 46560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4106-1	SS01	Total/NA	Solid	8015B NM	46577
890-4106-2	SS02	Total/NA	Solid	8015B NM	46577
890-4106-3	SS03	Total/NA	Solid	8015B NM	46577
890-4106-4	SS04	Total/NA	Solid	8015B NM	46577
890-4106-5	SS05	Total/NA	Solid	8015B NM	46577
890-4106-6	SS06	Total/NA	Solid	8015B NM	46577
890-4106-7	SS07	Total/NA	Solid	8015B NM	46577
890-4106-8	SS01A	Total/NA	Solid	8015B NM	46577
890-4106-9	SS02A	Total/NA	Solid	8015B NM	46577
890-4106-10	SS03A	Total/NA	Solid	8015B NM	46577
MB 880-46577/1-A	Method Blank	Total/NA	Solid	8015B NM	46577
LCS 880-46577/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	46577
LCSD 880-46577/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	46577
890-4106-1 MS	SS01	Total/NA	Solid	8015B NM	46577
890-4106-1 MSD	SS01	Total/NA	Solid	8015B NM	46577

Prep Batch: 46577

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4106-1	SS01	Total/NA	Solid	8015NM Prep	
890-4106-2	SS02	Total/NA	Solid	8015NM Prep	
890-4106-3	SS03	Total/NA	Solid	8015NM Prep	
890-4106-4	SS04	Total/NA	Solid	8015NM Prep	
890-4106-5	SS05	Total/NA	Solid	8015NM Prep	
890-4106-6	SS06	Total/NA	Solid	8015NM Prep	
890-4106-7	SS07	Total/NA	Solid	8015NM Prep	
890-4106-8	SS01A	Total/NA	Solid	8015NM Prep	
890-4106-9	SS02A	Total/NA	Solid	8015NM Prep	
890-4106-10	SS03A	Total/NA	Solid	8015NM Prep	
MB 880-46577/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-46577/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-46577/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-4106-1 MS	SS01	Total/NA	Solid	8015NM Prep	
890-4106-1 MSD	SS01	Total/NA	Solid	8015NM Prep	

Analysis Batch: 46665

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4106-1	SS01	Total/NA	Solid	8015 NM	
890-4106-2	SS02	Total/NA	Solid	8015 NM	
890-4106-3	SS03	Total/NA	Solid	8015 NM	
890-4106-4	SS04	Total/NA	Solid	8015 NM	
890-4106-5	SS05	Total/NA	Solid	8015 NM	
890-4106-6	SS06	Total/NA	Solid	8015 NM	
890-4106-7	SS07	Total/NA	Solid	8015 NM	
890-4106-8	SS01A	Total/NA	Solid	8015 NM	
890-4106-9	SS02A	Total/NA	Solid	8015 NM	
890-4106-10	SS03A	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4106-1
SDG: 03D2024143

HPLC/IC

Leach Batch: 46531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4106-1	SS01	Soluble	Solid	DI Leach	
890-4106-2	SS02	Soluble	Solid	DI Leach	
890-4106-3	SS03	Soluble	Solid	DI Leach	
890-4106-4	SS04	Soluble	Solid	DI Leach	
890-4106-5	SS05	Soluble	Solid	DI Leach	
890-4106-6	SS06	Soluble	Solid	DI Leach	
890-4106-7	SS07	Soluble	Solid	DI Leach	
890-4106-8	SS01A	Soluble	Solid	DI Leach	
890-4106-9	SS02A	Soluble	Solid	DI Leach	
890-4106-10	SS03A	Soluble	Solid	DI Leach	
MB 880-46531/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-46531/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-46531/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4106-1 MS	SS01	Soluble	Solid	DI Leach	
890-4106-1 MSD	SS01	Soluble	Solid	DI Leach	

Analysis Batch: 46690

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4106-1	SS01	Soluble	Solid	300.0	46531
890-4106-2	SS02	Soluble	Solid	300.0	46531
890-4106-3	SS03	Soluble	Solid	300.0	46531
890-4106-4	SS04	Soluble	Solid	300.0	46531
890-4106-5	SS05	Soluble	Solid	300.0	46531
890-4106-6	SS06	Soluble	Solid	300.0	46531
890-4106-7	SS07	Soluble	Solid	300.0	46531
890-4106-8	SS01A	Soluble	Solid	300.0	46531
890-4106-9	SS02A	Soluble	Solid	300.0	46531
890-4106-10	SS03A	Soluble	Solid	300.0	46531
MB 880-46531/1-A	Method Blank	Soluble	Solid	300.0	46531
LCS 880-46531/2-A	Lab Control Sample	Soluble	Solid	300.0	46531
LCSD 880-46531/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	46531
890-4106-1 MS	SS01	Soluble	Solid	300.0	46531
890-4106-1 MSD	SS01	Soluble	Solid	300.0	46531

Lab Chronicle

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4106-1
SDG: 03D2024143

Client Sample ID: SS01

Date Collected: 02/14/23 09:40
Date Received: 02/14/23 14:30

Lab Sample ID: 890-4106-1
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	46597	02/17/23 11:13	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	46567	02/17/23 19:30	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			46736	02/20/23 14:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			46665	02/19/23 12:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	46577	02/17/23 08:57	SM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	46560	02/17/23 21:26	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	46531	02/16/23 13:11	KS	EET MID
Soluble	Analysis	300.0		5			46690	02/17/23 20:02	CH	EET MID

Client Sample ID: SS02

Date Collected: 02/14/23 09:30
Date Received: 02/14/23 14:30

Lab Sample ID: 890-4106-2
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	46597	02/17/23 11:13	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	46567	02/17/23 19:50	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			46736	02/20/23 14:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			46665	02/19/23 12:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	46577	02/17/23 08:57	SM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	46560	02/17/23 22:31	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	46531	02/16/23 13:11	KS	EET MID
Soluble	Analysis	300.0		5			46690	02/17/23 20:19	CH	EET MID

Client Sample ID: SS03

Date Collected: 02/14/23 09:20
Date Received: 02/14/23 14:30

Lab Sample ID: 890-4106-3
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			5.01 g	5 mL	46597	02/17/23 11:13	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	46567	02/17/23 20:10	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			46736	02/20/23 14:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			46665	02/19/23 12:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	46577	02/17/23 08:57	SM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	46560	02/17/23 22:53	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	46531	02/16/23 13:11	KS	EET MID
Soluble	Analysis	300.0		1			46690	02/17/23 20:25	CH	EET MID

Client Sample ID: SS04

Date Collected: 02/14/23 11:30
Date Received: 02/14/23 14:30

Lab Sample ID: 890-4106-4
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			5.04 g	5 mL	46597	02/17/23 11:13	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	46567	02/17/23 20:31	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			46736	02/20/23 14:09	AJ	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4106-1
SDG: 03D2024143

Client Sample ID: SS04

Lab Sample ID: 890-4106-4

Date Collected: 02/14/23 11:30
Matrix: Solid
Date Received: 02/14/23 14:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			46665	02/19/23 12:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	46577	02/17/23 08:57	SM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	46560	02/17/23 23:14	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	46531	02/16/23 13:11	KS	EET MID
Soluble	Analysis	300.0		1			46690	02/17/23 20:31	CH	EET MID

Client Sample ID: SS05

Lab Sample ID: 890-4106-5

Date Collected: 02/14/23 11:35
Matrix: Solid
Date Received: 02/14/23 14:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	46597	02/17/23 11:13	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	46567	02/17/23 20:51	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			46736	02/20/23 14:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			46665	02/19/23 12:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	46577	02/17/23 08:57	SM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	46560	02/17/23 23:37	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	46531	02/16/23 13:11	KS	EET MID
Soluble	Analysis	300.0		1			46690	02/17/23 20:36	CH	EET MID

Client Sample ID: SS06

Lab Sample ID: 890-4106-6

Date Collected: 02/14/23 11:40
Matrix: Solid
Date Received: 02/14/23 14:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	46597	02/17/23 11:13	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	46567	02/17/23 21:12	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			46736	02/20/23 14:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			46665	02/19/23 12:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	46577	02/17/23 08:57	SM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	46560	02/17/23 23:59	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	46531	02/16/23 13:11	KS	EET MID
Soluble	Analysis	300.0		1			46690	02/17/23 20:53	CH	EET MID

Client Sample ID: SS07

Lab Sample ID: 890-4106-7

Date Collected: 02/14/23 11:50
Matrix: Solid
Date Received: 02/14/23 14:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	46597	02/17/23 11:13	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	46567	02/17/23 21:32	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			46736	02/20/23 14:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			46665	02/19/23 12:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	46577	02/17/23 08:57	SM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	46560	02/18/23 00:21	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4106-1
SDG: 03D2024143

Client Sample ID: SS07

Lab Sample ID: 890-4106-7
Matrix: Solid
Date Collected: 02/14/23 11:50
Date Received: 02/14/23 14:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	46531	02/16/23 13:11	KS	EET MID
Soluble	Analysis	300.0		1			46690	02/17/23 20:59	CH	EET MID

Client Sample ID: SS01A

Lab Sample ID: 890-4106-8
Matrix: Solid
Date Collected: 02/14/23 11:00
Date Received: 02/14/23 14:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	46597	02/17/23 11:13	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	46567	02/17/23 21:53	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			46736	02/20/23 14:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			46665	02/19/23 12:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	46577	02/17/23 08:57	SM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	46560	02/18/23 00:43	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	46531	02/16/23 13:11	KS	EET MID
Soluble	Analysis	300.0		1			46690	02/17/23 21:05	CH	EET MID

Client Sample ID: SS02A

Lab Sample ID: 890-4106-9
Matrix: Solid
Date Collected: 02/14/23 11:10
Date Received: 02/14/23 14:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	46597	02/17/23 11:13	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	46567	02/17/23 22:13	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			46736	02/20/23 14:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			46665	02/19/23 12:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	46577	02/17/23 08:57	SM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	46560	02/18/23 01:06	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	46531	02/16/23 13:11	KS	EET MID
Soluble	Analysis	300.0		1			46690	02/17/23 21:10	CH	EET MID

Client Sample ID: SS03A

Lab Sample ID: 890-4106-10
Matrix: Solid
Date Collected: 02/14/23 11:20
Date Received: 02/14/23 14:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	46597	02/17/23 11:13	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	46567	02/17/23 22:33	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			46736	02/20/23 14:09	AJ	EET MID
Total/NA	Analysis	8015 NM		1			46665	02/19/23 12:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	46577	02/17/23 08:57	SM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	46560	02/18/23 01:28	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	46531	02/16/23 13:11	KS	EET MID
Soluble	Analysis	300.0		1			46690	02/17/23 21:16	CH	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4106-1
SDG: 03D2024143

