ENSOLUM

July 18, 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
Stratojet 31 State Com 008H
Incident Number NAPP2314235805
Lea 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 Stratojet 31 State Com 008H (Site). The purpose of the Site assessment, excavation, and soil sampling activities was to address impacts to soil resulting from a release of produced water at the Site. Based on the excavation activities and laboratory analytical results from the soil sampling events, COG is submitting this *Closure Request*, describing remediation that has occurred and requesting closure for Incident Number NAPP2314235805.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit M, Section 31, Township 20 South, Range 35 East, in Lea County, New Mexico (32.5249°, -103.5030°) and is associated with oil and gas exploration and production operations on private land managed by Merchant Livestock Company.

On April 19, 2023, internal corrosion on a check valve resulted in the release of approximately 0.22 barrels (bbls) of produced water into the surrounding pasture area. No released fluids 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 May 22, 2023. The release was assigned Incident Number NAPP2314235805.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized to assess 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 between 51 feet and 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is United States Geological Survey (USGS) well

323148103295801, located approximately 0.7 miles north of the Site. The groundwater well has a reported depth to groundwater of 65.29 feet bgs and total depth of 85 feet bgs. Ground surface elevation at the groundwater well location is 3,713 feet above mean sea level (amsl), which is 29 feet lower 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 an emergent wetland, located approximately 1,846 feet north 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, church, or wetland. The Site is greater than 1,000 feet from a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). Site receptors are identified on Figure 1.

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

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

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

SITE ASSESSMENT AND LABORATORY ANALYTICAL RESULTS

On May 22, 2023, Ensolum personnel were at the Site to evaluate the release based on information provided on the Form C-141 and visual observations. Seven assessment soil samples (SS01 through SS07) were collected within and around the visible release extent at a depth of approximately 0.5 feet bgs to assess surficial soils within the release as well as 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 using Hach® chloride QuanTab® test strips. The release extent and assessment 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 as Appendix B.

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 strict chain-of-custody procedures to Eurofins Laboratories (Eurofins) in Carlsbad, New Mexico, for analysis of the following chemicals of concern (COCs): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

Laboratory analytical results for assessment soil samples SS01 through SS04, collected around the release extent, indicated all COC concentrations were compliant with most stringent Table I Closure Criteria and successfully defined the lateral extent of the release. Laboratory analytical results for assessment soil samples SS05 through SS07, collected within the release extent, indicated chloride concentrations exceeded the Closure Criteria as well as reclamation requirement. Based on laboratory analytical results for soil samples SS05 through SS07, collected within the release extent, excavation activities appeared to be warranted.

EXCAVATION ACTIVITIES AND LABORATORY ANALYTICAL RESULTS

Between June 23 and July 13, 2023, Ensolum personnel were at the Site to oversee excavation activities based on visible staining and laboratory analytical results for assessment soil samples SS05 through SS07. Excavation activities were performed via backhoe and transport vehicles. To direct excavation activities, soil was field screened for VOCs and chloride. The excavation was completed at a depth of 4 feet bgs. Photographic documentation of the excavation activities is included in Appendix B.

Following removal of impacted soil, 5-point composite soil samples were collected every 200 square feet from the floor and sidewalls of the excavation. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil samples FS01 through FS10 were collected from the floor of the excavation at a depth of 4 feet bgs. Composite soil samples SW01 through SW04 were collected from the sidewalls of the excavation at depths ranging from ground surface to 4 feet bgs. The soil samples were collected, handled, and analyzed following the same procedures as described above. The excavation extent and excavation soil sample locations are presented on Figure 3.

Laboratory analytical results for excavation samples FS01 through FS10 and SW01 through SW04 indicated all COC concentrations were compliant with the Closure Criteria and the reclamation requirement. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Appendix C.

The excavation measured approximately 1,886 square feet in aerial extent. A total of approximately 280 cubic yards of impacted soil was removed during the excavation activities. The soil was transported and properly disposed of at the R360 Disposal Facility in Hobbs, New Mexico.

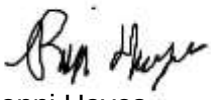
CLOSURE REQUEST

Site assessment and excavation activities were conducted at the Site to address the April 19, 2023, release of produced water. Laboratory analytical results for the excavation soil samples, collected from the final excavation extent, indicated all COC concentrations were compliant with the Closure Criteria and the reclamation requirement. Based on the laboratory analytical results, no further remediation was required.

COG believes the remedial actions completed are protective of human health, the environment, and groundwater. As such, COG respectfully requests closure for Incident Number NAPP2314235805. NMOCD notifications are included in Appendix D and the Final C-141 is included in Appendix E.

If you have any questions or comments, please contact Ms. Hadlie Green at (432) 557-8895 or hgreen@ensolum.com.

Sincerely,
Ensolum, LLC



Ronni Hayes
Assistant Geologist

Daneil R. Moir, PG
Senior Managing Geologist

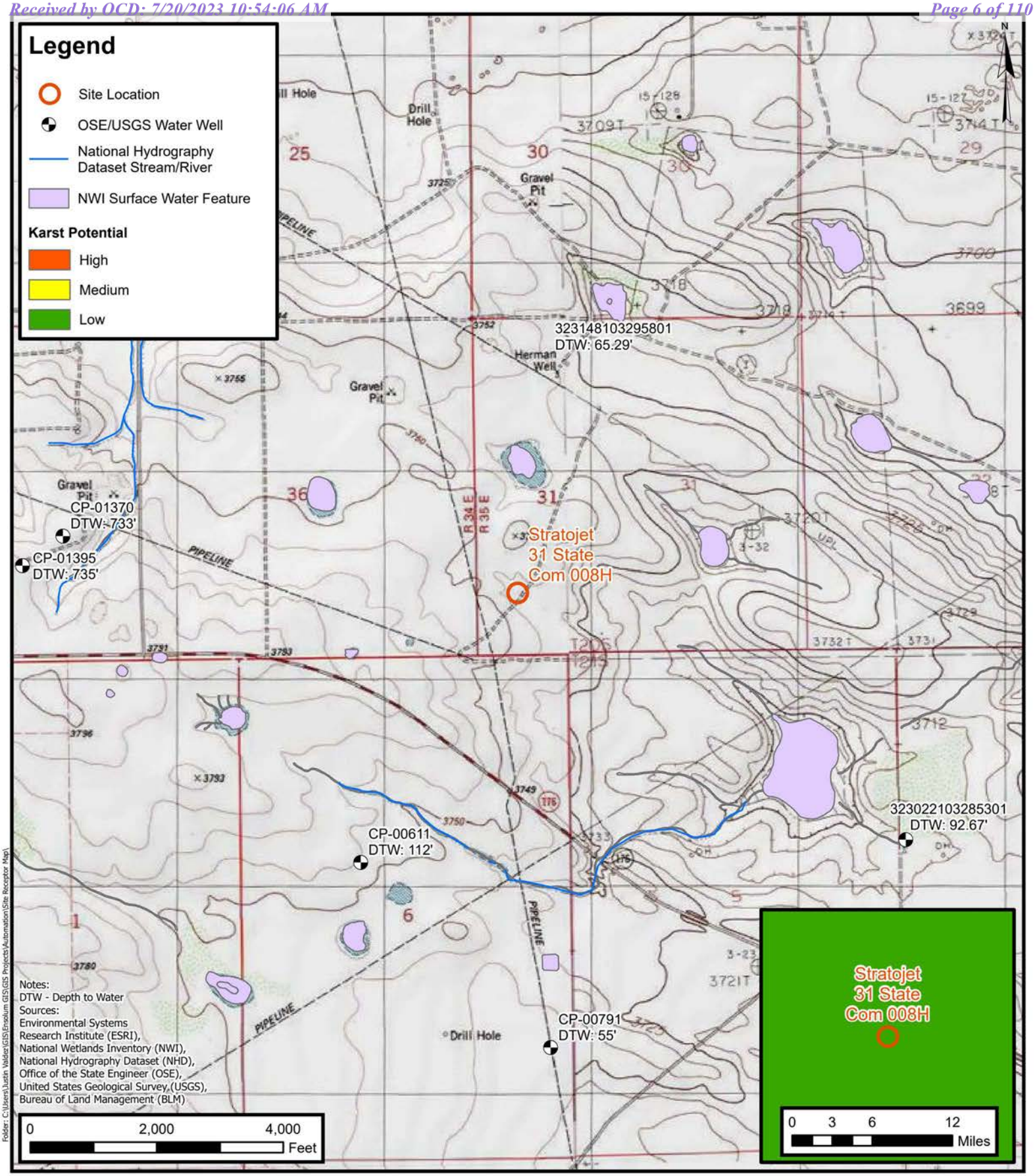
cc: Jacob Laird, ConocoPhillips
Merchant Livestock Company

Appendices:

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

ENSOLUM

FIGURES

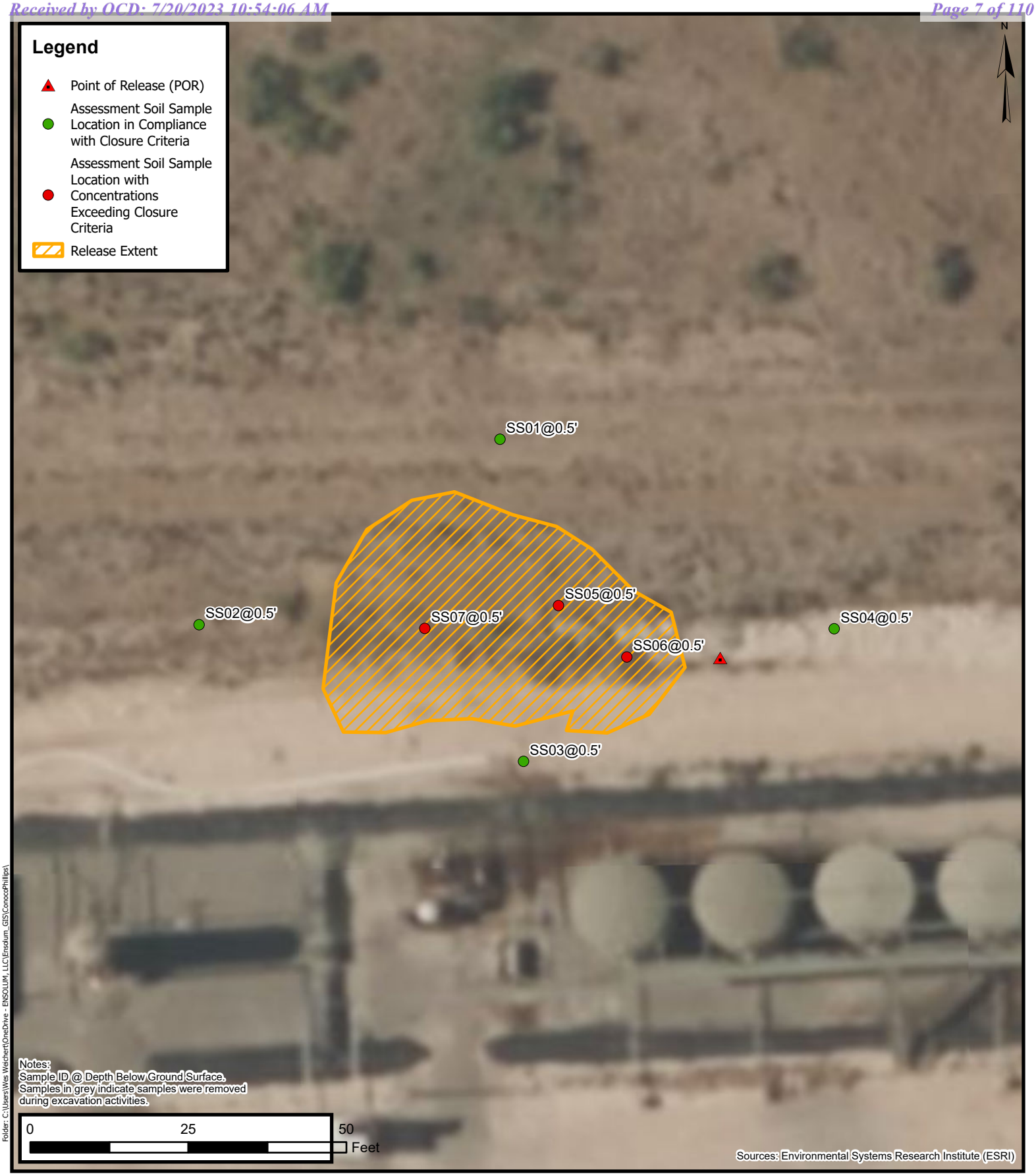


ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Site Receptor Map

COG Operating, LLC
Stratojet 31 State Com 008H
Incident Number: NAPP2314235805
Unit M, Sec 31, T20S R35E
Lea County, New Mexico