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4106-1
SDG: 03D2024143

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-25	06-30-23

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

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

Method Summary

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4106-1
SDG: 03D2024143

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

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4106-1
SDG: 03D2024143

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-4106-1	SS01	Solid	02/14/23 09:40	02/14/23 14:30	0.2
890-4106-2	SS02	Solid	02/14/23 09:30	02/14/23 14:30	0.2
890-4106-3	SS03	Solid	02/14/23 09:20	02/14/23 14:30	0.2
890-4106-4	SS04	Solid	02/14/23 11:30	02/14/23 14:30	0.2
890-4106-5	SS05	Solid	02/14/23 11:35	02/14/23 14:30	0.2
890-4106-6	SS06	Solid	02/14/23 11:40	02/14/23 14:30	0.2
890-4106-7	SS07	Solid	02/14/23 11:50	02/14/23 14:30	0.2
890-4106-8	SS01A	Solid	02/14/23 11:00	02/14/23 14:30	0.5
890-4106-9	SS02A	Solid	02/14/23 11:10	02/14/23 14:30	0.5
890-4106-10	SS03A	Solid	02/14/23 11:20	02/14/23 14:30	0.5

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Chain of Custody

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

Work Order No: _____

www.xenco.com Page 1 of 1

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

Work Order Comments

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

Project Name:	Cabo Wabo Federal Com 705H	Turn Around	☑ Routine ☐ Rush
Project Number:	03D2024143	Due Date:	
Project Location:	32.0861,-103.9633	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Peter Van Patten		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	TNM007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	5.6
Total Containers:		Corrected Temperature:	5.4

Preservative Codes

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)	Sample Comments
SS01	Soil	2/14/2023	940	0.2'	Comp	1		x	x	x	
SS02	Soil	2/14/2023	930	0.2'	Comp	1		x	x	x	
SS03	Soil	2/14/2023	920	0.2'	Comp	1		x	x	x	
SS04	Soil	2/14/2023	1130	0.2'	Comp	1		x	x	x	
SS05	Soil	2/14/2023	1135	0.2'	Comp	1		x	x	x	
SS06	Soil	2/14/2023	1140	0.2'	Comp	1		x	x	x	
SS07	Soil	2/14/2023	1150	0.2'	Comp	1		x	x	x	
SS01A	Soil	2/14/2023	1100	0.5'	Comp	1		x	x	x	
SS02A	Soil	2/14/2023	1110	0.5'	Comp	1		x	x	x	
SS03A	Soil	2/14/2023	1120	0.5'	Comp	1		x	x	x	

ANALYSIS REQUEST

890-4106 Chain of Custody

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Peter Van Patten	Alex Ayo	2.14.23 1488			
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Eurofins Carlsbad
1089 N Canal St
Carlsbad NM 88220
Phone 575-988-3199 Fax 575-988-3199

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer, Jessica	Carrier Tracking No(s):	COC No: 890-1135 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Jessica.Kramer@et.eurofinsus.com	State of Origin: New Mexico	Page: Page 1 of 2
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 890-4106-1
Address: 1211 W Florida Ave	Due Date Requested: 2/20/2023			
City: Midland	TAT Requested (days):			
State, Zip: TX 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: Cabo Wabo Federal Com 705H	Project #: 89000094			
Site	SSOW#:			

Analysis Requested

Preservation Codes

A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O - AsNaO2, P Na2O4S, Q - Na2SO3, R Na2S2O3, S - H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	8015MOD_Calc	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc (MOD) BTEX	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note
			Preservation Code:										
SS01 (890-4106-1)	2/14/23	09 40 Mountain		Solid			X	X	X	X	X	1	
SS02 (890-4106-2)	2/14/23	09 30 Mountain		Solid			X	X	X	X	X	1	
SS03 (890-4106-3)	2/14/23	09 20 Mountain		Solid			X	X	X	X	X	1	
SS04 (890-4106-4)	2/14/23	11 30 Mountain		Solid			X	X	X	X	X	1	
SS05 (890-4106-5)	2/14/23	11 35 Mountain		Solid			X	X	X	X	X	1	
SS06 (890-4106-6)	2/14/23	11 40 Mountain		Solid			X	X	X	X	X	1	
SS07 (890-4106-7)	2/14/23	11 50 Mountain		Solid			X	X	X	X	X	1	
SS01A (890-4106-8)	2/14/23	11 00 Mountain		Solid			X	X	X	X	X	1	
SS02A (890-4106-9)	2/14/23	11 10 Mountain		Solid			X	X	X	X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central LLC places the ownership of method analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central, LLC.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For _____ Months*
Deliverable Requested: I II III IV Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date	Time	Method of Shipment:

Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Eurofins Carlsbad
1089 N Canal St
Carlsbad NM 88220
Phone: 575-988-3199 Fax. 575-988-3199

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 890-1135 2
Client Contact: Shipping/Receiving	Phone:	E-Mail: Jessica Kramer@et.eurofinsus com	State of Origin: New Mexico	Page: Page 2 of 2
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 890-4106-1
Address: 1211 W Florida Ave	Due Date Requested: 2/20/2023			
City: Midland	TAT Requested (days):			
State, Zip: TX 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: Cabo Wabo Federal Com 705H	Project #: 89000094			
Site:	SSOW#:			

Analysis Requested

Preservation Codes

A HCL, B NaOH, C Zn Acetate, D - Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H - Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V - MCAA, W pH 4-5, Y Trizma, Z other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8016NM_S_Prep (MOD) Full TPH	8015MOD_Calc	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc (MOD) BTEX	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
SS03A (890-4106-10)	2/14/23	11 20 Mountain		Solid			X	X	X	X	X	1	

Note Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Environment Testing South Central LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing South Central LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central LLC

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank 2	Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date	Time:	Method of Shipment:

Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company

Custody Seals Intact. Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks.

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4106-1
SDG Number: 03D2024143

Login Number: 4106
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: 890-4106-1
SDG Number: 03D2024143

Login Number: 4106
List Number: 2
Creator: Teel, Brianna

List Source: Eurofins Midland
List Creation: 02/16/23 10:28 AM

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

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 3/22/2023 3:03:30 PM

JOB DESCRIPTION

Cabo Wabo Federal Com 705H
SDG NUMBER 03D2024143

JOB NUMBER

890-4276-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

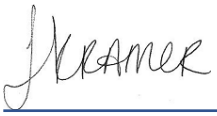
my EOL

Eurofins Carlsbad

Job Notes

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

Authorization



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3/22/2023 3:03:30 PM

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

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Laboratory Job ID: 890-4276-1
SDG: 03D2024143

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4276-1
SDG: 03D2024143

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4276-1
SDG: 03D2024143

Job ID: 890-4276-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-4276-1

Receipt
The samples were received on 3/10/2023 8:57 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.4°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: FS01 (890-4276-1), FS02 (890-4276-2), FS03 (890-4276-3), FS04 (890-4276-4), FS05 (890-4276-5), FS06 (890-4276-6), FS07 (890-4276-7), FS08 (890-4276-8), FS09 (890-4276-9), FS10 (890-4276-10), FS11 (890-4276-11), FS12 (890-4276-12) and FS13 (890-4276-13).

GC VOA
Method 8021B: The matrix spike duplicate (MSD) recoveries for preparation batch 880-48754 and analytical batch 880-48949 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: FS07 (890-4276-7). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-48754 and analytical batch 880-48949 was outside the upper control limits.

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

GC Semi VOA
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-48481 and analytical batch 880-48420 was outside the upper control limits.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-48481 and analytical batch 880-48420 recovered outside control limits for the following analytes: Diesel Range Organics (Over C10-C28).

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-48480 and analytical batch 880-48423 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (MB 880-48614/1-A). Evidence of matrix interferences is not obvious.

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

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-48591 and 880-48591 and analytical batch 880-49126 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.The associated samples are: FS01 (890-4276-1), FS02 (890-4276-2), FS03 (890-4276-3), FS04 (890-4276-4), (890-4272-A-1-B), (890-4272-A-1-C MS) and (890-4272-A-1-E MSD).

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: Cabo Wabo Federal Com 705H

Job ID: 890-4276-1
SDG: 03D2024143

Client Sample ID: FS01

Lab Sample ID: 890-4276-1
Matrix: Solid
Date Collected: 03/09/23 12:30
Date Received: 03/10/23 08:57
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/20/23 11:49	03/21/23 03:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/20/23 11:49	03/21/23 03:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/20/23 11:49	03/21/23 03:46	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		03/20/23 11:49	03/21/23 03:46	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/20/23 11:49	03/21/23 03:46	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		03/20/23 11:49	03/21/23 03:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*03/20/23 11:49*	*03/21/23 03:46*	*1*
1,4-Difluorobenzene (Surr)	*115*		*70 - 130*	*03/20/23 11:49*	*03/21/23 03:46*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			03/22/23 15:38	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			03/21/23 09:46	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/14/23 13:44	03/14/23 21:19	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/14/23 13:44	03/14/23 21:19	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/14/23 13:44	03/14/23 21:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*03/14/23 13:44*	*03/14/23 21:19*	*1*
o-Terphenyl	*115*		*70 - 130*	*03/14/23 13:44*	*03/14/23 21:19*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.97	U	4.97		mg/Kg			03/20/23 03:42	1

Client Sample ID: FS02

Lab Sample ID: 890-4276-2
Matrix: Solid
Date Collected: 03/09/23 13:40
Date Received: 03/10/23 08:57
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/20/23 11:49	03/21/23 04:06	1
Toluene	<0.00201	U	0.00201		mg/Kg		03/20/23 11:49	03/21/23 04:06	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/20/23 11:49	03/21/23 04:06	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/20/23 11:49	03/21/23 04:06	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/20/23 11:49	03/21/23 04:06	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/20/23 11:49	03/21/23 04:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*03/20/23 11:49*	*03/21/23 04:06*	*1*

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4276-1
SDG: 03D2024143

Client Sample ID: FS02

Lab Sample ID: 890-4276-2
Matrix: Solid
Date Collected: 03/09/23 13:40
Date Received: 03/10/23 08:57
Sample Depth: 0.5'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*	*03/20/23 11:49*	*03/21/23 04:06*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			03/22/23 15:38	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/21/23 09:46	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/14/23 13:44	03/14/23 22:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/14/23 13:44	03/14/23 22:24	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/14/23 13:44	03/14/23 22:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*93*		*70 - 130*	*03/14/23 13:44*	*03/14/23 22:24*	*1*
o-Terphenyl	*107*		*70 - 130*	*03/14/23 13:44*	*03/14/23 22:24*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**99.3**		4.99		mg/Kg			03/20/23 03:47	1