FIGURE 1



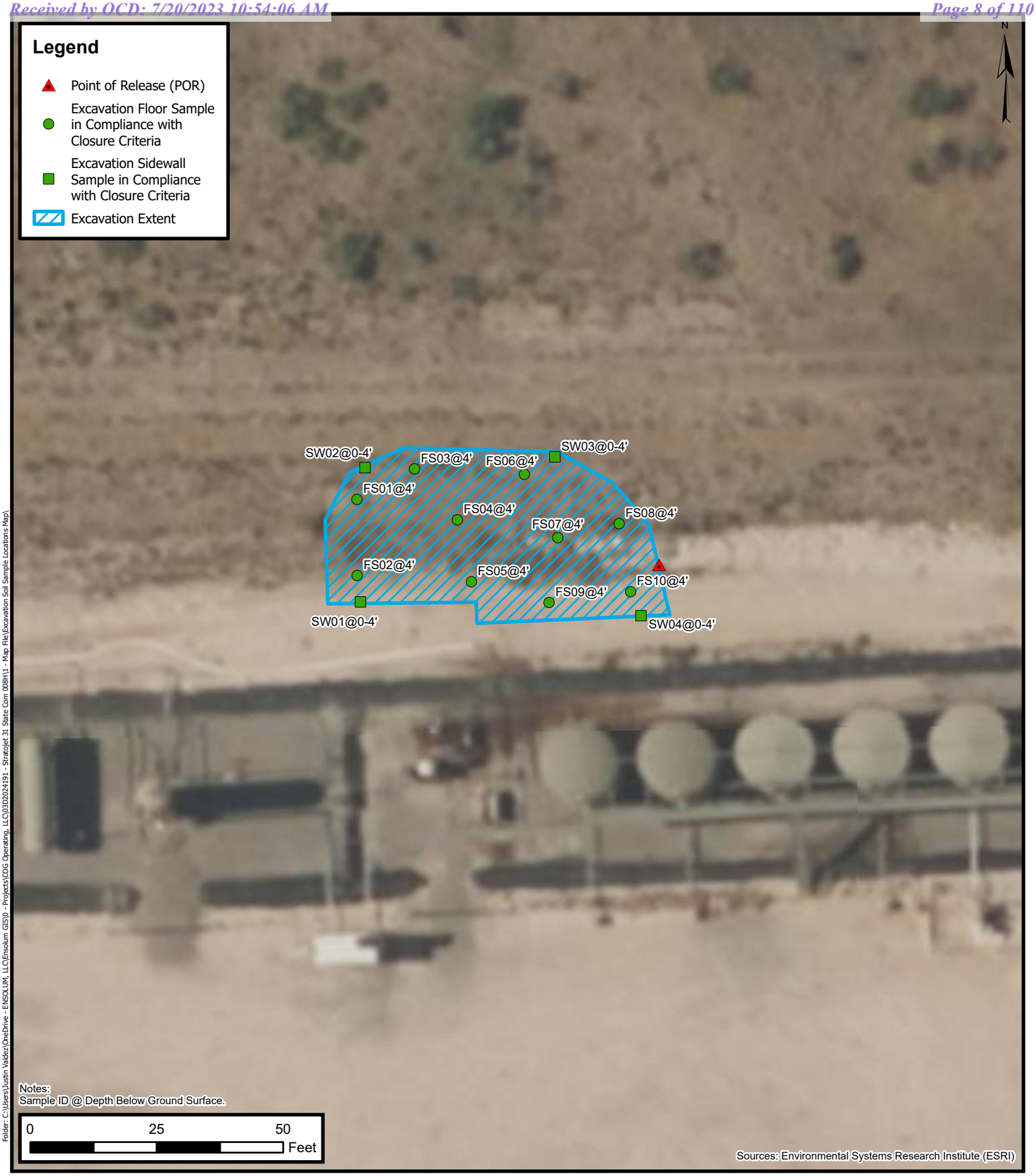
Folder: C:\Users\Wes Welchert\OneDrive - ENSOLUM, LLC\Ensolum_GIS\ConocoPhillips\

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Assessment Soil Sample Locations

COG Operating, LLC
Stratojet 31 State Com 008H
Incident Number: NAPP2314235805
Unit M, Sec 31, T20S R35E
Lea County, New Mexico

FIGURE 2



Folder: C:\Users\Justin Valdez\OneDrive - ENSOLUM, LLC\Ensolum GIS\0 - Projects\COG Operating, LLC\03202024191 - Stratojet 31 State Com 008H\1 - Map File\Excavation Soil Sample Locations Map\

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Excavation Soil Sample Locations

COG Operating, LLC
Stratojet 31 State Com 008H
Incident Number: NAPP2314235805
Unit M, Sec 31, T20S R35E
Lea County, New Mexico

FIGURE 3

ENSOLUM

TABLES

ENSOLUM

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Stratojet 31 State Com 008H
COG Operating, LLC
Lea 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	1,000	2,500	10,000
Assessment Soil Samples										
SS01*	5/22/2023	0.5	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	48.6
SS02*	5/22/2023	0.5	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	52.7
SS03*	5/22/2023	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	107
SS04*	5/22/2023	0.5	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	551
SS05*	5/22/2023	0.5	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	**15,400**
SS06*	5/22/2023	0.5	<0.00201	<0.00402	<50.0	51.5	<50.0	51.5	51.5	**15,700**
SS07*	5/22/2023	0.5	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	<49.8	**11,100**
Excavation Floor Soil Samples										
FS01	07/13/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
FS02	07/13/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
FS03	07/13/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
FS04	07/13/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
FS05	07/13/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
FS06	07/13/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
FS07	07/13/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
FS08	07/13/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
FS09	07/13/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	<16.0
FS10	07/13/2023	4	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	16.0

ENSOLUM

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Stratojet 31 State Com 008H
COG Operating, LLC
Lea 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	1,000	2,500	10,000
Excavation Sidewall Soil Samples										
SW01*	6/26/2023	0-4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	331
SW02*	6/26/2023	0-4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	290
SW03*	6/26/2023	0-4	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	314
SW04*	6/23/2023	0-4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	446

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

ENSOLUM

APPENDIX A

Referenced Well Records

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

site_no list =

- 323148103295801

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

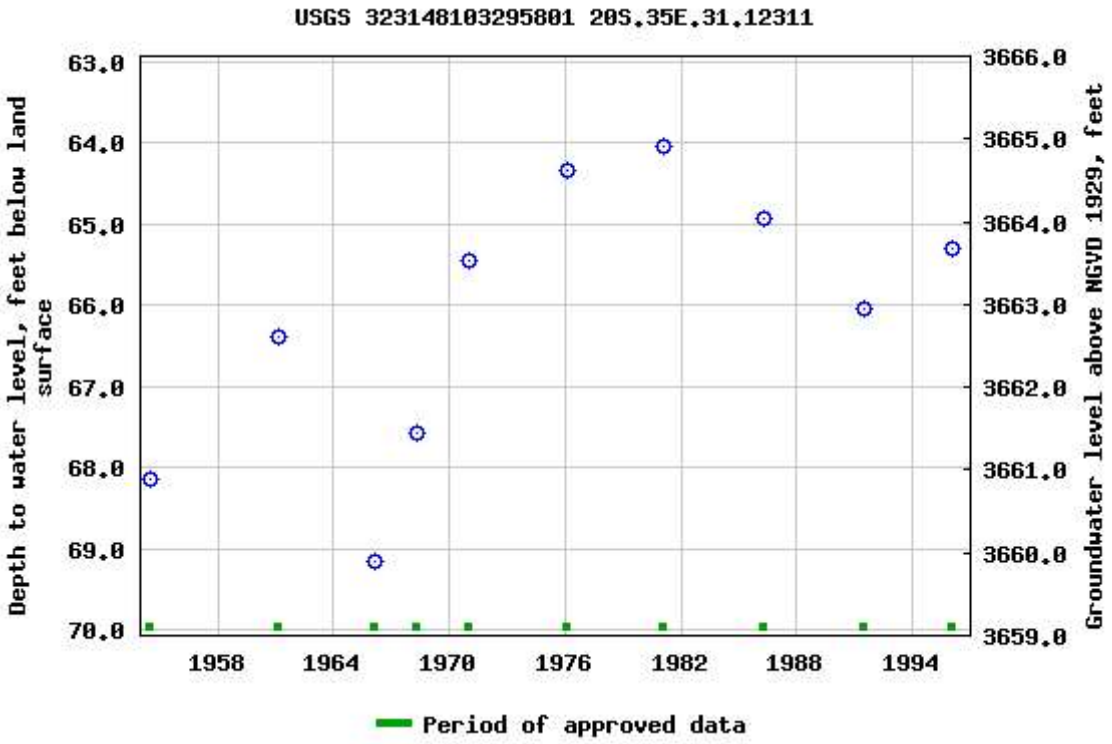
USGS 323148103295801 20S.35E.31.12311

Available data for this site | Groundwater: Field measurements | GO

Lea County, New Mexico
Hydrologic Unit Code 13070007
Latitude 32°32'06", Longitude 103°30'03" NAD27
Land-surface elevation 3,729.00 feet above NGVD29
The depth of the well is 85 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

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



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

Questions or Comments
Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
News

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: 2023-07-14 15:23:18 EDT
0.63 0.53 nadww01

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 =
- 323148103295801

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

USGS 323148103295801 20S.35E.31.12311

Lea County, New Mexico
Latitude 32°32'06", Longitude 103°30'03" NAD27
Land-surface elevation 3,729.00 feet above NGVD29
The depth of the well is 85 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Ogallala Formation (121OGLL) 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 measur
1954-06-25		D	62610		3660.85	NGVD29	P	Z		
1954-06-25		D	62611		3662.41	NAVD88	P	Z		
1954-06-25		D	72019	68.15			P	Z		
1961-03-08		D	62610		3662.62	NGVD29	P	Z		
1961-03-08		D	62611		3664.18	NAVD88	P	Z		
1961-03-08		D	72019	66.38			P	Z		
1966-03-02		D	62610		3659.84	NGVD29	P	Z		
1966-03-02		D	62611		3661.40	NAVD88	P	Z		
1966-03-02		D	72019	69.16			P	Z		
1968-04-17		D	62610		3661.43	NGVD29	P	Z		
1968-04-17		D	62611		3662.99	NAVD88	P	Z		
1968-04-17		D	72019	67.57			P	Z		
1971-01-26		D	62610		3663.55	NGVD29	1	Z		
1971-01-26		D	62611		3665.11	NAVD88	1	Z		
1971-01-26		D	72019	65.45			1	Z		
1976-02-18		D	62610		3664.67	NGVD29	1	Z		

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
1976-02-18		D	62611		3666.23	NAVD88	1		Z	
1976-02-18		D	72019	64.33			1		Z	
1981-02-18		D	62610		3664.97	NGVD29	1		Z	
1981-02-18		D	62611		3666.53	NAVD88	1		Z	
1981-02-18		D	72019	64.03			1		Z	
1986-04-09		D	62610		3664.07	NGVD29	1		Z	
1986-04-09		D	62611		3665.63	NAVD88	1		Z	
1986-04-09		D	72019	64.93			1		Z	
1991-07-03		D	62610		3662.96	NGVD29	1		Z	
1991-07-03		D	62611		3664.52	NAVD88	1		Z	
1991-07-03		D	72019	66.04			1		Z	
1996-02-02		D	62610		3663.71	NGVD29	1		S	
1996-02-02		D	62611		3665.27	NAVD88	1		S	
1996-02-02		D	72019	65.29			1		S	

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
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
Status	P	Pumping
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.

STATE ENGINEER OFFICE
ROSWELL, NEW MEXICO
2016 AUG -9 PM 1:12

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION

OSE POD NUMBER (WELL NUMBER)	OSE FILE NUMBER(S)
CP - 1334 (Dillon#1) *** Revised 07/25/2016 ***	
WELL OWNER NAME(S)	PHONE (OPTIONAL)
Lea Townsite or Berry Ranch/Glenn's Water Well Service, Inc.	575-398-2424
WELL OWNER MAILING ADDRESS	CITY / STATE / ZIP
P. O. Box 692	Tatum / NM / 88267

WELL LOCATION (FROM GPS)	DEGREES	MINUTES	SECONDS	
LATITUDE	32	31	39.48	N
LONGITUDE	-103	31	34.68	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

NW1/4NE1/4SE1/4 Sec. 35, T20S R34E on Berry Ranch Land

2. DRILLING & CASING INFORMATION

LICENSE NUMBER	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
WD 421	Corky Glenn	Glenn's Water Well Service, Inc.

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
06/21/14	07/01/14	1,258'	1,258'	1,104'

COMPLETED WELL IS: (•) ARTESIAN ( ) DRY HOLE ( ) SHALLOW (UNCONFINED)

STATIC WATER LEVEL IN COMPLETED WELL (FT): 732.8'

DRILLING FLUID: ( ) AIR (•) MUD ADDITIVES – SPECIFY:

DRILLING METHOD: ( ) ROTARY ( ) HAMMER ( ) CABLE TOOL ( ) OTHER – SPECIFY:

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	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
0'	40'	20"	16"	None	15 1/2"	.250	
0'	1,014'	14 3/4"	9 5/8"	Thread & Collar	8.921"	36 lbs.	None
936'	1,258'	8 3/4"	7" - 322'	Thread & Collar	6.5"	~~23 lbs.~~ .188	1/8"
			240' perforated				
			on bottom of liner				

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
0'	40'	20"	Cemented	2yds.	Top Pour
0'	1,014'	14 3/4"	Float and Shoe Cemented to Surface	740	Circulated

FOR OSE INTERNAL USE WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	CP-1334	POD NUMBER		TRN NUMBER	553178
LOCATION	20S.35E.35.4.2.3			Commercial	PAGE 1 OF 2

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)
1	20	20	Caliche	○ Y ◉ N	
20	90	70	Sand	○ Y ◉ N	
90	105	15	Sand	○ Y ◉ N	
105	115	10	Sand & Gravel	○ Y ◉ N	
115	138	23	Sand	○ Y ◉ N	
138	146	8	Red Clay	○ Y ◉ N	
146	980	834	Red & Brown Shale	○ Y ◉ N	
980	1014	34	Red & Brown Shale with some sandrock	○ Y ◉ N	
1014	1135	121	Shale with Stringers of sandrock	◉ Y ○ N	
1135	1235	100	Santa Rosa Sand (some shale stringers)	◉ Y ○ N	
1235	1258	23	Fine Santa Rosa Sand	◉ 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): 30

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:
0' to 1014' drilled with mud.
1014' to 1258' drilled with air and foam.

Went back in well on 07/21/16 & 07/22/16: Cleaned out & deepened. Installed 322' of 7" liner.

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

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 20 DAYS AFTER COMPLETION OF WELL DRILLING:

Corky Glenn Corky Glenn — SIGNATURE OF DRILLER / PRINT SIGNEE NAME

8/8/16 — DATE

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	CP-1334	POD NUMBER		TRN NUMBER	553178	
LOCATION	20S.35E.35.4.2.3			Commercial		PAGE 2 OF 2

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 New Mexico

Click to hide state-specific text

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 323022103285301

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

USGS 323022103285301 21S.34E.04.311331

Lea County, New Mexico
Latitude 32°30'50.1", Longitude 103°28'59.8" NAD83
Land-surface elevation 3,713 feet above NAVD88
The depth of the well is 125 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Chinle Formation (231CHNL) 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 measur
1981-03-11		D	62610		3625.09	NGVD29	1	Z		
1981-03-11		D	62611		3626.65	NAVD88	1	Z		
1981-03-11		D	72019	86.35			1	Z		
1986-03-21		D	62610		3622.97	NGVD29	1	Z		
1986-03-21		D	62611		3624.53	NAVD88	1	Z		
1986-03-21		D	72019	88.47			1	Z		
1991-05-01		D	62610		3621.34	NGVD29	1	Z		
1991-05-01		D	62611		3622.90	NAVD88	1	Z		
1991-05-01		D	72019	90.10			1	Z		
1996-03-13		D	62610		3620.30	NGVD29	1	S		
1996-03-13		D	62611		3621.86	NAVD88	1	S		
1996-03-13		D	72019	91.14			1	S		
2015-12-17	23:00 UTC	m	62610		3618.77	NGVD29	1	S	USGS	
2015-12-17	23:00 UTC	m	62611		3620.33	NAVD88	1	S	USGS	

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 measur
2015-12-17	23:00 UTC	m	72019	92.67			1	S	USGS	

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Water-level date-time accuracy	m	Date is accurate to the Minute
Parameter code	62610	Groundwater level above NGVD 1929, feet
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
Measuring agency	USGS	U.S. Geological Survey
Source of measurement		Not determined
Source of measurement	S	Measured by personnel of reporting agency.
Water-level approval status	A	Approved for publication -- Processing and review completed.