Client Sample ID: FS03

Lab Sample ID: 890-4276-3
Matrix: Solid
Date Collected: 03/09/23 13:50
Date Received: 03/10/23 08:57
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0401	U	0.0401		mg/Kg		03/20/23 11:49	03/21/23 05:28	20
Toluene	<0.0401	U	0.0401		mg/Kg		03/20/23 11:49	03/21/23 05:28	20
Ethylbenzene	<0.0401	U	0.0401		mg/Kg		03/20/23 11:49	03/21/23 05:28	20
m-Xylene & p-Xylene	<0.0802	U	0.0802		mg/Kg		03/20/23 11:49	03/21/23 05:28	20
o-Xylene	<0.0401	U	0.0401		mg/Kg		03/20/23 11:49	03/21/23 05:28	20
Xylenes, Total	<0.0802	U	0.0802		mg/Kg		03/20/23 11:49	03/21/23 05:28	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*03/20/23 11:49*	*03/21/23 05:28*	*20*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*	*03/20/23 11:49*	*03/21/23 05:28*	*20*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0802	U	0.0802		mg/Kg			03/22/23 15:38	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			03/21/23 09:46	1

Client Sample Results

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4276-1
SDG: 03D2024143

Client Sample ID: FS03

Lab Sample ID: 890-4276-3
Matrix: Solid
Date Collected: 03/09/23 13:50
Date Received: 03/10/23 08:57
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/14/23 13:44	03/14/23 22:46	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/14/23 13:44	03/14/23 22:46	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/14/23 13:44	03/14/23 22:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*03/14/23 13:44*	*03/14/23 22:46*	*1*
o-Terphenyl	*113*		*70 - 130*	*03/14/23 13:44*	*03/14/23 22:46*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**183**		4.99		mg/Kg			03/20/23 03:52	1

Client Sample ID: FS04

Lab Sample ID: 890-4276-4
Matrix: Solid
Date Collected: 03/09/23 13:55
Date Received: 03/10/23 08:57
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/20/23 11:49	03/21/23 04:27	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/20/23 11:49	03/21/23 04:27	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/20/23 11:49	03/21/23 04:27	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/20/23 11:49	03/21/23 04:27	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/20/23 11:49	03/21/23 04:27	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/20/23 11:49	03/21/23 04:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*03/20/23 11:49*	*03/21/23 04:27*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*03/20/23 11:49*	*03/21/23 04:27*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/22/23 15:38	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			03/21/23 09:46	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/14/23 13:44	03/14/23 23:08	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/14/23 13:44	03/14/23 23:08	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/14/23 13:44	03/14/23 23:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*03/14/23 13:44*	*03/14/23 23:08*	*1*
o-Terphenyl	*112*		*70 - 130*	*03/14/23 13:44*	*03/14/23 23:08*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4276-1
SDG: 03D2024143

Client Sample ID: FS04

Lab Sample ID: 890-4276-4
Matrix: Solid

Date Collected: 03/09/23 13:55
Date Received: 03/10/23 08:57
Sample Depth: 0.5'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	398		4.99		mg/Kg			03/20/23 03:57	1

Client Sample ID: FS05

Lab Sample ID: 890-4276-5
Matrix: Solid

Date Collected: 03/09/23 14:15
Date Received: 03/10/23 08:57
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/20/23 11:49	03/21/23 04:47	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/20/23 11:49	03/21/23 04:47	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/20/23 11:49	03/21/23 04:47	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/20/23 11:49	03/21/23 04:47	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/20/23 11:49	03/21/23 04:47	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/20/23 11:49	03/21/23 04:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*	*03/20/23 11:49*	*03/21/23 04:47*	*1*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*	*03/20/23 11:49*	*03/21/23 04:47*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/22/23 15:38	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			03/21/23 09:46	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/14/23 13:44	03/14/23 23:30	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/14/23 13:44	03/14/23 23:30	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/14/23 13:44	03/14/23 23:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*03/14/23 13:44*	*03/14/23 23:30*	*1*
o-Terphenyl	*114*		*70 - 130*	*03/14/23 13:44*	*03/14/23 23:30*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	228		5.01		mg/Kg			03/18/23 15:25	1

Client Sample Results

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4276-1
SDG: 03D2024143

Client Sample ID: FS06

Lab Sample ID: 890-4276-6
Matrix: Solid
Date Collected: 03/09/23 14:20
Date Received: 03/10/23 08:57
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/20/23 11:49	03/21/23 05:08	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/20/23 11:49	03/21/23 05:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/20/23 11:49	03/21/23 05:08	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		03/20/23 11:49	03/21/23 05:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/20/23 11:49	03/21/23 05:08	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		03/20/23 11:49	03/21/23 05:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*03/20/23 11:49*	*03/21/23 05:08*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*03/20/23 11:49*	*03/21/23 05:08*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			03/22/23 15:38	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			03/21/23 09:46	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/14/23 13:44	03/14/23 23:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/14/23 13:44	03/14/23 23:52	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/14/23 13:44	03/14/23 23:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*03/14/23 13:44*	*03/14/23 23:52*	*1*
o-Terphenyl	*109*		*70 - 130*	*03/14/23 13:44*	*03/14/23 23:52*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**13.3**		4.99		mg/Kg			03/18/23 15:30	1

Client Sample ID: FS07

Lab Sample ID: 890-4276-7
Matrix: Solid
Date Collected: 03/09/23 14:25
Date Received: 03/10/23 08:57
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/16/23 13:22	03/21/23 05:37	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/16/23 13:22	03/21/23 05:37	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/16/23 13:22	03/21/23 05:37	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/16/23 13:22	03/21/23 05:37	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/16/23 13:22	03/21/23 05:37	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/16/23 13:22	03/21/23 05:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*03/16/23 13:22*	*03/21/23 05:37*	*1*

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Client Sample Results

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4276-1
SDG: 03D2024143

Client Sample ID: FS07

Lab Sample ID: 890-4276-7
Matrix: Solid
Date Collected: 03/09/23 14:25
Date Received: 03/10/23 08:57
Sample Depth: 0.5'

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*69*	*S1-*	*70 - 130*	*03/16/23 13:22*	*03/21/23 05:37*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			03/22/23 15:38	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			03/21/23 09:46	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/14/23 13:44	03/15/23 00:14	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/14/23 13:44	03/15/23 00:14	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/14/23 13:44	03/15/23 00:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*03/14/23 13:44*	*03/15/23 00:14*	*1*
o-Terphenyl	*112*		*70 - 130*	*03/14/23 13:44*	*03/15/23 00:14*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5.64**		4.97	mg/Kg			03/18/23 15:35	1

Client Sample ID: FS08

Lab Sample ID: 890-4276-8
Matrix: Solid
Date Collected: 03/09/23 14:30
Date Received: 03/10/23 08:57
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		03/16/23 13:22	03/21/23 05:57	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/16/23 13:22	03/21/23 05:57	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/16/23 13:22	03/21/23 05:57	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/16/23 13:22	03/21/23 05:57	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/16/23 13:22	03/21/23 05:57	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/16/23 13:22	03/21/23 05:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*03/16/23 13:22*	*03/21/23 05:57*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*03/16/23 13:22*	*03/21/23 05:57*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			03/22/23 15:38	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			03/21/23 09:46	1

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Client Sample Results

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4276-1
SDG: 03D2024143

Client Sample ID: FS08

Lab Sample ID: 890-4276-8
Matrix: Solid
Date Collected: 03/09/23 14:30
Date Received: 03/10/23 08:57
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		03/13/23 12:16	03/13/23 21:00	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		03/13/23 12:16	03/13/23 21:00	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/13/23 12:16	03/13/23 21:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*94*		*70 - 130*	*03/13/23 12:16*	*03/13/23 21:00*	*1*
o-Terphenyl	*107*		*70 - 130*	*03/13/23 12:16*	*03/13/23 21:00*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.95	U	4.95		mg/Kg			03/18/23 15:40	1

Client Sample ID: FS09

Lab Sample ID: 890-4276-9
Matrix: Solid
Date Collected: 03/09/23 15:00
Date Received: 03/10/23 08:57
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/16/23 13:22	03/21/23 06:18	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/16/23 13:22	03/21/23 06:18	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/16/23 13:22	03/21/23 06:18	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		03/16/23 13:22	03/21/23 06:18	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/16/23 13:22	03/21/23 06:18	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		03/16/23 13:22	03/21/23 06:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*	*03/16/23 13:22*	*03/21/23 06:18*	*1*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*	*03/16/23 13:22*	*03/21/23 06:18*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			03/22/23 15:38	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			03/21/23 09:46	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/13/23 12:16	03/13/23 21:23	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/13/23 12:16	03/13/23 21:23	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/13/23 12:16	03/13/23 21:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*03/13/23 12:16*	*03/13/23 21:23*	*1*
o-Terphenyl	*100*		*70 - 130*	*03/13/23 12:16*	*03/13/23 21:23*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4276-1
SDG: 03D2024143

Client Sample ID: FS09

Lab Sample ID: 890-4276-9
Matrix: Solid
Date Collected: 03/09/23 15:00
Date Received: 03/10/23 08:57
Sample Depth: 0.5'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	31.2		5.00		mg/Kg			03/18/23 15:45	1

Client Sample ID: FS10

Lab Sample ID: 890-4276-10
Matrix: Solid
Date Collected: 03/09/23 14:40
Date Received: 03/10/23 08:57
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/17/23 16:23	03/21/23 14:15	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/17/23 16:23	03/21/23 14:15	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/17/23 16:23	03/21/23 14:15	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		03/17/23 16:23	03/21/23 14:15	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/17/23 16:23	03/21/23 14:15	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		03/17/23 16:23	03/21/23 14:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*03/17/23 16:23*	*03/21/23 14:15*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*03/17/23 16:23*	*03/21/23 14:15*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			03/22/23 15:38	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			03/21/23 09:46	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/13/23 12:24	03/13/23 20:14	1
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9		mg/Kg		03/13/23 12:24	03/13/23 20:14	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/13/23 12:24	03/13/23 20:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*03/13/23 12:24*	*03/13/23 20:14*	*1*
o-Terphenyl	*110*		*70 - 130*	*03/13/23 12:24*	*03/13/23 20:14*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.04	U	5.04		mg/Kg			03/19/23 12:22	1

Client Sample Results

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4276-1
SDG: 03D2024143

Client Sample ID: FS11

Lab Sample ID: 890-4276-11
Matrix: Solid
Date Collected: 03/09/23 14:45
Date Received: 03/10/23 08:57
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/17/23 16:23	03/21/23 14:36	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/17/23 16:23	03/21/23 14:36	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/17/23 16:23	03/21/23 14:36	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		03/17/23 16:23	03/21/23 14:36	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/17/23 16:23	03/21/23 14:36	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		03/17/23 16:23	03/21/23 14:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*03/17/23 16:23*	*03/21/23 14:36*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*03/17/23 16:23*	*03/21/23 14:36*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			03/22/23 15:38	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			03/21/23 09:46	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		03/13/23 12:24	03/13/23 20:35	1
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9		mg/Kg		03/13/23 12:24	03/13/23 20:35	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/13/23 12:24	03/13/23 20:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*108*		*70 - 130*	*03/13/23 12:24*	*03/13/23 20:35*	*1*
o-Terphenyl	*114*		*70 - 130*	*03/13/23 12:24*	*03/13/23 20:35*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**395**		4.97		mg/Kg			03/18/23 16:06	1