ENSOLUM

APPENDIX B

Photographic Log

ENSOLUM

Photographic Log
COG Operating, LLC
Stratojet 31 State Com 008H
Incident Number: NAPP2314235805

Photograph: 1 Date: 4/19/2023
Description: Initial Release
View: North

Photograph: 2 Date: 5/22/2023
Description: Initial Assessment Activities
View: Northwest

Photograph: 3 Date: 6/14/2023
Description: Excavation Activities
View: Southeast

Photograph: 4 Date: 6/26/2023
Description: Excavation Activities
View: East

ENSOLUM

APPENDIX C

Laboratory Analytical Reports & Chain of Custody Documentation

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Hadlie Green
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 5/31/2023 9:51:53 AM

JOB DESCRIPTION

Stratojet 31 State Com 8H
SDG NUMBER 03D2024191

JOB NUMBER

890-4709-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

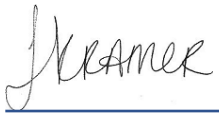
Eurofins Carlsbad

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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
5/31/2023 9:51:53 AM

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

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: Stratojet 31 State Com 8H

Job ID: 890-4709-1
SDG: 03D2024191

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
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: Stratojet 31 State Com 8H

Job ID: 890-4709-1
SDG: 03D2024191

Job ID: 890-4709-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-4709-1

Receipt
The samples were received on 5/23/2023 8:34 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 0.8°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: SS01 (890-4709-1), SS02 (890-4709-2), SS03 (890-4709-3), SS04 (890-4709-4), SS05 (890-4709-5), SS06 (890-4709-6) and SS07 (890-4709-7).

GC VOA
Method 8021B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 880-54206 recovered outside control limits for the following analytes: Benzene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (CCV 880-54206/11). 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 880-54098 and 880-54102 and analytical batch 880-54206 was outside the upper control limits.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-54206 recovered above the upper control limit for Benzene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (MB 880-54206/6). 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 surrogate recovery for the blank associated with preparation batch 880-54064 and analytical batch 880-54024 was outside the upper control limits.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-54080 and analytical batch 880-54026 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: SS03 (890-4709-3), SS04 (890-4709-4), SS05 (890-4709-5), SS06 (890-4709-6) and SS07 (890-4709-7). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-54056 and analytical batch 880-54097 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: Ensolum
Project/Site: Stratojet 31 State Com 8H

Job ID: 890-4709-1
SDG: 03D2024191

Client Sample ID: SS01

Lab Sample ID: 890-4709-1
Matrix: Solid
Date Collected: 05/22/23 15:00
Date Received: 05/23/23 08:34
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		05/24/23 15:24	05/27/23 10:31	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/24/23 15:24	05/27/23 10:31	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/24/23 15:24	05/27/23 10:31	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		05/24/23 15:24	05/27/23 10:31	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/24/23 15:24	05/27/23 10:31	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		05/24/23 15:24	05/27/23 10:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*	*05/24/23 15:24*	*05/27/23 10:31*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*05/24/23 15:24*	*05/27/23 10:31*	*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			05/31/23 10:19	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			05/25/23 10:20	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		05/24/23 12:15	05/25/23 05:33	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/24/23 12:15	05/25/23 05:33	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/24/23 12:15	05/25/23 05:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*107*		*70 - 130*	*05/24/23 12:15*	*05/25/23 05:33*	*1*
o-Terphenyl	*114*		*70 - 130*	*05/24/23 12:15*	*05/25/23 05:33*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**48.6**		5.00		mg/Kg			05/25/23 13:24	1

Client Sample ID: SS02

Lab Sample ID: 890-4709-2
Matrix: Solid
Date Collected: 05/22/23 14:30
Date Received: 05/23/23 08:34
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		05/24/23 15:24	05/27/23 13:07	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/24/23 15:24	05/27/23 13:07	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/24/23 15:24	05/27/23 13:07	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		05/24/23 15:24	05/27/23 13:07	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/24/23 15:24	05/27/23 13:07	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		05/24/23 15:24	05/27/23 13:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*	*05/24/23 15:24*	*05/27/23 13:07*	*1*

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: Stratojet 31 State Com 8H

Job ID: 890-4709-1
SDG: 03D2024191

Client Sample ID: SS02

Date Collected: 05/22/23 14:30
Date Received: 05/23/23 08:34
Sample Depth: 0.5'

Lab Sample ID: 890-4709-2
Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*05/24/23 15:24*	*05/27/23 13:07*	*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			05/31/23 10:19	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			05/25/23 11:47	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		05/24/23 12:56	05/24/23 22:00	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		05/24/23 12:56	05/24/23 22:00	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		05/24/23 12:56	05/24/23 22:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*127*		*70 - 130*	*05/24/23 12:56*	*05/24/23 22:00*	*1*
o-Terphenyl	*100*		*70 - 130*	*05/24/23 12:56*	*05/24/23 22:00*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**52.7**		5.00	mg/Kg			05/25/23 13:57	1

Client Sample ID: SS03

Date Collected: 05/22/23 14:35
Date Received: 05/23/23 08:34
Sample Depth: 0.5'

Lab Sample ID: 890-4709-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		05/24/23 15:24	05/27/23 13:34	1
Toluene	<0.00199	U	0.00199	mg/Kg		05/24/23 15:24	05/27/23 13:34	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		05/24/23 15:24	05/27/23 13:34	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		05/24/23 15:24	05/27/23 13:34	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		05/24/23 15:24	05/27/23 13:34	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		05/24/23 15:24	05/27/23 13:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*	*05/24/23 15:24*	*05/27/23 13:34*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*05/24/23 15:24*	*05/27/23 13:34*	*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			05/31/23 10:19	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			05/25/23 11:47	1

Client Sample Results

Client: Ensolum
Project/Site: Stratojet 31 State Com 8H

Job ID: 890-4709-1
SDG: 03D2024191

Client Sample ID: SS03

Lab Sample ID: 890-4709-3
Matrix: Solid
Date Collected: 05/22/23 14:35
Date Received: 05/23/23 08:34
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		05/24/23 12:56	05/24/23 23:05	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/24/23 12:56	05/24/23 23:05	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/24/23 12:56	05/24/23 23:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*133*	*S1+*	*70 - 130*	*05/24/23 12:56*	*05/24/23 23:05*	*1*
o-Terphenyl	*105*		*70 - 130*	*05/24/23 12:56*	*05/24/23 23:05*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**107**		5.04		mg/Kg			05/25/23 14:02	1

Client Sample ID: SS04

Lab Sample ID: 890-4709-4
Matrix: Solid
Date Collected: 05/22/23 14:40
Date Received: 05/23/23 08:34
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		05/24/23 15:24	05/27/23 14:01	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/24/23 15:24	05/27/23 14:01	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/24/23 15:24	05/27/23 14:01	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		05/24/23 15:24	05/27/23 14:01	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/24/23 15:24	05/27/23 14:01	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		05/24/23 15:24	05/27/23 14:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*05/24/23 15:24*	*05/27/23 14:01*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*05/24/23 15:24*	*05/27/23 14:01*	*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			05/31/23 10:19	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			05/25/23 11:47	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		05/24/23 12:56	05/24/23 23:26	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/24/23 12:56	05/24/23 23:26	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/24/23 12:56	05/24/23 23:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*134*	*S1+*	*70 - 130*	*05/24/23 12:56*	*05/24/23 23:26*	*1*
o-Terphenyl	*105*		*70 - 130*	*05/24/23 12:56*	*05/24/23 23:26*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Stratojet 31 State Com 8H

Job ID: 890-4709-1
SDG: 03D2024191

Client Sample ID: SS04

Lab Sample ID: 890-4709-4
Matrix: Solid
Date Collected: 05/22/23 14:40
Date Received: 05/23/23 08:34
Sample Depth: 0.5'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	551		5.02		mg/Kg			05/25/23 14:07	1

Client Sample ID: SS05

Lab Sample ID: 890-4709-5
Matrix: Solid
Date Collected: 05/22/23 14:45
Date Received: 05/23/23 08:34
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		05/24/23 15:24	05/27/23 15:47	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/24/23 15:24	05/27/23 15:47	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/24/23 15:24	05/27/23 15:47	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		05/24/23 15:24	05/27/23 15:47	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/24/23 15:24	05/27/23 15:47	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		05/24/23 15:24	05/27/23 15:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*	*05/24/23 15:24*	*05/27/23 15:47*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*05/24/23 15:24*	*05/27/23 15:47*	*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			05/31/23 10:19	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			05/25/23 11:47	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		05/24/23 12:56	05/24/23 23:48	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/24/23 12:56	05/24/23 23:48	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/24/23 12:56	05/24/23 23:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*132*	*S1+*	*70 - 130*	*05/24/23 12:56*	*05/24/23 23:48*	*1*
o-Terphenyl	*104*		*70 - 130*	*05/24/23 12:56*	*05/24/23 23:48*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	15400		100		mg/Kg			05/25/23 14:13	20

Client Sample Results

Client: Ensolum
Project/Site: Stratojet 31 State Com 8H

Job ID: 890-4709-1
SDG: 03D2024191

Client Sample ID: SS06

Lab Sample ID: 890-4709-6
Matrix: Solid
Date Collected: 05/22/23 14:50
Date Received: 05/23/23 08:34
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		05/24/23 15:24	05/27/23 16:14	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/24/23 15:24	05/27/23 16:14	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/24/23 15:24	05/27/23 16:14	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		05/24/23 15:24	05/27/23 16:14	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/24/23 15:24	05/27/23 16:14	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/24/23 15:24	05/27/23 16:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*05/24/23 15:24*	*05/27/23 16:14*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*05/24/23 15:24*	*05/27/23 16:14*	*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			05/31/23 10:19	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**51.5**		50.0		mg/Kg			05/25/23 11:47	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		05/24/23 12:56	05/25/23 00:09	1
Diesel Range Organics (Over C10-C28)	**51.5**		50.0		mg/Kg		05/24/23 12:56	05/25/23 00:09	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/24/23 12:56	05/25/23 00:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*133*	*S1+*	*70 - 130*	*05/24/23 12:56*	*05/25/23 00:09*	*1*
o-Terphenyl	*105*		*70 - 130*	*05/24/23 12:56*	*05/25/23 00:09*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**15700**		99.4		mg/Kg			05/25/23 14:18	20

Client Sample ID: SS07

Lab Sample ID: 890-4709-7
Matrix: Solid
Date Collected: 05/22/23 14:55
Date Received: 05/23/23 08:34
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		05/24/23 15:24	05/27/23 16:41	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/24/23 15:24	05/27/23 16:41	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/24/23 15:24	05/27/23 16:41	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		05/24/23 15:24	05/27/23 16:41	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/24/23 15:24	05/27/23 16:41	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/24/23 15:24	05/27/23 16:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*	*05/24/23 15:24*	*05/27/23 16:41*	*1*

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: Stratojet 31 State Com 8H

Job ID: 890-4709-1
SDG: 03D2024191

Client Sample ID: SS07

Date Collected: 05/22/23 14:55
Date Received: 05/23/23 08:34
Sample Depth: 0.5'

Lab Sample ID: 890-4709-7

Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*05/24/23 15:24*	*05/27/23 16:41*	*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			05/31/23 10:19	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			05/25/23 11:47	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		05/24/23 12:56	05/25/23 00:31	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		05/24/23 12:56	05/25/23 00:31	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/24/23 12:56	05/25/23 00:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*133*	*S1+*	*70 - 130*	*05/24/23 12:56*	*05/25/23 00:31*	*1*
o-Terphenyl	*105*		*70 - 130*	*05/24/23 12:56*	*05/25/23 00:31*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11100**	**F1**	99.0		mg/Kg			05/25/23 14:37	20

Surrogate Summary

Client: Ensolum
Project/Site: Stratojet 31 State Com 8H

Job ID: 890-4709-1
SDG: 03D2024191

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-4707-A-21-C MS	Matrix Spike	84	105
890-4707-A-21-D MSD	Matrix Spike Duplicate	85	98
890-4709-1	SS01	86	108
890-4709-2	SS02	87	96
890-4709-3	SS03	93	97
890-4709-4	SS04	94	102
890-4709-5	SS05	85	91
890-4709-6	SS06	94	101
890-4709-7	SS07	86	99
LCS 880-54098/1-A	Lab Control Sample	80	118
LCSD 880-54098/2-A	Lab Control Sample Dup	81	107
MB 880-54098/5-A	Method Blank	53 S1-	100
MB 880-54102/5-A	Method Blank	51 S1-	98

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-4709-1	SS01	107	114
890-4709-2	SS02	127	100
890-4709-2 MS	SS02	118	85
890-4709-2 MSD	SS02	121	87
890-4709-3	SS03	133 S1+	105
890-4709-4	SS04	134 S1+	105
890-4709-5	SS05	132 S1+	104
890-4709-6	SS06	133 S1+	105
890-4709-7	SS07	133 S1+	105
890-4711-A-1-E MS	Matrix Spike	105	100
890-4711-A-1-F MSD	Matrix Spike Duplicate	113	107
LCS 880-54064/2-A	Lab Control Sample	86	82
LCS 880-54080/2-A	Lab Control Sample	103	79
LCSD 880-54064/3-A	Lab Control Sample Dup	86	84
LCSD 880-54080/3-A	Lab Control Sample Dup	103	79
MB 880-54064/1-A	Method Blank	169 S1+	181 S1+
MB 880-54080/1-A	Method Blank	170 S1+	138 S1+

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Stratojet 31 State Com 8H

Job ID: 890-4709-1
SDG: 03D2024191

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-54098/5-A
Matrix: Solid
Analysis Batch: 54206

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 54098

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/24/23 15:24	05/27/23 07:23	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/24/23 15:24	05/27/23 07:23	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/24/23 15:24	05/27/23 07:23	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/24/23 15:24	05/27/23 07:23	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/24/23 15:24	05/27/23 07:23	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/24/23 15:24	05/27/23 07:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*53*	*S1-*	*70 - 130*	*05/24/23 15:24*	*05/27/23 07:23*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*05/24/23 15:24*	*05/27/23 07:23*	*1*

Lab Sample ID: LCS 880-54098/1-A
Matrix: Solid
Analysis Batch: 54206

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 54098

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1225		mg/Kg		123	70 - 130		
Toluene			0.100	0.1063		mg/Kg		106	70 - 130		
Ethylbenzene			0.100	0.1001		mg/Kg		100	70 - 130		
m-Xylene & p-Xylene			0.200	0.1944		mg/Kg		97	70 - 130		
o-Xylene			0.100	0.09737		mg/Kg		97	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*80*		*70 - 130*
1,4-Difluorobenzene (Surr)	*118*		*70 - 130*

Lab Sample ID: LCSD 880-54098/2-A
Matrix: Solid
Analysis Batch: 54206

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 54098

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1289		mg/Kg		129	70 - 130	5	35
Toluene			0.100	0.1105		mg/Kg		110	70 - 130	4	35
Ethylbenzene			0.100	0.1071		mg/Kg		107	70 - 130	7	35
m-Xylene & p-Xylene			0.200	0.2100		mg/Kg		105	70 - 130	8	35
o-Xylene			0.100	0.1070		mg/Kg		107	70 - 130	9	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*81*		*70 - 130*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*

Lab Sample ID: 890-4707-A-21-C MS
Matrix: Solid
Analysis Batch: 54206

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 54098

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U	0.0998	0.1210		mg/Kg		121	70 - 130		
Toluene	<0.00199	U	0.0998	0.1091		mg/Kg		109	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: Stratojet 31 State Com 8H

Job ID: 890-4709-1
SDG: 03D2024191

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

Lab Sample ID: 890-4707-A-21-C MS
Matrix: Solid
Analysis Batch: 54206

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 54098

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U	0.0998	0.1058		mg/Kg		106	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.200	0.2034		mg/Kg		102	70 - 130
o-Xylene	<0.00199	U	0.0998	0.1001		mg/Kg		100	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*84*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: 890-4707-A-21-D MSD
Matrix: Solid
Analysis Batch: 54206

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 54098

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	0.1191		mg/Kg		119	70 - 130	2	35
Toluene	<0.00199	U	0.100	0.1091		mg/Kg		109	70 - 130	0	35
Ethylbenzene	<0.00199	U	0.100	0.1025		mg/Kg		102	70 - 130	3	35
m-Xylene & p-Xylene	<0.00398	U	0.201	0.1976		mg/Kg		98	70 - 130	3	35
o-Xylene	<0.00199	U	0.100	0.09868		mg/Kg		98	70 - 130	1	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: MB 880-54102/5-A
Matrix: Solid
Analysis Batch: 54206

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 54102

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		05/24/23 15:59	05/26/23 17:47	1
Toluene	<0.00200	U	0.00200	mg/Kg		05/24/23 15:59	05/26/23 17:47	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		05/24/23 15:59	05/26/23 17:47	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		05/24/23 15:59	05/26/23 17:47	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		05/24/23 15:59	05/26/23 17:47	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		05/24/23 15:59	05/26/23 17:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*51*	*S1-*	*70 - 130*	*05/24/23 15:59*	*05/26/23 17:47*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*05/24/23 15:59*	*05/26/23 17:47*	*1*

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

Lab Sample ID: MB 880-54064/1-A
Matrix: Solid
Analysis Batch: 54024

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 54064

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		05/24/23 12:15	05/24/23 20:53	1

QC Sample Results

Client: Ensolum
Project/Site: Stratojet 31 State Com 8H

Job ID: 890-4709-1
SDG: 03D2024191

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

Lab Sample ID: MB 880-54064/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 54024 — **Prep Batch: 54064**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/24/23 12:15	05/24/23 20:53	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/24/23 12:15	05/24/23 20:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*169*	*S1+*	*70 - 130*	*05/24/23 12:15*	*05/24/23 20:53*	*1*
o-Terphenyl	*181*	*S1+*	*70 - 130*	*05/24/23 12:15*	*05/24/23 20:53*	*1*

Lab Sample ID: LCS 880-54064/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 54024 — **Prep Batch: 54064**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	973.2		mg/Kg		97	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	984.0		mg/Kg		98	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*86*		*70 - 130*
o-Terphenyl	*82*		*70 - 130*

Lab Sample ID: LCSD 880-54064/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 54024 — **Prep Batch: 54064**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	958.6		mg/Kg		96	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	1005		mg/Kg		100	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*86*		*70 - 130*
o-Terphenyl	*84*		*70 - 130*

Lab Sample ID: 890-4711-A-1-E MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 54024 — **Prep Batch: 54064**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	999	970.9		mg/Kg		95	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.8	U	999	934.2		mg/Kg		91	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*105*		*70 - 130*
o-Terphenyl	*100*		*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: Stratojet 31 State Com 8H

Job ID: 890-4709-1
SDG: 03D2024191

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

Lab Sample ID: 890-4711-A-1-F MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 54024 — **Prep Batch: 54064**

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	<49.8	U	997	1025		mg/Kg		100	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	<49.8	U	997	1015		mg/Kg		99	70 - 130	8	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*113*		*70 - 130*
o-Terphenyl	*107*		*70 - 130*

Lab Sample ID: MB 880-54080/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 54026 — **Prep Batch: 54080**

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		05/24/23 12:56	05/24/23 20:56	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/24/23 12:56	05/24/23 20:56	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/24/23 12:56	05/24/23 20:56	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*170*	*S1+*	*70 - 130*	*05/24/23 12:56*	*05/24/23 20:56*	*1*
o-Terphenyl	*138*	*S1+*	*70 - 130*	*05/24/23 12:56*	*05/24/23 20:56*	*1*

Lab Sample ID: LCS 880-54080/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 54026 — **Prep Batch: 54080**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	916.4		mg/Kg		92	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	954.6		mg/Kg		95	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*103*		*70 - 130*
o-Terphenyl	*79*		*70 - 130*

Lab Sample ID: LCSD 880-54080/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 54026 — **Prep Batch: 54080**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	853.2		mg/Kg		85	70 - 130	7	20
Diesel Range Organics (Over C10-C28)			1000	878.9		mg/Kg		88	70 - 130	8	20

QC Sample Results

Client: Ensolum
Project/Site: Stratojet 31 State Com 8H

Job ID: 890-4709-1
SDG: 03D2024191

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

Lab Sample ID: LCSD 880-54080/3-A
Matrix: Solid
Analysis Batch: 54026

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 54080

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	103		70 - 130
o-Terphenyl	79		70 - 130

Lab Sample ID: 890-4709-2 MS
Matrix: Solid
Analysis Batch: 54026

Client Sample ID: SS02
Prep Type: Total/NA
Prep Batch: 54080

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	996	876.3		mg/Kg		88	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	996	788.5		mg/Kg		79	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	118		70 - 130
o-Terphenyl	85		70 - 130

Lab Sample ID: 890-4709-2 MSD
Matrix: Solid
Analysis Batch: 54026

Client Sample ID: SS02
Prep Type: Total/NA
Prep Batch: 54080

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	888.8		mg/Kg		89	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<49.9	U	996	815.5		mg/Kg		82	70 - 130	3	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	121		70 - 130
o-Terphenyl	87		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-54056/1-A
Matrix: Solid
Analysis Batch: 54097

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			05/25/23 12:17	1

Lab Sample ID: LCS 880-54056/2-A
Matrix: Solid
Analysis Batch: 54097

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride			250	258.5		mg/Kg		103	90 - 110

QC Sample Results

Client: Ensolum
Project/Site: Stratojet 31 State Com 8H

Job ID: 890-4709-1
SDG: 03D2024191

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-54056/3-A
Matrix: Solid
Analysis Batch: 54097

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	257.5		mg/Kg		103	90 - 110	0	20

Lab Sample ID: 890-4709-7 MS
Matrix: Solid
Analysis Batch: 54097

Client Sample ID: SS07
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	11100	F1	4950	17090	F1	mg/Kg		121	90 - 110

Lab Sample ID: 890-4709-7 MSD
Matrix: Solid
Analysis Batch: 54097

Client Sample ID: SS07
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	11100	F1	4950	16850	F1	mg/Kg		116	90 - 110	1	20

QC Association Summary

Client: Ensolum
Project/Site: Stratojet 31 State Com 8H

Job ID: 890-4709-1
SDG: 03D2024191

GC VOA

Prep Batch: 54098

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4709-1	SS01	Total/NA	Solid	5035	
890-4709-2	SS02	Total/NA	Solid	5035	
890-4709-3	SS03	Total/NA	Solid	5035	
890-4709-4	SS04	Total/NA	Solid	5035	
890-4709-5	SS05	Total/NA	Solid	5035	
890-4709-6	SS06	Total/NA	Solid	5035	
890-4709-7	SS07	Total/NA	Solid	5035	
MB 880-54098/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-54098/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-54098/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-4707-A-21-C MS	Matrix Spike	Total/NA	Solid	5035	
890-4707-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 54102

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-54102/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 54206

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4709-1	SS01	Total/NA	Solid	8021B	54098
890-4709-2	SS02	Total/NA	Solid	8021B	54098
890-4709-3	SS03	Total/NA	Solid	8021B	54098
890-4709-4	SS04	Total/NA	Solid	8021B	54098
890-4709-5	SS05	Total/NA	Solid	8021B	54098
890-4709-6	SS06	Total/NA	Solid	8021B	54098
890-4709-7	SS07	Total/NA	Solid	8021B	54098
MB 880-54098/5-A	Method Blank	Total/NA	Solid	8021B	54098
MB 880-54102/5-A	Method Blank	Total/NA	Solid	8021B	54102
LCS 880-54098/1-A	Lab Control Sample	Total/NA	Solid	8021B	54098
LCSD 880-54098/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	54098
890-4707-A-21-C MS	Matrix Spike	Total/NA	Solid	8021B	54098
890-4707-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	54098

Analysis Batch: 54478

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4709-1	SS01	Total/NA	Solid	Total BTEX	
890-4709-2	SS02	Total/NA	Solid	Total BTEX	
890-4709-3	SS03	Total/NA	Solid	Total BTEX	
890-4709-4	SS04	Total/NA	Solid	Total BTEX	
890-4709-5	SS05	Total/NA	Solid	Total BTEX	
890-4709-6	SS06	Total/NA	Solid	Total BTEX	
890-4709-7	SS07	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 54024

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4709-1	SS01	Total/NA	Solid	8015B NM	54064
MB 880-54064/1-A	Method Blank	Total/NA	Solid	8015B NM	54064
LCS 880-54064/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	54064
LCSD 880-54064/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	54064

QC Association Summary

Client: Ensolum
Project/Site: Stratojet 31 State Com 8H

Job ID: 890-4709-1
SDG: 03D2024191

GC Semi VOA (Continued)

Analysis Batch: 54024 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4711-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	54064
890-4711-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	54064

Analysis Batch: 54026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4709-2	SS02	Total/NA	Solid	8015B NM	54080
890-4709-3	SS03	Total/NA	Solid	8015B NM	54080
890-4709-4	SS04	Total/NA	Solid	8015B NM	54080
890-4709-5	SS05	Total/NA	Solid	8015B NM	54080
890-4709-6	SS06	Total/NA	Solid	8015B NM	54080
890-4709-7	SS07	Total/NA	Solid	8015B NM	54080
MB 880-54080/1-A	Method Blank	Total/NA	Solid	8015B NM	54080
LCS 880-54080/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	54080
LCSD 880-54080/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	54080
890-4709-2 MS	SS02	Total/NA	Solid	8015B NM	54080
890-4709-2 MSD	SS02	Total/NA	Solid	8015B NM	54080

Prep Batch: 54064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4709-1	SS01	Total/NA	Solid	8015NM Prep	
MB 880-54064/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-54064/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-54064/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-4711-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-4711-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 54080

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4709-2	SS02	Total/NA	Solid	8015NM Prep	
890-4709-3	SS03	Total/NA	Solid	8015NM Prep	
890-4709-4	SS04	Total/NA	Solid	8015NM Prep	
890-4709-5	SS05	Total/NA	Solid	8015NM Prep	
890-4709-6	SS06	Total/NA	Solid	8015NM Prep	
890-4709-7	SS07	Total/NA	Solid	8015NM Prep	
MB 880-54080/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-54080/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-54080/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-4709-2 MS	SS02	Total/NA	Solid	8015NM Prep	
890-4709-2 MSD	SS02	Total/NA	Solid	8015NM Prep	

Analysis Batch: 54159

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4709-1	SS01	Total/NA	Solid	8015 NM	
890-4709-2	SS02	Total/NA	Solid	8015 NM	
890-4709-3	SS03	Total/NA	Solid	8015 NM	
890-4709-4	SS04	Total/NA	Solid	8015 NM	
890-4709-5	SS05	Total/NA	Solid	8015 NM	
890-4709-6	SS06	Total/NA	Solid	8015 NM	
890-4709-7	SS07	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Ensolum
Project/Site: Stratojet 31 State Com 8H

Job ID: 890-4709-1
SDG: 03D2024191

HPLC/IC

Leach Batch: 54056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4709-1	SS01	Soluble	Solid	DI Leach	
890-4709-2	SS02	Soluble	Solid	DI Leach	
890-4709-3	SS03	Soluble	Solid	DI Leach	
890-4709-4	SS04	Soluble	Solid	DI Leach	
890-4709-5	SS05	Soluble	Solid	DI Leach	
890-4709-6	SS06	Soluble	Solid	DI Leach	
890-4709-7	SS07	Soluble	Solid	DI Leach	
MB 880-54056/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-54056/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-54056/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4709-7 MS	SS07	Soluble	Solid	DI Leach	
890-4709-7 MSD	SS07	Soluble	Solid	DI Leach	