Client Sample ID: FS12

Lab Sample ID: 890-4276-12
Matrix: Solid
Date Collected: 03/09/23 14:50
Date Received: 03/10/23 08:57
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/17/23 16:23	03/21/23 14:56	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/17/23 16:23	03/21/23 14:56	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/17/23 16:23	03/21/23 14:56	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/17/23 16:23	03/21/23 14:56	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/17/23 16:23	03/21/23 14:56	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/17/23 16:23	03/21/23 14:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*03/17/23 16:23*	*03/21/23 14:56*	*1*

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Client Sample Results

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4276-1
SDG: 03D2024143

Client Sample ID: FS12

Lab Sample ID: 890-4276-12
Matrix: Solid
Date Collected: 03/09/23 14:50
Date Received: 03/10/23 08:57
Sample Depth: 0.5'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*03/17/23 16:23*	*03/21/23 14:56*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			03/22/23 15:38	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			03/21/23 09:46	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		03/13/23 12:24	03/13/23 20:57	1
Diesel Range Organics (Over C10-C28)	<49.8	U *1	49.8	mg/Kg		03/13/23 12:24	03/13/23 20:57	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		03/13/23 12:24	03/13/23 20:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	*111*		*70 - 130*	*03/13/23 12:24*	*03/13/23 20:57*	*1*
o-Terphenyl	*117*		*70 - 130*	*03/13/23 12:24*	*03/13/23 20:57*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**40.9**		5.00	mg/Kg			03/18/23 16:21	1

Client Sample ID: FS13

Lab Sample ID: 890-4276-13
Matrix: Solid
Date Collected: 03/09/23 14:55
Date Received: 03/10/23 08:57
Sample Depth: 0.5'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		03/17/23 16:23	03/21/23 15:17	1
Toluene	<0.00199	U	0.00199	mg/Kg		03/17/23 16:23	03/21/23 15:17	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		03/17/23 16:23	03/21/23 15:17	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		03/17/23 16:23	03/21/23 15:17	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		03/17/23 16:23	03/21/23 15:17	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		03/17/23 16:23	03/21/23 15:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*03/17/23 16:23*	*03/21/23 15:17*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*03/17/23 16:23*	*03/21/23 15:17*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			03/22/23 15:38	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			03/21/23 09:46	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4276-1
SDG: 03D2024143

Client Sample ID: FS13

Date Collected: 03/09/23 14:55
Date Received: 03/10/23 08:57
Sample Depth: 0.5'

Lab Sample ID: 890-4276-13

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		03/13/23 12:24	03/13/23 21:18	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0		mg/Kg		03/13/23 12:24	03/13/23 21:18	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/13/23 12:24	03/13/23 21:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*03/13/23 12:24*	*03/13/23 21:18*	*1*
o-Terphenyl	*116*		*70 - 130*	*03/13/23 12:24*	*03/13/23 21:18*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.99	U	4.99		mg/Kg			03/18/23 16:26	1

Surrogate Summary

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4276-1
SDG: 03D2024143

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)										
880-26024-A-1-B MS	Matrix Spike	110	113										
880-26024-A-1-C MSD	Matrix Spike Duplicate	102	114										
890-4270-A-21-E MS	Matrix Spike	91	110										
890-4270-A-21-F MSD	Matrix Spike Duplicate	92	91										
890-4276-1	FS01	114	115										
890-4276-2	FS02	111	111										
890-4276-3	FS03	108	114										
890-4276-4	FS04	105	108										
890-4276-5	FS05	111	114										
890-4276-6	FS06	107	109										
890-4276-7	FS07	92	69 S1-										
890-4276-8	FS08	88	87										
890-4276-9	FS09	86	88										
890-4276-10	FS10	98	90										
890-4276-10 MS	FS10	106	97										
890-4276-10 MSD	FS10	118	95										
890-4276-11	FS11	96	98										
890-4276-12	FS12	100	96										
890-4276-13	FS13	107	92										
LCS 880-48754/1-A	Lab Control Sample	108	98										
LCS 880-48857/1-A	Lab Control Sample	99	101										
LCS 880-48991/1-A	Lab Control Sample	104	112										
LCSD 880-48754/2-A	Lab Control Sample Dup	117	99										
LCSD 880-48857/2-A	Lab Control Sample Dup	101	94										
LCSD 880-48991/2-A	Lab Control Sample Dup	107	111										
MB 880-48754/5-A	Method Blank	73	67 S1-										
MB 880-48857/5-A	Method Blank	96	78										
MB 880-48951/5-A	Method Blank	72	86										
MB 880-48991/5-A	Method Blank	98	106										

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)										
880-25796-A-1-B MS	Matrix Spike	104	104										
880-25796-A-1-C MSD	Matrix Spike Duplicate	105	105										
890-4267-A-61-B MS	Matrix Spike	127	112										
890-4267-A-61-C MSD	Matrix Spike Duplicate	128	117										
890-4276-1	FS01	101	115										
890-4276-1 MS	FS01	93	95										
890-4276-1 MSD	FS01	112	115										
890-4276-2	FS02	93	107										
890-4276-3	FS03	99	113										
890-4276-4	FS04	99	112										

Surrogate Summary

Client: Ensolum Job ID: 890-4276-1
Project/Site: Cabo Wabo Federal Com 705H SDG: 03D2024143

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

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

		Percent Surrogate Recovery (Acceptance Limits)											
		1CO1	OTPH1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
890-4276-5	FS05	101	114										
890-4276-6	FS06	97	109										
890-4276-7	FS07	98	112										
890-4276-8	FS08	94	107										
890-4276-9	FS09	88	100										
890-4276-10	FS10	104	110										
890-4276-11	FS11	108	114										
890-4276-12	FS12	111	117										
890-4276-13	FS13	110	116										
LCS 880-48480/2-A	Lab Control Sample	92	102										
LCS 880-48481/2-A	Lab Control Sample	87	83										
LCS 880-48614/2-A	Lab Control Sample	98	108										
LCSD 880-48480/3-A	Lab Control Sample Dup	107	118										
LCSD 880-48481/3-A	Lab Control Sample Dup	95	87										
LCSD 880-48614/3-A	Lab Control Sample Dup	94	103										
MB 880-48480/1-A	Method Blank	151 S1+	174 S1+										
MB 880-48481/1-A	Method Blank	136 S1+	138 S1+										
MB 880-48614/1-A	Method Blank	135 S1+	155 S1+										

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4276-1
SDG: 03D2024143

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-48754/5-A
Matrix: Solid
Analysis Batch: 48949

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 48754

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/16/23 13:22	03/20/23 22:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/16/23 13:22	03/20/23 22:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/16/23 13:22	03/20/23 22:46	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/16/23 13:22	03/20/23 22:46	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/16/23 13:22	03/20/23 22:46	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/16/23 13:22	03/20/23 22:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*73*		*70 - 130*	*03/16/23 13:22*	*03/20/23 22:46*	*1*
1,4-Difluorobenzene (Surr)	*67*	*S1-*	*70 - 130*	*03/16/23 13:22*	*03/20/23 22:46*	*1*

Lab Sample ID: LCS 880-48754/1-A
Matrix: Solid
Analysis Batch: 48949

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 48754

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09926		mg/Kg		99	70 - 130		
Toluene			0.100	0.1001		mg/Kg		100	70 - 130		
Ethylbenzene			0.100	0.1052		mg/Kg		105	70 - 130		
m-Xylene & p-Xylene			0.200	0.2201		mg/Kg		110	70 - 130		
o-Xylene			0.100	0.1089		mg/Kg		109	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: LCSD 880-48754/2-A
Matrix: Solid
Analysis Batch: 48949

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 48754

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.07941		mg/Kg		79	70 - 130	22	35
Toluene			0.100	0.08604		mg/Kg		86	70 - 130	15	35
Ethylbenzene			0.100	0.09577		mg/Kg		96	70 - 130	9	35
m-Xylene & p-Xylene			0.200	0.2087		mg/Kg		104	70 - 130	5	35
o-Xylene			0.100	0.1046		mg/Kg		105	70 - 130	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: 890-4270-A-21-E MS
Matrix: Solid
Analysis Batch: 48949

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 48754

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00198	U F1 F2	0.0998	0.1039		mg/Kg		104	70 - 130		
Toluene	<0.00198	U F1	0.0998	0.08965		mg/Kg		90	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4276-1
SDG: 03D2024143

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

Lab Sample ID: 890-4270-A-21-E MS
Matrix: Solid
Analysis Batch: 48949

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 48754

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00198	U F1	0.0998	0.08062		mg/Kg		81	70 - 130
m-Xylene & p-Xylene	<0.00396	U F1	0.200	0.1630		mg/Kg		82	70 - 130
o-Xylene	<0.00198	U F1	0.0998	0.07974		mg/Kg		80	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*

Lab Sample ID: 890-4270-A-21-F MSD
Matrix: Solid
Analysis Batch: 48949

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 48754

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00198	U F1 F2	0.101	0.06395	F1 F2	mg/Kg		63	70 - 130	48	35
Toluene	<0.00198	U F1	0.101	0.06970	F1	mg/Kg		69	70 - 130	25	35
Ethylbenzene	<0.00198	U F1	0.101	0.06457	F1	mg/Kg		64	70 - 130	22	35
m-Xylene & p-Xylene	<0.00396	U F1	0.202	0.1305	F1	mg/Kg		65	70 - 130	22	35
o-Xylene	<0.00198	U F1	0.101	0.06461	F1	mg/Kg		64	70 - 130	21	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*

Lab Sample ID: MB 880-48857/5-A
Matrix: Solid
Analysis Batch: 49106

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 48857

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/17/23 16:23	03/21/23 13:53	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/17/23 16:23	03/21/23 13:53	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/17/23 16:23	03/21/23 13:53	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/17/23 16:23	03/21/23 13:53	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/17/23 16:23	03/21/23 13:53	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/17/23 16:23	03/21/23 13:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*03/17/23 16:23*	*03/21/23 13:53*	*1*
1,4-Difluorobenzene (Surr)	*78*		*70 - 130*	*03/17/23 16:23*	*03/21/23 13:53*	*1*