Analysis Batch: 54097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4709-1	SS01	Soluble	Solid	300.0	54056
890-4709-2	SS02	Soluble	Solid	300.0	54056
890-4709-3	SS03	Soluble	Solid	300.0	54056
890-4709-4	SS04	Soluble	Solid	300.0	54056
890-4709-5	SS05	Soluble	Solid	300.0	54056
890-4709-6	SS06	Soluble	Solid	300.0	54056
890-4709-7	SS07	Soluble	Solid	300.0	54056
MB 880-54056/1-A	Method Blank	Soluble	Solid	300.0	54056
LCS 880-54056/2-A	Lab Control Sample	Soluble	Solid	300.0	54056
LCSD 880-54056/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	54056
890-4709-7 MS	SS07	Soluble	Solid	300.0	54056
890-4709-7 MSD	SS07	Soluble	Solid	300.0	54056

Lab Chronicle

Client: Ensolum
Project/Site: Stratojet 31 State Com 8H

Job ID: 890-4709-1
SDG: 03D2024191

Client Sample ID: SS01

Date Collected: 05/22/23 15:00
Date Received: 05/23/23 08:34

Lab Sample ID: 890-4709-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	54098	05/24/23 15:24	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54206	05/27/23 10:31	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			54478	05/31/23 10:19	SM	EET MID
Total/NA	Analysis	8015 NM		1			54159	05/25/23 10:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	54064	05/24/23 12:15	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54024	05/25/23 05:33	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	54056	05/24/23 11:18	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	54097	05/25/23 13:24	CH	EET MID

Client Sample ID: SS02

Date Collected: 05/22/23 14:30
Date Received: 05/23/23 08:34

Lab Sample ID: 890-4709-2
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			5.01 g	5 mL	54098	05/24/23 15:24	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54206	05/27/23 13:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			54478	05/31/23 10:19	SM	EET MID
Total/NA	Analysis	8015 NM		1			54159	05/25/23 11:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	54080	05/24/23 12:56	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54026	05/24/23 22:00	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	54056	05/24/23 11:18	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	54097	05/25/23 13:57	CH	EET MID

Client Sample ID: SS03

Date Collected: 05/22/23 14:35
Date Received: 05/23/23 08:34

Lab Sample ID: 890-4709-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	54098	05/24/23 15:24	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54206	05/27/23 13:34	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			54478	05/31/23 10:19	SM	EET MID
Total/NA	Analysis	8015 NM		1			54159	05/25/23 11:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	54080	05/24/23 12:56	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54026	05/24/23 23:05	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	54056	05/24/23 11:18	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	54097	05/25/23 14:02	CH	EET MID

Client Sample ID: SS04

Date Collected: 05/22/23 14:40
Date Received: 05/23/23 08:34

Lab Sample ID: 890-4709-4
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			5.05 g	5 mL	54098	05/24/23 15:24	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54206	05/27/23 14:01	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			54478	05/31/23 10:19	SM	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: Stratojet 31 State Com 8H

Job ID: 890-4709-1
SDG: 03D2024191

Client Sample ID: SS04

Date Collected: 05/22/23 14:40
Date Received: 05/23/23 08:34

Lab Sample ID: 890-4709-4
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			54159	05/25/23 11:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	54080	05/24/23 12:56	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54026	05/24/23 23:26	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	54056	05/24/23 11:18	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	54097	05/25/23 14:07	CH	EET MID

Client Sample ID: SS05

Date Collected: 05/22/23 14:45
Date Received: 05/23/23 08:34

Lab Sample ID: 890-4709-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	54098	05/24/23 15:24	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54206	05/27/23 15:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			54478	05/31/23 10:19	SM	EET MID
Total/NA	Analysis	8015 NM		1			54159	05/25/23 11:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	54080	05/24/23 12:56	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54026	05/24/23 23:48	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	54056	05/24/23 11:18	KS	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	54097	05/25/23 14:13	CH	EET MID

Client Sample ID: SS06

Date Collected: 05/22/23 14:50
Date Received: 05/23/23 08:34

Lab Sample ID: 890-4709-6
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			4.97 g	5 mL	54098	05/24/23 15:24	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54206	05/27/23 16:14	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			54478	05/31/23 10:19	SM	EET MID
Total/NA	Analysis	8015 NM		1			54159	05/25/23 11:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	54080	05/24/23 12:56	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54026	05/25/23 00:09	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	54056	05/24/23 11:18	KS	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	54097	05/25/23 14:18	CH	EET MID

Client Sample ID: SS07

Date Collected: 05/22/23 14:55
Date Received: 05/23/23 08:34

Lab Sample ID: 890-4709-7
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			4.98 g	5 mL	54098	05/24/23 15:24	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	54206	05/27/23 16:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			54478	05/31/23 10:19	SM	EET MID
Total/NA	Analysis	8015 NM		1			54159	05/25/23 11:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	54080	05/24/23 12:56	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	54026	05/25/23 00:31	SM	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: Stratojet 31 State Com 8H

Job ID: 890-4709-1
SDG: 03D2024191

Client Sample ID: SS07

Date Collected: 05/22/23 14:55
Date Received: 05/23/23 08:34

Lab Sample ID: 890-4709-7

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.05 g	50 mL	54056	05/24/23 11:18	KS	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	54097	05/25/23 14:37	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: Stratojet 31 State Com 8H

Job ID: 890-4709-1
SDG: 03D2024191

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: Stratojet 31 State Com 8H

Job ID: 890-4709-1
SDG: 03D2024191

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: Stratojet 31 State Com 8H

Job ID: 890-4709-1
SDG: 03D2024191

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-4709-1	SS01	Solid	05/22/23 15:00	05/23/23 08:34	0.5'
890-4709-2	SS02	Solid	05/22/23 14:30	05/23/23 08:34	0.5'
890-4709-3	SS03	Solid	05/22/23 14:35	05/23/23 08:34	0.5'
890-4709-4	SS04	Solid	05/22/23 14:40	05/23/23 08:34	0.5'
890-4709-5	SS05	Solid	05/22/23 14:45	05/23/23 08:34	0.5'
890-4709-6	SS06	Solid	05/22/23 14:50	05/23/23 08:34	0.5'
890-4709-7	SS07	Solid	05/22/23 14:55	05/23/23 08:34	0.5'

eurofins | Environment Testing Xenco

Chain of Custody

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

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Hadlie Green	Bill to: (if different)	Kalei Jennings
Company Name:	Ensolum LLC	Company Name:	Ensolum LLC
Address:	3122 National Parks Hwy	Address:	
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	
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:	Stratojet 31 State Com 8H	Turn Around	☑ Routine ☐ Rush
Project Number:	03D2024191	Due Date:	5 Day
Project Location:	32.5248, -103.5029	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Ronni Hayes		
Cost Center #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	TM-007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	1.0
Total Containers:		Corrected Temperature:	0.8

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	Parameters: CHLORIDES (EPA: 300.0)	BTEX	TPH	Sample Comments
SS01	S	5/22/2023	1500	0.5'	Grab	1		X	X	X	
SS02	S	5/22/2023	1430	0.5'	Grab	1		X	X	X	
SS03	S	5/22/2023	1435	0.5'	Grab	1		X	X	X	
SS04	S	5/22/2023	1440	0.5'	Grab	1		X	X	X	
SS05	S	5/22/2023	1445	0.5'	Grab	1		X	X	X	
SS06	S	5/22/2023	1450	0.5'	Grab	1		X	X	X	
SS07	S	5/22/2023	1455	0.5'	Grab	1		X	X	X	

890-4709 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		5/23/22 915am	2		
3		5/23/23 0834	4		
5			6		

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4709-1
SDG Number: 03D2024191

Login Number: 4709
List Number: 1
Creator: Stutzman, Amanda

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4709-1
SDG Number: 03D2024191

Login Number: 4709
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 05/24/23 10:58 AM

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

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Hadlie Green
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 7/6/2023 10:05:35 AM Revision 1

JOB DESCRIPTION

Stratojet 31 State Com 8H
SDG NUMBER 03D2024191

JOB NUMBER

890-4863-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

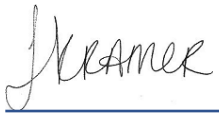
Eurofins Carlsbad

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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
7/6/2023 10:05:35 AM
Revision 1

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

Client: Ensolum
Project/Site: Stratojet 31 State Com 8H

Laboratory Job ID: 890-4863-1
SDG: 03D2024191

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: Stratojet 31 State Com 8H

Job ID: 890-4863-1
SDG: 03D2024191

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

GC Semi VOA

Qualifier	Qualifier Description
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: Stratojet 31 State Com 8H

Job ID: 890-4863-1
SDG: 03D2024191

Job ID: 890-4863-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-4863-1

REVISION

The report being provided is a revision of the original report sent on 7/3/2023. The report (revision 1) is being revised due to Per client email, requesting chloride re run on SW04.

Receipt
The samples were received on 6/26/2023 2:35 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 3.4°C

Receipt Exceptions
The following were received and analyzed from an unpreserved bulk soil jar: SW01 (890-4863-1), SW02 (890-4863-2), SW03 (890-4863-3) and SW04 (890-4863-4).

GC VOA
Method 8021B: The laboratory control sample duplicate (LCSD) for preparation batch 880-56543 and analytical batch 880-56598 recovered outside control limits for the following analytes: Benzene, Toluene, Ethylbenzene and m-Xylene & p-Xylene. Since only an acceptable LCS is required per the method, the data has been qualified and reported.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (MB 880-56543/5-A). Evidence of matrix interferences is not obvious.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-56543 and analytical batch 880-56598 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.

Method 8021B: Surrogate recovery for the following samples were outside control limits: (880-30176-A-3-D) and (880-30176-A-3-B MS). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: SW04 (890-4863-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (890-4871-A-5-B). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The continuing calibration verification (CCV) associated with batch 880-56452 recovered below the lower control limit for Diesel Range Organics (Over C10-C28). An acceptable CCV was ran within the 12 hour window, therefore the data has been qualified and reported. The associated sample is impacted: (CCV 880-56452/31).

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: Stratojet 31 State Com 8H

Job ID: 890-4863-1
SDG: 03D2024191

Client Sample ID: SW01

Date Collected: 06/26/23 09:15
Date Received: 06/26/23 14:35
Sample Depth: 0 - 4

Lab Sample ID: 890-4863-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *+	0.00199		mg/Kg		06/29/23 08:45	06/29/23 19:17	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/29/23 08:45	06/29/23 19:17	1
Ethylbenzene	<0.00199	U *+	0.00199		mg/Kg		06/29/23 08:45	06/29/23 19:17	1
m-Xylene & p-Xylene	<0.00398	U *+	0.00398		mg/Kg		06/29/23 08:45	06/29/23 19:17	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		06/29/23 08:45	06/29/23 19:17	1
Xylenes, Total	<0.00398	U *+	0.00398		mg/Kg		06/29/23 08:45	06/29/23 19:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*	*06/29/23 08:45*	*06/29/23 19:17*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*06/29/23 08:45*	*06/29/23 19:17*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			06/30/23 15:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			06/29/23 09:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		06/28/23 13:54	06/29/23 05:03	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/28/23 13:54	06/29/23 05:03	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/28/23 13:54	06/29/23 05:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*06/28/23 13:54*	*06/29/23 05:03*	*1*
o-Terphenyl	*94*		*70 - 130*	*06/28/23 13:54*	*06/29/23 05:03*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**331**		5.04		mg/Kg			06/28/23 16:07	1

Client Sample ID: SW02

Date Collected: 06/26/23 09:25
Date Received: 06/26/23 14:35
Sample Depth: 0 - 4

Lab Sample ID: 890-4863-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *+	0.00199		mg/Kg		06/29/23 08:45	06/29/23 19:44	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/29/23 08:45	06/29/23 19:44	1
Ethylbenzene	<0.00199	U *+	0.00199		mg/Kg		06/29/23 08:45	06/29/23 19:44	1
m-Xylene & p-Xylene	<0.00398	U *+	0.00398		mg/Kg		06/29/23 08:45	06/29/23 19:44	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		06/29/23 08:45	06/29/23 19:44	1
Xylenes, Total	<0.00398	U *+	0.00398		mg/Kg		06/29/23 08:45	06/29/23 19:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*06/29/23 08:45*	*06/29/23 19:44*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Stratojet 31 State Com 8H

Job ID: 890-4863-1
SDG: 03D2024191

Client Sample ID: SW02

Date Collected: 06/26/23 09:25
Date Received: 06/26/23 14:35
Sample Depth: 0 - 4

Lab Sample ID: 890-4863-2

Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*	*06/29/23 08:45*	*06/29/23 19:44*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			06/30/23 15:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			06/29/23 09:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/28/23 13:54	06/29/23 05:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/28/23 13:54	06/29/23 05:25	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/28/23 13:54	06/29/23 05:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*06/28/23 13:54*	*06/29/23 05:25*	*1*
o-Terphenyl	*108*		*70 - 130*	*06/28/23 13:54*	*06/29/23 05:25*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**290**		4.98		mg/Kg			06/28/23 16:12	1

Client Sample ID: SW03

Date Collected: 06/26/23 09:45
Date Received: 06/26/23 14:35
Sample Depth: 0 - 4

Lab Sample ID: 890-4863-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U *+	0.00198		mg/Kg		06/29/23 08:45	06/29/23 20:10	1
Toluene	<0.00198	U	0.00198		mg/Kg		06/29/23 08:45	06/29/23 20:10	1
Ethylbenzene	<0.00198	U *+	0.00198		mg/Kg		06/29/23 08:45	06/29/23 20:10	1
m-Xylene & p-Xylene	<0.00396	U *+	0.00396		mg/Kg		06/29/23 08:45	06/29/23 20:10	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		06/29/23 08:45	06/29/23 20:10	1
Xylenes, Total	<0.00396	U *+	0.00396		mg/Kg		06/29/23 08:45	06/29/23 20:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*06/29/23 08:45*	*06/29/23 20:10*	*1*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*	*06/29/23 08:45*	*06/29/23 20:10*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			06/30/23 15:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			06/29/23 09:22	1

Client Sample Results

Client: Ensolum
Project/Site: Stratojet 31 State Com 8H

Job ID: 890-4863-1
SDG: 03D2024191

Client Sample ID: SW03
Date Collected: 06/26/23 09:45
Date Received: 06/26/23 14:35
Sample Depth: 0 - 4

Lab Sample ID: 890-4863-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/28/23 13:54	06/29/23 05:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/28/23 13:54	06/29/23 05:47	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/28/23 13:54	06/29/23 05:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*06/28/23 13:54*	*06/29/23 05:47*	*1*
o-Terphenyl	*100*		*70 - 130*	*06/28/23 13:54*	*06/29/23 05:47*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**314**		5.00		mg/Kg			06/28/23 16:17	1

Client Sample ID: SW04
Date Collected: 06/26/23 09:55
Date Received: 06/26/23 14:35
Sample Depth: 0 - 4

Lab Sample ID: 890-4863-4
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		06/30/23 08:34	06/30/23 22:26	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/30/23 08:34	06/30/23 22:26	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		06/30/23 08:34	06/30/23 22:26	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		06/30/23 08:34	06/30/23 22:26	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		06/30/23 08:34	06/30/23 22:26	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		06/30/23 08:34	06/30/23 22:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*134*	*S1+*	*70 - 130*	*06/30/23 08:34*	*06/30/23 22:26*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*06/30/23 08:34*	*06/30/23 22:26*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			07/03/23 01:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			06/29/23 09:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		06/28/23 13:54	06/29/23 06:09	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		06/28/23 13:54	06/29/23 06:09	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		06/28/23 13:54	06/29/23 06:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*06/28/23 13:54*	*06/29/23 06:09*	*1*
o-Terphenyl	*94*		*70 - 130*	*06/28/23 13:54*	*06/29/23 06:09*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Stratojet 31 State Com 8H

Job ID: 890-4863-1
SDG: 03D2024191

Client Sample ID: SW04

Date Collected: 06/26/23 09:55
Date Received: 06/26/23 14:35
Sample Depth: 0 - 4

Lab Sample ID: 890-4863-4

Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	446		4.99		mg/Kg			07/05/23 16:10	1

Surrogate Summary

Client: Ensolum
Project/Site: Stratojet 31 State Com 8H

Job ID: 890-4863-1
SDG: 03D2024191

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)
880-30148-A-4-C MS	Matrix Spike	106	84
880-30148-A-4-D MSD	Matrix Spike Duplicate	104	88
880-30176-A-3-B MS	Matrix Spike	136 S1+	98
880-30176-A-3-C MSD	Matrix Spike Duplicate	112	83
890-4863-1	SW01	126	87
890-4863-2	SW02	118	84
890-4863-3	SW03	118	84
890-4863-4	SW04	134 S1+	90
LCS 880-56543/1-A	Lab Control Sample	105	77
LCS 880-56654/1-A	Lab Control Sample	106	91
LCSD 880-56543/2-A	Lab Control Sample Dup	110	99
LCSD 880-56654/2-A	Lab Control Sample Dup	120	90
MB 880-56543/5-A	Method Blank	63 S1-	86
MB 880-56654/5-A	Method Blank	71	87

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-4863-1	SW01	87	94
890-4863-2	SW02	102	108
890-4863-3	SW03	91	100
890-4863-4	SW04	88	94
890-4871-A-5-C MS	Matrix Spike	90	91
890-4871-A-5-D MSD	Matrix Spike Duplicate	93	92
LCS 880-56504/2-A	Lab Control Sample	92	101
LCSD 880-56504/3-A	Lab Control Sample Dup	85	92
MB 880-56504/1-A	Method Blank	94	105

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Stratojet 31 State Com 8H

Job ID: 890-4863-1
SDG: 03D2024191

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-56543/5-A
Matrix: Solid
Analysis Batch: 56598

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 56543

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/29/23 08:45	06/29/23 16:14	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/29/23 08:45	06/29/23 16:14	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/29/23 08:45	06/29/23 16:14	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/29/23 08:45	06/29/23 16:14	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/29/23 08:45	06/29/23 16:14	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/29/23 08:45	06/29/23 16:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*63*	*S1-*	*70 - 130*	*06/29/23 08:45*	*06/29/23 16:14*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*06/29/23 08:45*	*06/29/23 16:14*	*1*

Lab Sample ID: LCS 880-56543/1-A
Matrix: Solid
Analysis Batch: 56598

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 56543

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1295		mg/Kg		130	70 - 130
Toluene	0.100	0.1263		mg/Kg		126	70 - 130
Ethylbenzene	0.100	0.1208		mg/Kg		121	70 - 130
m-Xylene & p-Xylene	0.200	0.2347		mg/Kg		117	70 - 130
o-Xylene	0.100	0.1254		mg/Kg		125	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*77*		*70 - 130*

Lab Sample ID: LCSD 880-56543/2-A
Matrix: Solid
Analysis Batch: 56598

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 56543

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1391	*+	mg/Kg		139	70 - 130	7	35
Toluene	0.100	0.1300		mg/Kg		130	70 - 130	3	35
Ethylbenzene	0.100	0.1336	*+	mg/Kg		134	70 - 130	10	35
m-Xylene & p-Xylene	0.200	0.2618	*+	mg/Kg		131	70 - 130	11	35
o-Xylene	0.100	0.1301		mg/Kg		130	70 - 130	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: 880-30148-A-4-C MS
Matrix: Solid
Analysis Batch: 56598

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 56543

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U *+	0.0996	0.07271		mg/Kg		73	70 - 130
Toluene	<0.00201	U F1	0.0996	0.06324	F1	mg/Kg		63	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Stratojet 31 State Com 8H

Job ID: 890-4863-1
SDG: 03D2024191

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

Lab Sample ID: 880-30148-A-4-C MS
Matrix: Solid
Analysis Batch: 56598

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 56543

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U *+ F1	0.0996	0.05772	F1	mg/Kg		58	70 - 130
m-Xylene & p-Xylene	<0.00402	U *+ F1	0.199	0.1108	F1	mg/Kg		56	70 - 130
o-Xylene	<0.00201	U F1	0.0996	0.05574	F1	mg/Kg		56	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*84*		*70 - 130*

Lab Sample ID: 880-30148-A-4-D MSD
Matrix: Solid
Analysis Batch: 56598

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 56543

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U *+	0.0994	0.06930		mg/Kg		70	70 - 130	5	35
Toluene	<0.00201	U F1	0.0994	0.05814	F1	mg/Kg		58	70 - 130	8	35
Ethylbenzene	<0.00201	U *+ F1	0.0994	0.04689	F1	mg/Kg		47	70 - 130	21	35
m-Xylene & p-Xylene	<0.00402	U *+ F1	0.199	0.08876	F1	mg/Kg		45	70 - 130	22	35
o-Xylene	<0.00201	U F1	0.0994	0.04332	F1	mg/Kg		44	70 - 130	25	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*

Lab Sample ID: MB 880-56654/5-A
Matrix: Solid
Analysis Batch: 56649

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 56654

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/30/23 08:34	06/30/23 12:27	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/30/23 08:34	06/30/23 12:27	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/30/23 08:34	06/30/23 12:27	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		06/30/23 08:34	06/30/23 12:27	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/30/23 08:34	06/30/23 12:27	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/30/23 08:34	06/30/23 12:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*71*		*70 - 130*	*06/30/23 08:34*	*06/30/23 12:27*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*06/30/23 08:34*	*06/30/23 12:27*	*1*

Lab Sample ID: LCS 880-56654/1-A
Matrix: Solid
Analysis Batch: 56649

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 56654

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1145		mg/Kg		115	70 - 130
Toluene	0.100	0.1146		mg/Kg		115	70 - 130
Ethylbenzene	0.100	0.1107		mg/Kg		111	70 - 130
m-Xylene & p-Xylene	0.200	0.2152		mg/Kg		108	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Stratojet 31 State Com 8H

Job ID: 890-4863-1
SDG: 03D2024191

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

Lab Sample ID: LCS 880-56654/1-A
Matrix: Solid
Analysis Batch: 56649

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 56654

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
o-Xylene			0.100	0.1095		mg/Kg		110	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*

Lab Sample ID: LCSD 880-56654/2-A
Matrix: Solid
Analysis Batch: 56649

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 56654

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1259		mg/Kg		126	70 - 130	9	35
Toluene			0.100	0.1228		mg/Kg		123	70 - 130	7	35
Ethylbenzene			0.100	0.1200		mg/Kg		120	70 - 130	8	35
m-Xylene & p-Xylene			0.200	0.2354		mg/Kg		118	70 - 130	9	35
o-Xylene			0.100	0.1232		mg/Kg		123	70 - 130	12	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*

Lab Sample ID: 880-30176-A-3-B MS
Matrix: Solid
Analysis Batch: 56649

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 56654

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00200	U	0.0996	0.1246		mg/Kg		125	70 - 130		
Toluene	0.00264		0.0996	0.1189		mg/Kg		117	70 - 130		
Ethylbenzene	<0.00200	U	0.0996	0.1137		mg/Kg		114	70 - 130		
m-Xylene & p-Xylene	<0.00399	U	0.199	0.2242		mg/Kg		113	70 - 130		
o-Xylene	<0.00200	U	0.0996	0.1072		mg/Kg		108	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*136*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: 880-30176-A-3-C MSD
Matrix: Solid
Analysis Batch: 56649

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 56654

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0994	0.1120		mg/Kg		113	70 - 130	11	35
Toluene	0.00264		0.0994	0.1080		mg/Kg		106	70 - 130	10	35
Ethylbenzene	<0.00200	U	0.0994	0.09685		mg/Kg		97	70 - 130	16	35
m-Xylene & p-Xylene	<0.00399	U	0.199	0.1886		mg/Kg		95	70 - 130	17	35
o-Xylene	<0.00200	U	0.0994	0.1028		mg/Kg		103	70 - 130	4	35

QC Sample Results

Client: Ensolum
Project/Site: Stratojet 31 State Com 8H

Job ID: 890-4863-1
SDG: 03D2024191

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

Lab Sample ID: 880-30176-A-3-C MSD
Matrix: Solid
Analysis Batch: 56649

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 56654

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	83		70 - 130

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

Lab Sample ID: MB 880-56504/1-A
Matrix: Solid
Analysis Batch: 56452

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 56504

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/28/23 13:54	06/28/23 20:49	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/28/23 13:54	06/28/23 20:49	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/28/23 13:54	06/28/23 20:49	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130	06/28/23 13:54	06/28/23 20:49	1
o-Terphenyl	105		70 - 130	06/28/23 13:54	06/28/23 20:49	1

Lab Sample ID: LCS 880-56504/2-A
Matrix: Solid
Analysis Batch: 56452

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 56504

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	913.1		mg/Kg		91	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1022		mg/Kg		102	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	92		70 - 130
o-Terphenyl	101		70 - 130

Lab Sample ID: LCSD 880-56504/3-A
Matrix: Solid
Analysis Batch: 56452

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 56504

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	950.2		mg/Kg		95	70 - 130	4	20
Diesel Range Organics (Over C10-C28)			1000	1097		mg/Kg		110	70 - 130	7	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	85		70 - 130
o-Terphenyl	92		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Stratojet 31 State Com 8H

Job ID: 890-4863-1
SDG: 03D2024191

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

Lab Sample ID: 890-4871-A-5-C MS
Matrix: Solid
Analysis Batch: 56452

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 56504

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	996	888.9		mg/Kg		88	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	996	842.6		mg/Kg		85	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*90*		*70 - 130*
o-Terphenyl	*91*		*70 - 130*

Lab Sample ID: 890-4871-A-5-D MSD
Matrix: Solid
Analysis Batch: 56452

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 56504

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	916.5		mg/Kg		90	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<49.9	U	996	881.3		mg/Kg		88	70 - 130	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*93*		*70 - 130*
o-Terphenyl	*92*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-56484/1-A
Matrix: Solid
Analysis Batch: 56510

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			06/28/23 15:31	1

Lab Sample ID: LCS 880-56484/2-A
Matrix: Solid
Analysis Batch: 56510

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	256.0		mg/Kg		102	90 - 110

Lab Sample ID: LCSD 880-56484/3-A
Matrix: Solid
Analysis Batch: 56510

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	260.9		mg/Kg		104	90 - 110	2	20

QC Sample Results

Client: Ensolum
Project/Site: Stratojet 31 State Com 8H

Job ID: 890-4863-1
SDG: 03D2024191

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-4861-A-5-B MS
Matrix: Solid
Analysis Batch: 56510

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	66.0		248	288.7		mg/Kg		90	90 - 110

Lab Sample ID: 890-4861-A-5-D MSD
Matrix: Solid
Analysis Batch: 56510

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	66.0		248	289.5		mg/Kg		90	90 - 110	0	20

Lab Sample ID: MB 880-56951/1-A
Matrix: Solid
Analysis Batch: 57012

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			07/05/23 13:35	1

Lab Sample ID: LCS 880-56951/2-A
Matrix: Solid
Analysis Batch: 57012

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	240.3		mg/Kg		96	90 - 110

Lab Sample ID: LCSD 880-56951/3-A
Matrix: Solid
Analysis Batch: 57012

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	240.4		mg/Kg		96	90 - 110	0	20

Lab Sample ID: 880-30227-A-2-E MS
Matrix: Solid
Analysis Batch: 57012

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	105		248	347.4		mg/Kg		98	90 - 110

Lab Sample ID: 880-30227-A-2-F MSD
Matrix: Solid
Analysis Batch: 57012

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	105		248	347.8		mg/Kg		98	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: Stratojet 31 State Com 8H

Job ID: 890-4863-1
SDG: 03D2024191

GC VOA

Prep Batch: 56543

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4863-1	SW01	Total/NA	Solid	5035	
890-4863-2	SW02	Total/NA	Solid	5035	
890-4863-3	SW03	Total/NA	Solid	5035	
MB 880-56543/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-56543/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-56543/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-30148-A-4-C MS	Matrix Spike	Total/NA	Solid	5035	
880-30148-A-4-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 56598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4863-1	SW01	Total/NA	Solid	8021B	56543
890-4863-2	SW02	Total/NA	Solid	8021B	56543
890-4863-3	SW03	Total/NA	Solid	8021B	56543
MB 880-56543/5-A	Method Blank	Total/NA	Solid	8021B	56543
LCS 880-56543/1-A	Lab Control Sample	Total/NA	Solid	8021B	56543
LCSD 880-56543/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	56543
880-30148-A-4-C MS	Matrix Spike	Total/NA	Solid	8021B	56543
880-30148-A-4-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	56543

Analysis Batch: 56649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4863-4	SW04	Total/NA	Solid	8021B	56654
MB 880-56654/5-A	Method Blank	Total/NA	Solid	8021B	56654
LCS 880-56654/1-A	Lab Control Sample	Total/NA	Solid	8021B	56654
LCSD 880-56654/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	56654
880-30176-A-3-B MS	Matrix Spike	Total/NA	Solid	8021B	56654
880-30176-A-3-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	56654