Lab Sample ID: LCS 880-48857/1-A
Matrix: Solid
Analysis Batch: 49106

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 48857

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09970		mg/Kg		100	70 - 130
Toluene	0.100	0.09729		mg/Kg		97	70 - 130
Ethylbenzene	0.100	0.09785		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	0.200	0.1970		mg/Kg		99	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4276-1
SDG: 03D2024143

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

Lab Sample ID: LCS 880-48857/1-A
Matrix: Solid
Analysis Batch: 49106

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 48857

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
o-Xylene			0.100	0.09809		mg/Kg		98	70 - 130		

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

Lab Sample ID: LCSD 880-48857/2-A
Matrix: Solid
Analysis Batch: 49106

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 48857

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09119		mg/Kg		91	70 - 130	9	35
Toluene			0.100	0.09262		mg/Kg		93	70 - 130	5	35
Ethylbenzene			0.100	0.09236		mg/Kg		92	70 - 130	6	35
m-Xylene & p-Xylene			0.200	0.1882		mg/Kg		94	70 - 130	5	35
o-Xylene			0.100	0.09421		mg/Kg		94	70 - 130	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*

Lab Sample ID: 890-4276-10 MS
Matrix: Solid
Analysis Batch: 49106

Client Sample ID: FS10
Prep Type: Total/NA
Prep Batch: 48857

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00200	U	0.100	0.08050		mg/Kg		80	70 - 130		
Toluene	<0.00200	U	0.100	0.08331		mg/Kg		83	70 - 130		
Ethylbenzene	<0.00200	U	0.100	0.08221		mg/Kg		82	70 - 130		
m-Xylene & p-Xylene	<0.00401	U	0.201	0.1756		mg/Kg		87	70 - 130		
o-Xylene	<0.00200	U	0.100	0.08729		mg/Kg		87	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: 890-4276-10 MSD
Matrix: Solid
Analysis Batch: 49106

Client Sample ID: FS10
Prep Type: Total/NA
Prep Batch: 48857

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	0.08018		mg/Kg		81	70 - 130	0	35
Toluene	<0.00200	U	0.0990	0.09049		mg/Kg		91	70 - 130	8	35
Ethylbenzene	<0.00200	U	0.0990	0.1028		mg/Kg		104	70 - 130	22	35
m-Xylene & p-Xylene	<0.00401	U	0.198	0.2090		mg/Kg		106	70 - 130	17	35
o-Xylene	<0.00200	U	0.0990	0.1043		mg/Kg		105	70 - 130	18	35

QC Sample Results

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4276-1
SDG: 03D2024143

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

Lab Sample ID: 890-4276-10 MSD
Matrix: Solid
Analysis Batch: 49106

Client Sample ID: FS10
Prep Type: Total/NA
Prep Batch: 48857

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	118		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: MB 880-48951/5-A
Matrix: Solid
Analysis Batch: 48949

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 48951

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/20/23 08:52	03/20/23 12:12	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/20/23 08:52	03/20/23 12:12	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/20/23 08:52	03/20/23 12:12	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/20/23 08:52	03/20/23 12:12	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/20/23 08:52	03/20/23 12:12	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/20/23 08:52	03/20/23 12:12	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	72		70 - 130	03/20/23 08:52	03/20/23 12:12	1
1,4-Difluorobenzene (Surr)	86		70 - 130	03/20/23 08:52	03/20/23 12:12	1

Lab Sample ID: MB 880-48991/5-A
Matrix: Solid
Analysis Batch: 48961

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 48991

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/20/23 11:49	03/21/23 02:36	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/20/23 11:49	03/21/23 02:36	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/20/23 11:49	03/21/23 02:36	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/20/23 11:49	03/21/23 02:36	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/20/23 11:49	03/21/23 02:36	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/20/23 11:49	03/21/23 02:36	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	03/20/23 11:49	03/21/23 02:36	1
1,4-Difluorobenzene (Surr)	106		70 - 130	03/20/23 11:49	03/21/23 02:36	1

Lab Sample ID: LCS 880-48991/1-A
Matrix: Solid
Analysis Batch: 48961

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 48991

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09859		mg/Kg		99	70 - 130		
Toluene			0.100	0.1122		mg/Kg		112	70 - 130		
Ethylbenzene			0.100	0.08586		mg/Kg		86	70 - 130		
m-Xylene & p-Xylene			0.200	0.1673		mg/Kg		84	70 - 130		
o-Xylene			0.100	0.08513		mg/Kg		85	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4276-1
SDG: 03D2024143

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

Lab Sample ID: LCS 880-48991/1-A
Matrix: Solid
Analysis Batch: 48961

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 48991

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	112		70 - 130

Lab Sample ID: LCSD 880-48991/2-A
Matrix: Solid
Analysis Batch: 48961

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 48991

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09737		mg/Kg		97	70 - 130	1	35
Toluene			0.100	0.1136		mg/Kg		114	70 - 130	1	35
Ethylbenzene			0.100	0.08534		mg/Kg		85	70 - 130	1	35
m-Xylene & p-Xylene			0.200	0.1667		mg/Kg		83	70 - 130	0	35
o-Xylene			0.100	0.08544		mg/Kg		85	70 - 130	0	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: 880-26024-A-1-B MS
Matrix: Solid
Analysis Batch: 48961

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 48991

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U	0.0998	0.09019		mg/Kg		90	70 - 130		
Toluene	<0.00199	U	0.0998	0.1061		mg/Kg		106	70 - 130		
Ethylbenzene	<0.00199	U	0.0998	0.07582		mg/Kg		76	70 - 130		
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1466		mg/Kg		73	70 - 130		
o-Xylene	<0.00199	U	0.0998	0.07463		mg/Kg		74	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	113		70 - 130

Lab Sample ID: 880-26024-A-1-C MSD
Matrix: Solid
Analysis Batch: 48961

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 48991

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.100	0.09357		mg/Kg		93	70 - 130	4	35
Toluene	<0.00199	U	0.100	0.1053		mg/Kg		105	70 - 130	1	35
Ethylbenzene	<0.00199	U	0.100	0.07659		mg/Kg		76	70 - 130	1	35
m-Xylene & p-Xylene	<0.00398	U	0.201	0.1477		mg/Kg		74	70 - 130	1	35
o-Xylene	<0.00199	U	0.100	0.07399		mg/Kg		73	70 - 130	1	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	114		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4276-1
SDG: 03D2024143

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

Lab Sample ID: MB 880-48480/1-A
Matrix: Solid
Analysis Batch: 48423

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 48480

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/13/23 08:16	03/13/23 08:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/13/23 08:16	03/13/23 08:55	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/13/23 08:16	03/13/23 08:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*151*	*S1+*	*70 - 130*	*03/13/23 08:16*	*03/13/23 08:55*	*1*
o-Terphenyl	*174*	*S1+*	*70 - 130*	*03/13/23 08:16*	*03/13/23 08:55*	*1*

Lab Sample ID: LCS 880-48480/2-A
Matrix: Solid
Analysis Batch: 48423

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 48480

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	935.0		mg/Kg		94	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	947.3		mg/Kg		95	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*92*		*70 - 130*
o-Terphenyl	*102*		*70 - 130*

Lab Sample ID: LCSD 880-48480/3-A
Matrix: Solid
Analysis Batch: 48423

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 48480

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1035		mg/Kg		104	70 - 130	10	20
Diesel Range Organics (Over C10-C28)			1000	1092		mg/Kg		109	70 - 130	14	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*107*		*70 - 130*
o-Terphenyl	*118*		*70 - 130*

Lab Sample ID: 880-25796-A-1-B MS
Matrix: Solid
Analysis Batch: 48423

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 48480

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	997	934.1		mg/Kg		92	70 - 130		
Diesel Range Organics (Over C10-C28)	63.7		997	982.3		mg/Kg		92	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4276-1
SDG: 03D2024143

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

Lab Sample ID: 880-25796-A-1-B MS
Matrix: Solid
Analysis Batch: 48423

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 48480

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

Lab Sample ID: 880-25796-A-1-C MSD
Matrix: Solid
Analysis Batch: 48423

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 48480

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	996	932.5		mg/Kg		92	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	63.7		996	998.3		mg/Kg		94	70 - 130	2	20

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

Lab Sample ID: MB 880-48481/1-A
Matrix: Solid
Analysis Batch: 48420

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 48481

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/13/23 09:04	03/13/23 09:20	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/13/23 09:04	03/13/23 09:20	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/13/23 09:04	03/13/23 09:20	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	136	S1+	70 - 130	03/13/23 09:04	03/13/23 09:20	1
o-Terphenyl	138	S1+	70 - 130	03/13/23 09:04	03/13/23 09:20	1

Lab Sample ID: LCS 880-48481/2-A
Matrix: Solid
Analysis Batch: 48420

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 48481

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	932.0		mg/Kg		93	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	788.7		mg/Kg		79	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	87		70 - 130
o-Terphenyl	83		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4276-1
SDG: 03D2024143

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

Lab Sample ID: LCSD 880-48481/3-A
Matrix: Solid
Analysis Batch: 48420

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 48481

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1097		mg/Kg		110	70 - 130	16	20
Diesel Range Organics (Over C10-C28)			1000	1108	*1	mg/Kg		111	70 - 130	34	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*95*		*70 - 130*
o-Terphenyl	*87*		*70 - 130*

Lab Sample ID: 890-4267-A-61-B MS
Matrix: Solid
Analysis Batch: 48420

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 48481

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	998	1145		mg/Kg		113	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U *1	998	931.1		mg/Kg		89	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*127*		*70 - 130*
o-Terphenyl	*112*		*70 - 130*

Lab Sample ID: 890-4267-A-61-C MSD
Matrix: Solid
Analysis Batch: 48420

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 48481

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	997	1143		mg/Kg		113	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<50.0	U *1	997	977.1		mg/Kg		94	70 - 130	5	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*128*		*70 - 130*
o-Terphenyl	*117*		*70 - 130*

Lab Sample ID: MB 880-48614/1-A
Matrix: Solid
Analysis Batch: 48566

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 48614

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		03/14/23 13:44	03/14/23 20:14	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/14/23 13:44	03/14/23 20:14	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/14/23 13:44	03/14/23 20:14	1

QC Sample Results

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4276-1
SDG: 03D2024143

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

Lab Sample ID: MB 880-48614/1-A
Matrix: Solid
Analysis Batch: 48566

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 48614

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	135	S1+	70 - 130	03/14/23 13:44	03/14/23 20:14	1
o-Terphenyl	155	S1+	70 - 130	03/14/23 13:44	03/14/23 20:14	1

Lab Sample ID: LCS 880-48614/2-A
Matrix: Solid
Analysis Batch: 48566

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 48614

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1078		mg/Kg		108	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	903.0		mg/Kg		90	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	98		70 - 130
o-Terphenyl	108		70 - 130

Lab Sample ID: LCSD 880-48614/3-A
Matrix: Solid
Analysis Batch: 48566

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 48614

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1069		mg/Kg		107	70 - 130	1	20
Diesel Range Organics (Over C10-C28)			1000	862.6		mg/Kg		86	70 - 130	5	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	94		70 - 130
o-Terphenyl	103		70 - 130

Lab Sample ID: 890-4276-1 MS
Matrix: Solid
Analysis Batch: 48566

Client Sample ID: FS01
Prep Type: Total/NA
Prep Batch: 48614

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	1255		mg/Kg		124	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	998	858.5		mg/Kg		86	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	93		70 - 130
o-Terphenyl	95		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4276-1
SDG: 03D2024143

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

Lab Sample ID: 890-4276-1 MSD
Matrix: Solid
Analysis Batch: 48566

Client Sample ID: FS01
Prep Type: Total/NA
Prep Batch: 48614

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1046		mg/Kg		103	70 - 130	18	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	1044		mg/Kg		105	70 - 130	20	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*112*		*70 - 130*
o-Terphenyl	*115*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-48583/1-A
Matrix: Solid
Analysis Batch: 49027

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			03/18/23 13:11	1

Lab Sample ID: LCS 880-48583/2-A
Matrix: Solid
Analysis Batch: 49027

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	259.5		mg/Kg		104	90 - 110

Lab Sample ID: LCSD 880-48583/3-A
Matrix: Solid
Analysis Batch: 49027

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	260.7		mg/Kg		104	90 - 110	0	20

Lab Sample ID: 890-4276-9 MS
Matrix: Solid
Analysis Batch: 49027

Client Sample ID: FS09
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	31.2		250	290.3		mg/Kg		104	90 - 110

Lab Sample ID: 890-4276-9 MSD
Matrix: Solid
Analysis Batch: 49027

Client Sample ID: FS09
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	31.2		250	291.6		mg/Kg		104	90 - 110	0	20

QC Sample Results

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4276-1
SDG: 03D2024143

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 880-48591/1-A
Matrix: Solid
Analysis Batch: 49126

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			03/20/23 01:26	1

Lab Sample ID: LCS 880-48591/2-A
Matrix: Solid
Analysis Batch: 49126

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	268.8		mg/Kg		108	90 - 110		

Lab Sample ID: LCSD 880-48591/3-A
Matrix: Solid
Analysis Batch: 49126

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	268.7		mg/Kg		107	90 - 110	0	20

Lab Sample ID: 890-4272-A-1-C MS
Matrix: Solid
Analysis Batch: 49126

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	<4.98	U F1	249	281.0	F1	mg/Kg		111	90 - 110		

Lab Sample ID: 890-4272-A-1-E MSD
Matrix: Solid
Analysis Batch: 49126

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	<4.98	U F1	249	280.1	F1	mg/Kg		111	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4276-1
SDG: 03D2024143

GC VOA

Prep Batch: 48754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4276-7	FS07	Total/NA	Solid	5035	
890-4276-8	FS08	Total/NA	Solid	5035	
890-4276-9	FS09	Total/NA	Solid	5035	
MB 880-48754/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-48754/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-48754/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-4270-A-21-E MS	Matrix Spike	Total/NA	Solid	5035	
890-4270-A-21-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 48857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4276-10	FS10	Total/NA	Solid	5035	
890-4276-11	FS11	Total/NA	Solid	5035	
890-4276-12	FS12	Total/NA	Solid	5035	
890-4276-13	FS13	Total/NA	Solid	5035	
MB 880-48857/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-48857/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-48857/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-4276-10 MS	FS10	Total/NA	Solid	5035	
890-4276-10 MSD	FS10	Total/NA	Solid	5035	

Analysis Batch: 48949

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4276-7	FS07	Total/NA	Solid	8021B	48754
890-4276-8	FS08	Total/NA	Solid	8021B	48754
890-4276-9	FS09	Total/NA	Solid	8021B	48754
MB 880-48754/5-A	Method Blank	Total/NA	Solid	8021B	48754
MB 880-48951/5-A	Method Blank	Total/NA	Solid	8021B	48951
LCS 880-48754/1-A	Lab Control Sample	Total/NA	Solid	8021B	48754
LCSD 880-48754/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	48754
890-4270-A-21-E MS	Matrix Spike	Total/NA	Solid	8021B	48754
890-4270-A-21-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	48754

Prep Batch: 48951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-48951/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 48961

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4276-1	FS01	Total/NA	Solid	8021B	48991
890-4276-2	FS02	Total/NA	Solid	8021B	48991
890-4276-3	FS03	Total/NA	Solid	8021B	48991
890-4276-4	FS04	Total/NA	Solid	8021B	48991
890-4276-5	FS05	Total/NA	Solid	8021B	48991
890-4276-6	FS06	Total/NA	Solid	8021B	48991
MB 880-48991/5-A	Method Blank	Total/NA	Solid	8021B	48991
LCS 880-48991/1-A	Lab Control Sample	Total/NA	Solid	8021B	48991
LCSD 880-48991/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	48991
880-26024-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	48991
880-26024-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	48991

QC Association Summary

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4276-1
SDG: 03D2024143

GC VOA

Prep Batch: 48991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4276-1	FS01	Total/NA	Solid	5035	
890-4276-2	FS02	Total/NA	Solid	5035	
890-4276-3	FS03	Total/NA	Solid	5035	
890-4276-4	FS04	Total/NA	Solid	5035	
890-4276-5	FS05	Total/NA	Solid	5035	
890-4276-6	FS06	Total/NA	Solid	5035	
MB 880-48991/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-48991/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-48991/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-26024-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-26024-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 49106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4276-10	FS10	Total/NA	Solid	8021B	48857
890-4276-11	FS11	Total/NA	Solid	8021B	48857
890-4276-12	FS12	Total/NA	Solid	8021B	48857
890-4276-13	FS13	Total/NA	Solid	8021B	48857
MB 880-48857/5-A	Method Blank	Total/NA	Solid	8021B	48857
LCS 880-48857/1-A	Lab Control Sample	Total/NA	Solid	8021B	48857
LCSD 880-48857/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	48857
890-4276-10 MS	FS10	Total/NA	Solid	8021B	48857
890-4276-10 MSD	FS10	Total/NA	Solid	8021B	48857

Analysis Batch: 49220

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4276-1	FS01	Total/NA	Solid	Total BTEX	
890-4276-2	FS02	Total/NA	Solid	Total BTEX	
890-4276-3	FS03	Total/NA	Solid	Total BTEX	
890-4276-4	FS04	Total/NA	Solid	Total BTEX	
890-4276-5	FS05	Total/NA	Solid	Total BTEX	
890-4276-6	FS06	Total/NA	Solid	Total BTEX	
890-4276-7	FS07	Total/NA	Solid	Total BTEX	
890-4276-8	FS08	Total/NA	Solid	Total BTEX	
890-4276-9	FS09	Total/NA	Solid	Total BTEX	
890-4276-10	FS10	Total/NA	Solid	Total BTEX	
890-4276-11	FS11	Total/NA	Solid	Total BTEX	
890-4276-12	FS12	Total/NA	Solid	Total BTEX	
890-4276-13	FS13	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 48420

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4276-10	FS10	Total/NA	Solid	8015B NM	48481
890-4276-11	FS11	Total/NA	Solid	8015B NM	48481
890-4276-12	FS12	Total/NA	Solid	8015B NM	48481
890-4276-13	FS13	Total/NA	Solid	8015B NM	48481
MB 880-48481/1-A	Method Blank	Total/NA	Solid	8015B NM	48481
LCS 880-48481/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	48481
LCSD 880-48481/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	48481

QC Association Summary

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4276-1
SDG: 03D2024143

GC Semi VOA (Continued)

Analysis Batch: 48420 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4267-A-61-B MS	Matrix Spike	Total/NA	Solid	8015B NM	48481
890-4267-A-61-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	48481

Analysis Batch: 48423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4276-8	FS08	Total/NA	Solid	8015B NM	48480
890-4276-9	FS09	Total/NA	Solid	8015B NM	48480
MB 880-48480/1-A	Method Blank	Total/NA	Solid	8015B NM	48480
LCS 880-48480/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	48480
LCSD 880-48480/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	48480
880-25796-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	48480
880-25796-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	48480

Prep Batch: 48480

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4276-8	FS08	Total/NA	Solid	8015NM Prep	
890-4276-9	FS09	Total/NA	Solid	8015NM Prep	
MB 880-48480/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-48480/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-48480/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-25796-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-25796-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 48481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4276-10	FS10	Total/NA	Solid	8015NM Prep	
890-4276-11	FS11	Total/NA	Solid	8015NM Prep	
890-4276-12	FS12	Total/NA	Solid	8015NM Prep	
890-4276-13	FS13	Total/NA	Solid	8015NM Prep	
MB 880-48481/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-48481/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-48481/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-4267-A-61-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-4267-A-61-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 48566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4276-1	FS01	Total/NA	Solid	8015B NM	48614
890-4276-2	FS02	Total/NA	Solid	8015B NM	48614
890-4276-3	FS03	Total/NA	Solid	8015B NM	48614
890-4276-4	FS04	Total/NA	Solid	8015B NM	48614
890-4276-5	FS05	Total/NA	Solid	8015B NM	48614
890-4276-6	FS06	Total/NA	Solid	8015B NM	48614
890-4276-7	FS07	Total/NA	Solid	8015B NM	48614
MB 880-48614/1-A	Method Blank	Total/NA	Solid	8015B NM	48614
LCS 880-48614/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	48614
LCSD 880-48614/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	48614
890-4276-1 MS	FS01	Total/NA	Solid	8015B NM	48614
890-4276-1 MSD	FS01	Total/NA	Solid	8015B NM	48614

QC Association Summary

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4276-1
SDG: 03D2024143

GC Semi VOA

Prep Batch: 48614

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4276-1	FS01	Total/NA	Solid	8015NM Prep	
890-4276-2	FS02	Total/NA	Solid	8015NM Prep	
890-4276-3	FS03	Total/NA	Solid	8015NM Prep	
890-4276-4	FS04	Total/NA	Solid	8015NM Prep	
890-4276-5	FS05	Total/NA	Solid	8015NM Prep	
890-4276-6	FS06	Total/NA	Solid	8015NM Prep	
890-4276-7	FS07	Total/NA	Solid	8015NM Prep	
MB 880-48614/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-48614/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-48614/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-4276-1 MS	FS01	Total/NA	Solid	8015NM Prep	
890-4276-1 MSD	FS01	Total/NA	Solid	8015NM Prep	