Prep Batch: 56654

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4863-4	SW04	Total/NA	Solid	5035	
MB 880-56654/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-56654/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-56654/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-30176-A-3-B MS	Matrix Spike	Total/NA	Solid	5035	
880-30176-A-3-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 56727

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4863-1	SW01	Total/NA	Solid	Total BTEX	
890-4863-2	SW02	Total/NA	Solid	Total BTEX	
890-4863-3	SW03	Total/NA	Solid	Total BTEX	
890-4863-4	SW04	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 56452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4863-1	SW01	Total/NA	Solid	8015B NM	56504
890-4863-2	SW02	Total/NA	Solid	8015B NM	56504

QC Association Summary

Client: Ensolum
Project/Site: Stratojet 31 State Com 8H

Job ID: 890-4863-1
SDG: 03D2024191

GC Semi VOA (Continued)

Analysis Batch: 56452 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4863-3	SW03	Total/NA	Solid	8015B NM	56504
890-4863-4	SW04	Total/NA	Solid	8015B NM	56504
MB 880-56504/1-A	Method Blank	Total/NA	Solid	8015B NM	56504
LCS 880-56504/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	56504
LCSD 880-56504/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	56504
890-4871-A-5-C MS	Matrix Spike	Total/NA	Solid	8015B NM	56504
890-4871-A-5-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	56504

Prep Batch: 56504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4863-1	SW01	Total/NA	Solid	8015NM Prep	
890-4863-2	SW02	Total/NA	Solid	8015NM Prep	
890-4863-3	SW03	Total/NA	Solid	8015NM Prep	
890-4863-4	SW04	Total/NA	Solid	8015NM Prep	
MB 880-56504/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-56504/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-56504/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-4871-A-5-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-4871-A-5-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 56555

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4863-1	SW01	Total/NA	Solid	8015 NM	
890-4863-2	SW02	Total/NA	Solid	8015 NM	
890-4863-3	SW03	Total/NA	Solid	8015 NM	
890-4863-4	SW04	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 56484

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4863-1	SW01	Soluble	Solid	DI Leach	
890-4863-2	SW02	Soluble	Solid	DI Leach	
890-4863-3	SW03	Soluble	Solid	DI Leach	
MB 880-56484/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-56484/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-56484/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4861-A-5-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-4861-A-5-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 56510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4863-1	SW01	Soluble	Solid	300.0	56484
890-4863-2	SW02	Soluble	Solid	300.0	56484
890-4863-3	SW03	Soluble	Solid	300.0	56484
MB 880-56484/1-A	Method Blank	Soluble	Solid	300.0	56484
LCS 880-56484/2-A	Lab Control Sample	Soluble	Solid	300.0	56484
LCSD 880-56484/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	56484
890-4861-A-5-B MS	Matrix Spike	Soluble	Solid	300.0	56484
890-4861-A-5-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	56484

QC Association Summary

Client: Ensolum
Project/Site: Stratojet 31 State Com 8H

Job ID: 890-4863-1
SDG: 03D2024191

HPLC/IC

Leach Batch: 56951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4863-4	SW04	Soluble	Solid	DI Leach	
MB 880-56951/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-56951/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-56951/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-30227-A-2-E MS	Matrix Spike	Soluble	Solid	DI Leach	
880-30227-A-2-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 57012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4863-4	SW04	Soluble	Solid	300.0	56951
MB 880-56951/1-A	Method Blank	Soluble	Solid	300.0	56951
LCS 880-56951/2-A	Lab Control Sample	Soluble	Solid	300.0	56951
LCSD 880-56951/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	56951
880-30227-A-2-E MS	Matrix Spike	Soluble	Solid	300.0	56951
880-30227-A-2-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	56951

Lab Chronicle

Client: Ensolum
Project/Site: Stratojet 31 State Com 8H

Job ID: 890-4863-1
SDG: 03D2024191

Client Sample ID: SW01
Date Collected: 06/26/23 09:15
Date Received: 06/26/23 14:35

Lab Sample ID: 890-4863-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	56543	06/29/23 08:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	56598	06/29/23 19:17	SM	EET MID
Total/NA	Analysis	Total BTEX		1			56727	06/30/23 15:51	SM	EET MID
Total/NA	Analysis	8015 NM		1			56555	06/29/23 09:22	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	56504	06/28/23 13:54	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	56452	06/29/23 05:03	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	56484	06/28/23 09:55	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	56510	06/28/23 16:07	CH	EET MID

Client Sample ID: SW02
Date Collected: 06/26/23 09:25
Date Received: 06/26/23 14:35

Lab Sample ID: 890-4863-2
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	56543	06/29/23 08:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	56598	06/29/23 19:44	SM	EET MID
Total/NA	Analysis	Total BTEX		1			56727	06/30/23 15:51	SM	EET MID
Total/NA	Analysis	8015 NM		1			56555	06/29/23 09:22	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	56504	06/28/23 13:54	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	56452	06/29/23 05:25	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	56484	06/28/23 09:55	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	56510	06/28/23 16:12	CH	EET MID

Client Sample ID: SW03
Date Collected: 06/26/23 09:45
Date Received: 06/26/23 14:35

Lab Sample ID: 890-4863-3
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			5.05 g	5 mL	56543	06/29/23 08:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	56598	06/29/23 20:10	SM	EET MID
Total/NA	Analysis	Total BTEX		1			56727	06/30/23 15:51	SM	EET MID
Total/NA	Analysis	8015 NM		1			56555	06/29/23 09:22	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	56504	06/28/23 13:54	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	56452	06/29/23 05:47	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	56484	06/28/23 09:55	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	56510	06/28/23 16:17	CH	EET MID

Client Sample ID: SW04
Date Collected: 06/26/23 09:55
Date Received: 06/26/23 14:35

Lab Sample ID: 890-4863-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	56654	06/30/23 08:34	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	56649	06/30/23 22:26	SM	EET MID
Total/NA	Analysis	Total BTEX		1			56727	07/03/23 01:44	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: Stratojet 31 State Com 8H

Job ID: 890-4863-1
SDG: 03D2024191

Client Sample ID: SW04

Date Collected: 06/26/23 09:55
Date Received: 06/26/23 14:35

Lab Sample ID: 890-4863-4

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			56555	06/29/23 09:22	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	56504	06/28/23 13:54	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	56452	06/29/23 06:09	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	56951	07/05/23 11:30	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	57012	07/05/23 16:10	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: Stratojet 31 State Com 8H

Job ID: 890-4863-1
SDG: 03D2024191

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	T104704400-23-26	06-30-24

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: Stratojet 31 State Com 8H

Job ID: 890-4863-1
SDG: 03D2024191

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: Stratojet 31 State Com 8H

Job ID: 890-4863-1
SDG: 03D2024191

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-4863-1	SW01	Solid	06/26/23 09:15	06/26/23 14:35	0 - 4
890-4863-2	SW02	Solid	06/26/23 09:25	06/26/23 14:35	0 - 4
890-4863-3	SW03	Solid	06/26/23 09:45	06/26/23 14:35	0 - 4
890-4863-4	SW04	Solid	06/26/23 09:55	06/26/23 14:35	0 - 4

eurofins | Environment Testing Xenco

Chain of Custody

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

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	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:	hgreen@ensolum.com, kjennings@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:	Stratojet 31 State Com 8H	**Turn Around**	
Project Number:	03D2024191	☑ Routine ☐ Rush	
Project Location:	32.5248,-103.5029	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:	3.6
Total Containers:		Corrected Temperature:	3.4

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)
SW01	Soil	6/26/2023	915	0'-4'	Comp	1		x	x	x
SW02	Soil	6/26/2023	925	0'-4'	Comp	1		x	x	x
SW03	Soil	6/26/2023	945	0'-4'	Comp	1		x	x	x
SW04	Soil	6/26/2023	955	0'-4'	Comp	1		x	x	x

Parameters

890-4863 Chain of Custody

Preservative Codes

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

Sample 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		6.26.23 1435	2		
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

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer, Jessica	Carrier Tracking No(s).	COC No: 890-1346 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Jessica Kramer@et.eurofinsus.com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 890-4863-1
Address: 1211 W Florida Ave	Due Date Requested: 6/30/2023	**Analysis Requested**		**Preservation Codes**
City: Midland	TAT Requested (days):			
State Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: Stratojet 31 State Com 8H	Project #: 89000145			
Site:	SSOW#:			

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)	8021B/5035FP_Calc (MOD) BTEX	Total_BTEX_GCV	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	8015MOD_Calc	300_ORGFM_28D/DI_LEACH Chloride	Total Number of containers	Special Instructions/Note:
				Preservation Code:									
SW01 (890-4863-1)	6/26/23	09 15 Mountain		Solid			X	X	X	X	X	1	
SW02 (890-4863-2)	6/26/23	09 25 Mountain		Solid			X	X	X	X	X	1	
SW03 (890-4863-3)	6/26/23	09 45 Mountain		Solid			X	X	X	X	X	1	
SW04 (890-4863-4)	6/26/23	09 55 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: Cae	Date/Time	Company	Received by: JKramer Date/Time: 6/28/23 1035 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 2.3/2.0

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4863-1
SDG Number: 03D2024191

Login Number: 4863
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: 890-4863-1
SDG Number: 03D2024191

Login Number: 4863
List Number: 2
Creator: Kramer, Jessica

List Source: Eurofins Midland
List Creation: 06/28/23 10:43 AM

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

CARDINAL Laboratories

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

July 13, 2023

HADLIE GREEN

ENSOLUM, LLC

705 W WADLEY AVE.

MIDLAND, TX 79705

RE: STRATOJET 31

Enclosed are the results of analyses for samples received by the laboratory on 07/12/23 9:47.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	07/12/2023	Sampling Date:	07/12/2023
Reported:	07/13/2023	Sampling Type:	Soil
Project Name:	STRATOJET 31	Sampling Condition:	Cool & Intact
Project Number:	03D2024191	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

Sample ID: FS 01 4' (H233543-01)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/12/2023	ND	1.84	92.0	2.00	6.95	
Toluene*	<0.050	0.050	07/12/2023	ND	1.90	95.1	2.00	7.35	
Ethylbenzene*	<0.050	0.050	07/12/2023	ND	1.93	96.3	2.00	7.74	
Total Xylenes*	<0.150	0.150	07/12/2023	ND	5.74	95.7	6.00	8.47	
Total BTEX	<0.300	0.300	07/12/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/12/2023	ND	432	108	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/12/2023	ND	205	103	200	5.13	QM-07
DRO >C10-C28*	<10.0	10.0	07/12/2023	ND	222	111	200	6.09	QM-07
EXT DRO >C28-C36	<10.0	10.0	07/12/2023	ND					

Surrogate: 1-Chlorooctane *122 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *144 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	07/12/2023	Sampling Date:	07/12/2023
Reported:	07/13/2023	Sampling Type:	Soil
Project Name:	STRATOJET 31	Sampling Condition:	Cool & Intact
Project Number:	03D2024191	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

Sample ID: FS 02 4' (H233543-02)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/12/2023	ND	1.84	92.0	2.00	6.95	
Toluene*	<0.050	0.050	07/12/2023	ND	1.90	95.1	2.00	7.35	
Ethylbenzene*	<0.050	0.050	07/12/2023	ND	1.93	96.3	2.00	7.74	
Total Xylenes*	<0.150	0.150	07/12/2023	ND	5.74	95.7	6.00	8.47	
Total BTEX	<0.300	0.300	07/12/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/12/2023	ND	432	108	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/12/2023	ND	205	103	200	5.13	
DRO >C10-C28*	<10.0	10.0	07/12/2023	ND	222	111	200	6.09	
EXT DRO >C28-C36	<10.0	10.0	07/12/2023	ND					

Surrogate: 1-Chlorooctane *113 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *133 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	07/12/2023	Sampling Date:	07/12/2023
Reported:	07/13/2023	Sampling Type:	Soil
Project Name:	STRATOJET 31	Sampling Condition:	Cool & Intact
Project Number:	03D2024191	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

Sample ID: FS 03 4' (H233543-03)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/12/2023	ND	1.84	92.0	2.00	6.95	
Toluene*	<0.050	0.050	07/12/2023	ND	1.90	95.1	2.00	7.35	
Ethylbenzene*	<0.050	0.050	07/12/2023	ND	1.93	96.3	2.00	7.74	
Total Xylenes*	<0.150	0.150	07/12/2023	ND	5.74	95.7	6.00	8.47	
Total BTEX	<0.300	0.300	07/12/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *106 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/12/2023	ND	432	108	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/12/2023	ND	205	103	200	5.13	
DRO >C10-C28*	<10.0	10.0	07/12/2023	ND	222	111	200	6.09	
EXT DRO >C28-C36	<10.0	10.0	07/12/2023	ND					

Surrogate: 1-Chlorooctane *96.0 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *114 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	07/12/2023	Sampling Date:	07/12/2023
Reported:	07/13/2023	Sampling Type:	Soil
Project Name:	STRATOJET 31	Sampling Condition:	Cool & Intact
Project Number:	03D2024191	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

Sample ID: FS 04 4' (H233543-04)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/12/2023	ND	1.84	92.0	2.00	6.95	
Toluene*	<0.050	0.050	07/12/2023	ND	1.90	95.1	2.00	7.35	
Ethylbenzene*	<0.050	0.050	07/12/2023	ND	1.93	96.3	2.00	7.74	
Total Xylenes*	<0.150	0.150	07/12/2023	ND	5.74	95.7	6.00	8.47	
Total BTEX	<0.300	0.300	07/12/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/12/2023	ND	432	108	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/12/2023	ND	205	103	200	5.13	
DRO >C10-C28*	<10.0	10.0	07/12/2023	ND	222	111	200	6.09	
EXT DRO >C28-C36	<10.0	10.0	07/12/2023	ND					

Surrogate: 1-Chlorooctane *76.0 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *91.6 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	07/12/2023	Sampling Date:	07/12/2023
Reported:	07/13/2023	Sampling Type:	Soil
Project Name:	STRATOJET 31	Sampling Condition:	Cool & Intact
Project Number:	03D2024191	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

Sample ID: FS 05 4' (H233543-05)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/12/2023	ND	1.84	92.0	2.00	6.95	
Toluene*	<0.050	0.050	07/12/2023	ND	1.90	95.1	2.00	7.35	
Ethylbenzene*	<0.050	0.050	07/12/2023	ND	1.93	96.3	2.00	7.74	
Total Xylenes*	<0.150	0.150	07/12/2023	ND	5.74	95.7	6.00	8.47	
Total BTEX	<0.300	0.300	07/12/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *104 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/12/2023	ND	432	108	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/12/2023	ND	205	103	200	5.13	
DRO >C10-C28*	<10.0	10.0	07/12/2023	ND	222	111	200	6.09	
EXT DRO >C28-C36	<10.0	10.0	07/12/2023	ND					

Surrogate: 1-Chlorooctane *96.6 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *121 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	07/12/2023	Sampling Date:	07/12/2023
Reported:	07/13/2023	Sampling Type:	Soil
Project Name:	STRATOJET 31	Sampling Condition:	Cool & Intact
Project Number:	03D2024191	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

Sample ID: FS 06 4' (H233543-06)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/12/2023	ND	1.84	92.0	2.00	6.95	
Toluene*	<0.050	0.050	07/12/2023	ND	1.90	95.1	2.00	7.35	
Ethylbenzene*	<0.050	0.050	07/12/2023	ND	1.93	96.3	2.00	7.74	
Total Xylenes*	<0.150	0.150	07/12/2023	ND	5.74	95.7	6.00	8.47	
Total BTEX	<0.300	0.300	07/12/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/12/2023	ND	432	108	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/12/2023	ND	205	103	200	5.13	
DRO >C10-C28*	<10.0	10.0	07/12/2023	ND	222	111	200	6.09	
EXT DRO >C28-C36	<10.0	10.0	07/12/2023	ND					

Surrogate: 1-Chlorooctane *109 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *129 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	07/12/2023	Sampling Date:	07/12/2023
Reported:	07/13/2023	Sampling Type:	Soil
Project Name:	STRATOJET 31	Sampling Condition:	Cool & Intact
Project Number:	03D2024191	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

Sample ID: FS 07 4' (H233543-07)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/12/2023	ND	1.84	92.0	2.00	6.95	
Toluene*	<0.050	0.050	07/12/2023	ND	1.90	95.1	2.00	7.35	
Ethylbenzene*	<0.050	0.050	07/12/2023	ND	1.93	96.3	2.00	7.74	
Total Xylenes*	<0.150	0.150	07/12/2023	ND	5.74	95.7	6.00	8.47	
Total BTEX	<0.300	0.300	07/12/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *102 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/12/2023	ND	432	108	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/12/2023	ND	205	103	200	5.13	
DRO >C10-C28*	<10.0	10.0	07/12/2023	ND	222	111	200	6.09	
EXT DRO >C28-C36	<10.0	10.0	07/12/2023	ND					

Surrogate: 1-Chlorooctane *125 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *144 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	07/12/2023	Sampling Date:	07/12/2023
Reported:	07/13/2023	Sampling Type:	Soil
Project Name:	STRATOJET 31	Sampling Condition:	Cool & Intact
Project Number:	03D2024191	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

Sample ID: FS 08 4' (H233543-08)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/12/2023	ND	1.84	92.0	2.00	6.95	
Toluene*	<0.050	0.050	07/12/2023	ND	1.90	95.1	2.00	7.35	
Ethylbenzene*	<0.050	0.050	07/12/2023	ND	1.93	96.3	2.00	7.74	
Total Xylenes*	<0.150	0.150	07/12/2023	ND	5.74	95.7	6.00	8.47	
Total BTEX	<0.300	0.300	07/12/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/12/2023	ND	432	108	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/13/2023	ND	205	103	200	5.13	
DRO >C10-C28*	<10.0	10.0	07/13/2023	ND	222	111	200	6.09	
EXT DRO >C28-C36	<10.0	10.0	07/13/2023	ND					

Surrogate: 1-Chlorooctane *114 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *135 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	07/12/2023	Sampling Date:	07/12/2023
Reported:	07/13/2023	Sampling Type:	Soil
Project Name:	STRATOJET 31	Sampling Condition:	Cool & Intact
Project Number:	03D2024191	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

Sample ID: FS 09 4' (H233543-09)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/12/2023	ND	1.84	92.0	2.00	6.95	
Toluene*	<0.050	0.050	07/12/2023	ND	1.90	95.1	2.00	7.35	
Ethylbenzene*	<0.050	0.050	07/12/2023	ND	1.93	96.3	2.00	7.74	
Total Xylenes*	<0.150	0.150	07/12/2023	ND	5.74	95.7	6.00	8.47	
Total BTEX	<0.300	0.300	07/12/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID *103 %* *71.5-134*

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	07/12/2023	ND	432	108	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/12/2023	ND	205	103	200	5.13	
DRO >C10-C28*	<10.0	10.0	07/12/2023	ND	222	111	200	6.09	
EXT DRO >C28-C36	<10.0	10.0	07/12/2023	ND					

Surrogate: 1-Chlorooctane *125 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *143 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Analytical Results For:

ENSOLUM, LLC
HADLIE GREEN
705 W WADLEY AVE.
MIDLAND TX, 79705
Fax To:

Received:	07/12/2023	Sampling Date:	07/12/2023
Reported:	07/13/2023	Sampling Type:	Soil
Project Name:	STRATOJET 31	Sampling Condition:	Cool & Intact
Project Number:	03D2024191	Sample Received By:	Tamara Oldaker
Project Location:	LEA CO NM		

Sample ID: FS 10 4' (H233543-10)

BTEX 8021B mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	07/12/2023	ND	1.84	92.0	2.00	6.95	
Toluene*	<0.050	0.050	07/12/2023	ND	1.90	95.1	2.00	7.35	
Ethylbenzene*	<0.050	0.050	07/12/2023	ND	1.93	96.3	2.00	7.74	
Total Xylenes*	<0.150	0.150	07/12/2023	ND	5.74	95.7	6.00	8.47	
Total BTEX	<0.300	0.300	07/12/2023	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	**16.0**	16.0	07/12/2023	ND	432	108	400	3.64	

TPH 8015M mg/kg Analyzed By: MS

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	07/12/2023	ND	205	103	200	5.13	
DRO >C10-C28*	<10.0	10.0	07/12/2023	ND	222	111	200	6.09	
EXT DRO >C28-C36	<10.0	10.0	07/12/2023	ND					

Surrogate: 1-Chlorooctane *121 %* *48.2-134*

Surrogate: 1-Chlorooctadecane *138 %* *49.1-148*

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
BS-3	Blank spike recovery outside of lab established statistical limits, but still within method limits. Data is not adversely affected.
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories *=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name:	Ensolum, LLC
Project Manager:	Hadlie Green
Address:	601 N. Marienfeld St. STE 400
City:	Midland State: TX Zip: 79701
Phone #:	432-557-8895 Fax #:
Project #:	03D2024191 Project Owner: Ensolum
Project Name:	Stratojet 31
Project Location:	Lea Co. NM
Sampler Name:	Hadlie Green

BILL TO

P.O. #:	03D2024191
Company:	Ensolum
Attn:	Hadlie Green
Address:	601 N Marienfeld
City:	Midland
State:	TX Zip: 79701
Phone #:	4325578895
Fax #:	

ANALYSIS REQUEST

FOR LAB USE ONLY Lab I.D.	Sample I.D.	Sample Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	PRESERV.: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	TPH 8015	BTEX 8021	CHLORIDES 300.0
H233543																		
1	FS01	4	C	1			X					X		7/12/23	0700	X	X	X
2	FS02	4					X					X			0702			
3	FS03	4					X					X			0704			
4	FS04	4					X					X			0706			
5	FS05	4					X					X			0708			
6	FS06	4					X					X			0710			
7	FS07	4					X					X			0712			
8	FS08	4					X					X			0714			
9	FS09	4					X					X			0716			
10	FS10	4					X					X			0718			

Relinquished By:	Hadlie Green	Date:	7-12-23
		Time:	0947
Relinquished By:		Date:	
		Time:	
Received By:	Tamara Oldaker		
Received By:			

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

All Results are emailed. Please provide Email address:

BJennings@ensolum.com

REMARKS:

Delivered By: (Circle One)	Observed Temp. °C 5.9	Sample Condition Cool: ☑ Yes ☐ No	Intact: ☑ Yes ☐ No	CHECKED BY: (Initials) TO
Sampler - UPS - Bus - Other:	Corrected Temp. °C			

Turnaround Time: Standard ☐ Rush ☒ Bacteria (only) Sample Condition: Cool ☐ Yes ☐ No Intact ☐ Yes ☐ No Observed Temp. °C

Thermometer ID #113 #140 Correction Factor -0.5°C TO 7/12/23 Corrected Temp. °C

24 HR

FORM-006 R 3.2 10/07/21

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

ENSOLUM

APPENDIX D

NMOCD Notifications

From: Buchanan, Michael, EMNRD
To: Hadlie Green; Enviro, OCD, EMNRD
Cc: Kalei Jennings; Peter Van Patten
Subject: RE: [EXTERNAL] COP - Sampling Notification (Week of 6/5/2023)
Date: Friday, June 2, 2023 3:54:30 PM
Attachments: image005.jpg
image006.png
image007.png
image008.png
image009.png

[**EXTERNAL EMAIL**]

Received.

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.

Mike Buchanan ● Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
8801 Horizon Blvd. NE | Albuquerque, NM 87113
| michael.buchanan@emnrd.nm.gov
http://www.emnrd.nm.gov/ocd

From: Hadlie Green <hgreen@ensolum.com>
Sent: Friday, June 2, 2023 9:18 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Kalei Jennings <kjennings@ensolum.com>; Peter Van Patten <pvanpatten@ensolum.com>
Subject: [EXTERNAL] COP - Sampling Notification (Week of 6/5/2023)

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 June 5, 2023.

- Vast State 21H / NAPP2313140440
  - Sampling Date: 6/9/2023 @ 10:00 AM MST
- Stratojet 31 State Com 8H / NAPP2314235805
  - Sampling Date: 6/8/2023 @ 10:00 AM MST

Thank you,

Hadlie Green
Project Geologist
432-557-8895
hgreen@ensolum.com
Ensolum, LLC

From: Enviro, OCD, EMNRD
To: Hadlie Green
Cc: Bratcher, Michael, EMNRD; Velez, Nelson, EMNRD
Subject: RE: [EXTERNAL] COP - Sampling Notification (Week of 6/5/2023)
Date: Friday, June 9, 2023 9:22:08 AM
Attachments: image006.png
image007.png
image008.png
image009.png

[**EXTERNAL EMAIL**]

Hadlie,

Please be aware that notification requirements are **two business days**, per rule. You may proceed on your schedule. This, and all correspondence, should be included in the closure report to ensure inclusion 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: Thursday, June 8, 2023 9:15 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Kalei Jennings <kjennings@ensolum.com>; Peter Van Patten <pvanpatten@ensolum.com>
Subject: [EXTERNAL] COP - Sampling Notification (Week of 6/5/2023)

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 June 12, 2023.

- Stratojet 31 State Com 8H / NAPP2314235805
  - Sampling Date: 6/12/2023 @ 10:00 AM MST

Thank you,

Hadlie Green
Project Geologist
432-557-8895
hgreen@ensolum.com
Ensolum, LLC

From: Enviro, OCD, EMNRD
To: Hadlie Green
Cc: Bratcher, Michael, EMNRD; Velez, Nelson, EMNRD
Subject: RE: [EXTERNAL] COP - Sampling Notification (Week of 6/26/2023)
Date: Wednesday, June 21, 2023 2:44:17 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: Wednesday, June 21, 2023 7:38 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Kalei Jennings <kjennings@ensolum.com>; Peter Van Patten <pvanpatten@ensolum.com>
Subject: [EXTERNAL] COP - Sampling Notification (Week of 6/26/2023)

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 June 26, 2023.

- Stratojet 31 State Com 8H / NAPP2314235805
  - Sampling Date: 6/26/2023 @ 10:00 AM MST
- Buck Federal CTB / NAPP2315731307

- Sampling Date: 6/29/2023 @ 10:00 AM MST

Thank you,

Hadlie Green
Project Geologist
432-557-8895
hgreen@ensolum.com
Ensolum, LLC

ENSOLUM

APPENDIX E

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		

State of New Mexico
Oil Conservation Division

Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release?
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: Michael Buchanan Date: _____

Convert Irregular shape into a series of rectangles	Length (ft.)	Width (ft.)	Average Depth (in.)	On/Off Pad (dropdown)	Soil Spilled-Fluid Saturation (%.)	Estimated volume of each area (bbl.)	Total Estimated Volume of Spill (bbl.)	[redacted]	Total Estimated Contaminated Soil, uncompacted, 25% (yd^3.)	Current Rule of Thumb - RMR Handover Volume, (yd^3.)
Rectangle A	20.0	5.0	1.0	Off-Pad	15.02%	1.48	0.22		0.39	
Rectangle B				On-Pad	10.50%	0.00	0.00		0.00	
Rectangle C				On-Pad	10.50%	0.00	0.00		0.00	
Rectangle D						0.00			0.00	
Rectangle E						0.00			0.00	
Rectangle F						0.00			0.00	750
Rectangle G						0.00			0.00	
Rectangle H						0.00			0.00	
Rectangle I						0.00			0.00	
[illegible]						0.00			0.00	
						Total Subsurface Volume Released:	0.22		0.39	BU

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

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 219366
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	None	5/23/2023

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2314235805
District RP	
Facility ID	fAPP2204037515
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?	>50 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☒ Yes ☐ No

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

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

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

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

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2314235805
District RP	
Facility ID	fAPP2204037515
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: Jacob Laird Title: Environmental Engineer

Signature: Jacob Laird Date: 7/18/2023

email: Jacob.Laird@ConocoPhillips.com Telephone: 575-703-5482

OCD Only

Received by: Shelly Wells Date: 7/20/2023

Form C-141
Page 6

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2314235805
District RP	
Facility ID	fAPP2204037515
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: Jacob Laird Title: Environmental Engineer

Signature: Jacob Laird Date: 7/18/2023

email: Jacob.Laird@ConocoPhillips.com Telephone: 575-703-5482

OCD Only

Received by: Shelly Wells Date: 7/20/2023

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: Nelson Velez Date: 10/13/2023

Printed Name: Nelson Velez Title: Environmental Specialist – Adv

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 242581

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 242581
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	10/13/2023