Analysis Batch: 49094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4276-1	FS01	Total/NA	Solid	8015 NM	
890-4276-2	FS02	Total/NA	Solid	8015 NM	
890-4276-3	FS03	Total/NA	Solid	8015 NM	
890-4276-4	FS04	Total/NA	Solid	8015 NM	
890-4276-5	FS05	Total/NA	Solid	8015 NM	
890-4276-6	FS06	Total/NA	Solid	8015 NM	
890-4276-7	FS07	Total/NA	Solid	8015 NM	
890-4276-8	FS08	Total/NA	Solid	8015 NM	
890-4276-9	FS09	Total/NA	Solid	8015 NM	
890-4276-10	FS10	Total/NA	Solid	8015 NM	
890-4276-11	FS11	Total/NA	Solid	8015 NM	
890-4276-12	FS12	Total/NA	Solid	8015 NM	
890-4276-13	FS13	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 48583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4276-5	FS05	Soluble	Solid	DI Leach	
890-4276-6	FS06	Soluble	Solid	DI Leach	
890-4276-7	FS07	Soluble	Solid	DI Leach	
890-4276-8	FS08	Soluble	Solid	DI Leach	
890-4276-9	FS09	Soluble	Solid	DI Leach	
890-4276-10	FS10	Soluble	Solid	DI Leach	
890-4276-11	FS11	Soluble	Solid	DI Leach	
890-4276-12	FS12	Soluble	Solid	DI Leach	
890-4276-13	FS13	Soluble	Solid	DI Leach	
MB 880-48583/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-48583/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-48583/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4276-9 MS	FS09	Soluble	Solid	DI Leach	
890-4276-9 MSD	FS09	Soluble	Solid	DI Leach	

Leach Batch: 48591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4276-1	FS01	Soluble	Solid	DI Leach	

QC Association Summary

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4276-1
SDG: 03D2024143

HPLC/IC (Continued)

Leach Batch: 48591 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4276-2	FS02	Soluble	Solid	DI Leach	
890-4276-3	FS03	Soluble	Solid	DI Leach	
890-4276-4	FS04	Soluble	Solid	DI Leach	
MB 880-48591/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-48591/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-48591/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4272-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-4272-A-1-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 49027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4276-5	FS05	Soluble	Solid	300.0	48583
890-4276-6	FS06	Soluble	Solid	300.0	48583
890-4276-7	FS07	Soluble	Solid	300.0	48583
890-4276-8	FS08	Soluble	Solid	300.0	48583
890-4276-9	FS09	Soluble	Solid	300.0	48583
890-4276-10	FS10	Soluble	Solid	300.0	48583
890-4276-11	FS11	Soluble	Solid	300.0	48583
890-4276-12	FS12	Soluble	Solid	300.0	48583
890-4276-13	FS13	Soluble	Solid	300.0	48583
MB 880-48583/1-A	Method Blank	Soluble	Solid	300.0	48583
LCS 880-48583/2-A	Lab Control Sample	Soluble	Solid	300.0	48583
LCSD 880-48583/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	48583
890-4276-9 MS	FS09	Soluble	Solid	300.0	48583
890-4276-9 MSD	FS09	Soluble	Solid	300.0	48583

Analysis Batch: 49126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4276-1	FS01	Soluble	Solid	300.0	48591
890-4276-2	FS02	Soluble	Solid	300.0	48591
890-4276-3	FS03	Soluble	Solid	300.0	48591
890-4276-4	FS04	Soluble	Solid	300.0	48591
MB 880-48591/1-A	Method Blank	Soluble	Solid	300.0	48591
LCS 880-48591/2-A	Lab Control Sample	Soluble	Solid	300.0	48591
LCSD 880-48591/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	48591
890-4272-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	48591
890-4272-A-1-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	48591

Lab Chronicle

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4276-1
SDG: 03D2024143

Client Sample ID: FS01

Lab Sample ID: 890-4276-1
Matrix: Solid
Date Collected: 03/09/23 12:30
Date Received: 03/10/23 08:57

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	48991	03/20/23 11:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	48961	03/21/23 03:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49220	03/22/23 15:38	AJ	EET MID
Total/NA	Analysis	8015 NM		1			49094	03/21/23 09:46	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	48614	03/14/23 13:44	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48566	03/14/23 21:19	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	48591	03/14/23 11:19	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49126	03/20/23 03:42	SMC	EET MID

Client Sample ID: FS02

Lab Sample ID: 890-4276-2
Matrix: Solid
Date Collected: 03/09/23 13:40
Date Received: 03/10/23 08:57

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	48991	03/20/23 11:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	48961	03/21/23 04:06	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49220	03/22/23 15:38	AJ	EET MID
Total/NA	Analysis	8015 NM		1			49094	03/21/23 09:46	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	48614	03/14/23 13:44	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48566	03/14/23 22:24	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	48591	03/14/23 11:19	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49126	03/20/23 03:47	SMC	EET MID

Client Sample ID: FS03

Lab Sample ID: 890-4276-3
Matrix: Solid
Date Collected: 03/09/23 13:50
Date Received: 03/10/23 08:57

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	48991	03/20/23 11:49	MNR	EET MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	48961	03/21/23 05:28	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49220	03/22/23 15:38	AJ	EET MID
Total/NA	Analysis	8015 NM		1			49094	03/21/23 09:46	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	48614	03/14/23 13:44	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48566	03/14/23 22:46	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	48591	03/14/23 11:19	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49126	03/20/23 03:52	SMC	EET MID

Client Sample ID: FS04

Lab Sample ID: 890-4276-4
Matrix: Solid
Date Collected: 03/09/23 13:55
Date Received: 03/10/23 08:57

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	48991	03/20/23 11:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	48961	03/21/23 04:27	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49220	03/22/23 15:38	AJ	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4276-1
SDG: 03D2024143

Client Sample ID: FS04

Date Collected: 03/09/23 13:55
Date Received: 03/10/23 08:57

Lab Sample ID: 890-4276-4
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			49094	03/21/23 09:46	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	48614	03/14/23 13:44	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48566	03/14/23 23:08	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	48591	03/14/23 11:19	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49126	03/20/23 03:57	SMC	EET MID

Client Sample ID: FS05

Date Collected: 03/09/23 14:15
Date Received: 03/10/23 08:57

Lab Sample ID: 890-4276-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	48991	03/20/23 11:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	48961	03/21/23 04:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49220	03/22/23 15:38	AJ	EET MID
Total/NA	Analysis	8015 NM		1			49094	03/21/23 09:46	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	48614	03/14/23 13:44	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48566	03/14/23 23:30	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	48583	03/14/23 11:07	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49027	03/18/23 15:25	SMC	EET MID

Client Sample ID: FS06

Date Collected: 03/09/23 14:20
Date Received: 03/10/23 08:57

Lab Sample ID: 890-4276-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	48991	03/20/23 11:49	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	48961	03/21/23 05:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49220	03/22/23 15:38	AJ	EET MID
Total/NA	Analysis	8015 NM		1			49094	03/21/23 09:46	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	48614	03/14/23 13:44	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48566	03/14/23 23:52	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	48583	03/14/23 11:07	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49027	03/18/23 15:30	SMC	EET MID

Client Sample ID: FS07

Date Collected: 03/09/23 14:25
Date Received: 03/10/23 08:57

Lab Sample ID: 890-4276-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	48754	03/16/23 13:22	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	48949	03/21/23 05:37	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49220	03/22/23 15:38	AJ	EET MID
Total/NA	Analysis	8015 NM		1			49094	03/21/23 09:46	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	48614	03/14/23 13:44	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48566	03/15/23 00:14	SM	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4276-1
SDG: 03D2024143

Client Sample ID: FS07

Lab Sample ID: 890-4276-7

Date Collected: 03/09/23 14:25
Matrix: Solid
Date Received: 03/10/23 08:57

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	48583	03/14/23 11:07	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49027	03/18/23 15:35	SMC	EET MID

Client Sample ID: FS08

Lab Sample ID: 890-4276-8

Date Collected: 03/09/23 14:30
Matrix: Solid
Date Received: 03/10/23 08:57

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	48754	03/16/23 13:22	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	48949	03/21/23 05:57	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49220	03/22/23 15:38	AJ	EET MID
Total/NA	Analysis	8015 NM		1			49094	03/21/23 09:46	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	48480	03/13/23 12:16	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48423	03/13/23 21:00	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	48583	03/14/23 11:07	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49027	03/18/23 15:40	SMC	EET MID

Client Sample ID: FS09

Lab Sample ID: 890-4276-9

Date Collected: 03/09/23 15:00
Matrix: Solid
Date Received: 03/10/23 08:57

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	48754	03/16/23 13:22	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	48949	03/21/23 06:18	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49220	03/22/23 15:38	AJ	EET MID
Total/NA	Analysis	8015 NM		1			49094	03/21/23 09:46	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	48480	03/13/23 12:16	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48423	03/13/23 21:23	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	48583	03/14/23 11:07	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49027	03/18/23 15:45	SMC	EET MID

Client Sample ID: FS10

Lab Sample ID: 890-4276-10

Date Collected: 03/09/23 14:40
Matrix: Solid
Date Received: 03/10/23 08:57

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	48857	03/17/23 16:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49106	03/21/23 14:15	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49220	03/22/23 15:38	AJ	EET MID
Total/NA	Analysis	8015 NM		1			49094	03/21/23 09:46	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	48481	03/13/23 12:24	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48420	03/13/23 20:14	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	48583	03/14/23 11:07	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49027	03/19/23 12:22	SMC	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4276-1
SDG: 03D2024143

Client Sample ID: FS11

Lab Sample ID: 890-4276-11

Date Collected: 03/09/23 14:45
Matrix: Solid
Date Received: 03/10/23 08:57

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	48857	03/17/23 16:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49106	03/21/23 14:36	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49220	03/22/23 15:38	AJ	EET MID
Total/NA	Analysis	8015 NM		1			49094	03/21/23 09:46	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	48481	03/13/23 12:24	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48420	03/13/23 20:35	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	48583	03/14/23 11:07	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49027	03/18/23 16:06	SMC	EET MID

Client Sample ID: FS12

Lab Sample ID: 890-4276-12

Date Collected: 03/09/23 14:50
Matrix: Solid
Date Received: 03/10/23 08:57

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	48857	03/17/23 16:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49106	03/21/23 14:56	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49220	03/22/23 15:38	AJ	EET MID
Total/NA	Analysis	8015 NM		1			49094	03/21/23 09:46	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	48481	03/13/23 12:24	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48420	03/13/23 20:57	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	48583	03/14/23 11:07	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49027	03/18/23 16:21	SMC	EET MID

Client Sample ID: FS13

Lab Sample ID: 890-4276-13

Date Collected: 03/09/23 14:55
Matrix: Solid
Date Received: 03/10/23 08:57

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	48857	03/17/23 16:23	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49106	03/21/23 15:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49220	03/22/23 15:38	AJ	EET MID
Total/NA	Analysis	8015 NM		1			49094	03/21/23 09:46	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	48481	03/13/23 12:24	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48420	03/13/23 21:18	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	48583	03/14/23 11:07	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49027	03/18/23 16:26	SMC	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: Cabo Wabo Federal Com 705H

Job ID: 890-4276-1
SDG: 03D2024143

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-25	06-30-23

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

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

Method Summary

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4276-1
SDG: 03D2024143

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

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: Cabo Wabo Federal Com 705H

Job ID: 890-4276-1
SDG: 03D2024143

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-4276-1	FS01	Solid	03/09/23 12:30	03/10/23 08:57	0.5'
890-4276-2	FS02	Solid	03/09/23 13:40	03/10/23 08:57	0.5'
890-4276-3	FS03	Solid	03/09/23 13:50	03/10/23 08:57	0.5'
890-4276-4	FS04	Solid	03/09/23 13:55	03/10/23 08:57	0.5'
890-4276-5	FS05	Solid	03/09/23 14:15	03/10/23 08:57	0.5'
890-4276-6	FS06	Solid	03/09/23 14:20	03/10/23 08:57	0.5'
890-4276-7	FS07	Solid	03/09/23 14:25	03/10/23 08:57	0.5'
890-4276-8	FS08	Solid	03/09/23 14:30	03/10/23 08:57	0.5'
890-4276-9	FS09	Solid	03/09/23 15:00	03/10/23 08:57	0.5'
890-4276-10	FS10	Solid	03/09/23 14:40	03/10/23 08:57	0.5'
890-4276-11	FS11	Solid	03/09/23 14:45	03/10/23 08:57	0.5'
890-4276-12	FS12	Solid	03/09/23 14:50	03/10/23 08:57	0.5'
890-4276-13	FS13	Solid	03/09/23 14:55	03/10/23 08:57	0.5'

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Chain of Custody

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

Work Order No: _____

www.xenco.com Page 1 of 2

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

Work Order Comments

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

Project Name:	Cabo Wabo Federal Com 705H	Turn Around	
Project Number:	03D2024143	☑ Routine ☐ Rush	
Project Location:	32.0861,-103.9633	Due Date:	
Sampler's Name:	Peter Van Patten	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	TM007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	4.6
Total Containers:		Corrected Temperature:	4.4

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

ANALYSIS REQUEST

Pres. Code

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

890-4276 Chain of Custody

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)	Sample Comments
FS01	Soil	3/9/2023	1230	0.5'	Comp	1	x	x	x	
FS02	Soil	3/9/2023	1340	0.5'	Comp	1	x	x	x	
FS03	Soil	3/9/2023	1350	0.5'	Comp	1	x	x	x	
FS04	Soil	3/9/2023	1355	0.5'	Comp	1	x	x	x	
FS05	Soil	3/9/2023	1415	0.5'	Comp	1	x	x	x	
FS06	Soil	3/9/2023	1420	0.5'	Comp	1	x	x	x	
FS07	Soil	3/9/2023	1425	0.5'	Comp	1	x	x	x	
FS08	Soil	3/9/2023	1430	0.5'	Comp	1	x	x	x	
FS09	Soil	3/9/2023	1500	0.5'	Comp	1	x	x	x	
FS10	Soil	3/9/2023	1440	0.5'	Comp	1	x	x	x	

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Peter Van Patten	M. O'Dell		2	3.10.23 857	
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

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Chain of Custody

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

Work Order No: _____

www.xenco.com Page 2 of 2

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

Work Order Comments

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

Project Name:	Cabo Wabo Federal Com 705H	Turn Around	
Project Number:	03D2024143	☑ Routine ☐ Rush	
Project Location:	32.0861,-103.9633	Due Date:	
Sampler's Name:	Peter Van Patten	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)
FS11	Soil	3/9/2023	1445	0.5'	Comp	1		x	x	x
FS12	Soil	3/9/2023	1450	0.5'	Comp	1		x	x	x
FS13	Soil	3/9/2023	1455	0.5'	Comp	1		x	x	x

ANALYSIS REQUEST — Parameters

Preservative Codes

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

Sample Comments

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Peter Van Patten	M. O'Dell		2		
3			4		
5			6		

3.10.23 857

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4276-1
SDG Number: 03D2024143

Login Number: 4276
List Number: 1
Creator: Stutzman, Amanda

List Source: Eurofins Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	Refer to job narrative
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	N/A	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
TCEQ Mtd 1005 soil sample was frozen/delivered for prep within 48H of sampling.	N/A	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4276-1
SDG Number: 03D2024143

Login Number: 4276
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 03/13/23 08:24 AM

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

ENSOLUM

APPENDIX E

NMOCD Notifications

Thank you,

Hadlie Green
Staff Geologist
432-557-8895
hgreen@ensolum.com
Ensolum, LLC

From: Enviro, OCD, EMNRD
To: Hadlie Green
Cc: Nobui, Jennifer, EMNRD; Bratcher, Michael, EMNRD
Subject: RE: [EXTERNAL] Sampling Notification (Week of 3/6/2023)
Date: Wednesday, March 1, 2023 5:17:02 PM
Attachments: image006.png
image007.png
image008.png
image009.png

[**EXTERNAL EMAIL**]

Hadlie,

Thank you for the notification. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

JH

Jocelyn Harimon ● Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
1220 South St. Francis Drive | Santa Fe, NM 87505
(505)469-2821 | Jocelyn.Harimon@emnrd.nm.gov
http:// **www.emnrd.nm.gov**

From: Hadlie Green <hgreen@ensolum.com>
Sent: Wednesday, March 1, 2023 8:43 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Kalei Jennings <kjennings@ensolum.com>
Subject: [EXTERNAL] Sampling Notification (Week of 3/6/2023)

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

All,

ConocoPhillips Company (COP) plans to complete sampling activities at the following site the week of March 6, 2023.

- Baseball Cap 25 M CTB / NAPP2303037207
- Wild Cobra 1 State 002H / NAPP2233946889
- Cabo Wabo Federal Com 705H / NAPP2236129464

From: Enviro, OCD, EMNRD
To: Hadlie Green
Cc: Bratcher, Michael, EMNRD
Subject: RE: [EXTERNAL] COG - Extension Request - Cabo Wabo Federal Com 705H (Incident Number NAPP223612464)
Date: Monday, March 13, 2023 2:33:47 PM
Attachments: image005.jpg
image006.png
image007.png
image008.png
image009.png

[**EXTERNAL EMAIL**]

Hadlie,

Thank you for the notification. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

JH

Jocelyn Harimon ● Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
1220 South St. Francis Drive | Santa Fe, NM 87505
(505)469-2821 | Jocelyn.Harimon@emnrd.nm.gov
http:// **www.emnrd.nm.gov**

From: Hadlie Green <hgreen@ensolum.com>
Sent: Monday, March 13, 2023 12:51 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Carlile, Justin <Justin.Carlile@conocophillips.com>; Kalei Jennings <kjennings@ensolum.com>
Subject: [EXTERNAL] COG - Extension Request - Cabo Wabo Federal Com 705H (Incident Number NAPP223612464)

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

To Whom It May Concern,

Cabo Wabo Federal Com 705H (Incident Number NAPP223612464)

COG Operating, LLC (COG) is requesting an extension for the current deadline of March 18, 2023, for submitting a remediation work plan or closure report required in 19.15.29.12.B.(1) NMAC for Cabo Wabo Federal Com 705H (Incident Number NAPP223612464). The release was discovered on

December 18, 2022. Initial site assessment activities have been completed and excavation of impacted soil has been completed. Based on the most recent field screening results, COG believes all impacted soil has been removed; however, we are waiting for laboratory analytical results to confirm. In order to complete additional remediation activities and submit a remediation work plan or closure report, COG requests a 90-day extension of this deadline until June 16, 2023.

Thank you,

Hadlie Green
Project Manager
432-557-8895
hgreen@ensolum.com
Ensolum, LLC

ENSOLUM

APPENDIX F

Final C-141

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	OGRID
Contact Name	Contact Telephone
Contact email	Incident # *(assigned by OCD)*
Contact mailing address	

Location of Release Source

Latitude _____ Longitude _____
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Site Type
Date Release Discovered	API# *(if applicable)*

Unit Letter	Section	Township	Range	County

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☐ Private (*Name:* _____)

Nature and Volume of Release

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

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

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State of New Mexico
Oil Conservation Division

Incident ID	
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Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

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

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

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

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

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

Printed Name: _____ Title: _____

Signature: _____ Date: _____

email: _____ Telephone: _____

OCD Only

Received by: _____ Date: _____

L48 Spill Volume Estimate Form

Facility Name & Number:	Cabo Wabo Fed Com 705H
Asset Area:	Permian D&C
Release Discovery Date & Time:	12/18/22 1500
Release Type:	Other
Provide any known details about the event:	Brackish water spill from 12" lay flat from pit to location minion

Spill Calculation - On Pad Surface Pool Spill

Convert Irregular shape into a series of rectangles	Length (ft.)	Width (ft.)	Deepest point in each of the areas (in.)	No. of boundaries of "shore" in each area	Estimated *Pool* Area (sq. ft.)	Estimated Average Depth (ft.)	Estimated volume of each pool area (bbl.)	Penetration allowance (ft.)	Total Estimated Volume of Spill (bbl.)
Rectangle A	65.0	17.0	5.00	4	1105.000	0.104	20.489	0.005	20.595
Rectangle B	11.0	5.0	1.50	4	55.000	0.031	0.306	0.002	0.306
Rectangle C					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle D					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle E					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle F					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle G					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle H					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle I					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle J					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
								Total Volume Release:	20.902

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2236129464
District RP	
Facility ID	fAPP2203848018
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

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State of New Mexico
Oil Conservation Division

Incident ID	NAPP2236129464
District RP	
Facility ID	fAPP2203848018
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: __Justin Carlile_____ Title: _Senior Environmental Engineer_____

Signature: Justin Carlile Date:_____4/13/2023_____

email: __Justin.Carlile@conocophillips.com_____ Telephone: ___432-202-4112_____

OCD Only

Received by: _____Jocelyn Harimon_____ Date: 04/20/2023

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2236129464
District RP	
Facility ID	fAPP2203848018
Application ID	

Closure

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

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

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

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

☒ Description of remediation activities

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

Printed Name: Justin Carlile Title: Senior Environmental Engineer

Signature: Justin Carlile Date: 4/13/2023

email: Justin.Carlile@ConocoPhillips.com Telephone: 432-202-4112

OCD Only

Received by: Jocelyn Harimon Date: 04/20/2023

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

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 209400

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 209400
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your closure report and final C-141 for Incident #NAPP2236129464 CABO WABO FEDERAL COM 705H, thank you. This closure is approved.	9/8/2023