ENSOLUM

August 4, 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: Remediation Work Plan
EVGSAU Sat 6 Mobile Tester
Incident Number NAPP2304744550
Lea County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of Maverick Permian, LLC (Maverick), has prepared the following *Remediation Work Plan* (*Work Plan*) to address impacted soil resulting from a gasket failure at the EVGSAU Sat 6 Mobile Tester (Site). The following *Work Plan* proposes lateral and vertical delineation of the release and excavation of impacted soil.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit I, Section 33, Township 17 South, Range 35 East, in Lea County, New Mexico (32.7900°, -103.4551°) and is associated with oil and gas exploration and production operations on state land managed by the New Mexico State Land Office (SLO).

On February 4, 2023, the gasket on the mobile tester failed, resulting in the release of approximately 17 barrels (bbls) of produced water and 3 bbls of crude oil into the pasture east of the pad. Maverick immediately dispatched a vacuum truck to address standing fluids and approximately 16 bbls of produced water were recovered. Maverick reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification Form C-141 (Form C-141) on February 9, 2023. The release was assigned Incident Number NAPP2304744550.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized to assess the 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 and 100 feet below ground surface (bgs) based on the nearest available groundwater well data. The closest permitted groundwater well with depth to groundwater data is New Mexico Office of the State Engineer (NMOSE) well L-05834-POD5. The well appears to be located north of the Site in the NMOSE database; however, ground truthing of the well places it approximately 203 feet southeast of the release extent. The groundwater well was drilled during in 1971 to depth of 234 feet bgs and has a reported depth to groundwater of 65 feet bgs.

A water well drilled by the United States Geological Survey (324708103270401) is located southeast of the Site. The most recent water level data from that well is from December 20, 1990 and indicates groundwater was 66.94 feet bgs. Data from numerous other wells in the vicinity also document depth to water is 50 feet or greater. All wells used for depth to groundwater determination are presented on Figure 1. The referenced well records are included in Appendix A.

Water well L-05834-POD5 was drilled in 1971 by Southwestern Public Service Company to supply water for a steam electric generating plant in the region. It is currently owned by Xcel Energy, permitted through the United States Environmental Protection Agency (EPA) as a Non-Transient Non-Community Water System (NTNC; Water System Number NM3593213) for Xcel's Cunningham Station, located 8 miles to the southeast of the Site. A NTNC water system is a public water system that regularly supplies water to at least 25 of the same people at least six months per year. The majority of the system is located at the Cunningham Station. The system appears to have been reduced to a treatment system on site and water well L-05834-POD5, also Well #28 in Water System NM3593213, is currently inactive. However, since the water well could be used as a supply well, Maverick will consider it as a freshwater well located within 1,000 feet of the release.

The closest continuously flowing or significant watercourse to the Site is depression, characterized as a semipermanently flooded palustrine wetland by the National Wetlands Inventory, located approximately ¼-mile southeast 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 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): 100 mg/kg
- Chloride: 600 mg/kg

INITIAL SITE ASSESSMENT

On February 8, 2023, Ensolum personnel completed a Site visit to evaluate the release extent based on information provided on the Form C-141 and visual observations. Assessment soil samples SS01 through SS03 were collected from a depth of 0.5 feet bgs within the release extent and assessment samples SS04 through SS07 were collected from a depth of 0.5 feet bgs in each cardinal direction outside of the release extent. The soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride Hach® chloride QuanTab® test strips. The release extent and delineation soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Photographic documentation was completed during the Site visit and a photographic log is included in Appendix B.

The assessment 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 chilled under strict chain-of-custody procedures to Eurofins Laboratories (Eurofins) in Carlsbad, New Mexico, for analysis of the following chemicals of concern (COCs): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-gasoline range organics

(GRO), TPH-diesel range organics (DRO), and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

Laboratory analytical results for assessment soil samples SS01 through SS03, collected within the release extent, indicated TPH and chloride concentrations exceeded the Site Closure Criteria. Additionally, soil sample SS02 contained greater than 50 mg/kg BTEX. Laboratory analytical results for assessment soil samples SS04 through SS07, collected around the release extent, indicated that all COC concentrations were compliant with the Site Closure Criteria, and defined the lateral extent of the release. The laboratory analytical results are summarized on the attached Table 1 and the complete laboratory analytical reports are included in Appendix C.

PROPOSED REMEDIATION WORKPLAN

Based on elevated concentrations of TPH and chloride detected in surface soil within the release extent, Maverick proposes to complete vertical delineation of the release, excavation of impacted soil, and reclamation of the off-pad area. Maverick has applied for and received a Right of Entry Permit (Number RE-6493) from the SLO that is valid until October 28, 2023. No additional cultural resource surveys were completed in connection with this release. A copy of the ROE Request for Remediation form and fully executed ROE Permit, are included in Appendix D.

Vertical Delineation

Maverick will complete vertical delineation of the release extent. Three boreholes will be advanced via hand auger within the release extent to assess the vertical extent of impacted soil. Soil from the boreholes will be field screened at 1-foot intervals for VOCs and chloride. Field screening results and observations for the boreholes will be logged on lithologic/soil sampling logs. Two delineation samples from each borehole will be submitted for laboratory analysis; the sample with the highest field screening result and the sample from the final borehole depth. Final depth of the boreholes will be determined by field screening results indicating compliance with the Site Closure Criteria.

The soil samples will be 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 will be transported chilled under strict chain-of-custody procedures to Cardinal Laboratories (Cardinal) in Hobbs, New Mexico, for analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, TPH-ORO following EPA Method 8015M/D; and chloride following EPA Method 4500.

Excavation

Impacted soil will be excavated from the release area based on the delineation soil sample analytical results. Excavation will proceed laterally and vertically until sidewall and floor samples are compliant with the Site Closure Criteria. Following removal of the impacted soil, 5-point composite confirmation samples will be collected at least every 200 square feet from the sidewalls and floor of the excavation. The 5-point composite samples will be collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. The excavation samples will be submitted for laboratory analysis of BTEX, TPH, and chloride as described above. The impacted soil will be disposed of at a licensed disposal facility. The excavation will be backfilled and recontoured to match pre-existing conditions. The disturbed pasture area will be re-seeded with an approved seed mixture.

Reclamation

Maverick will reclaim the off-pad excavation area according to the requirements of 19.15.29.13.D (1) NMAC, 19.2.100.67 NMAC, and *Revegetation Guidelines Handbook for Southeastern New Mexico* – Version 1-1, authored by the SLO and dated 2018. The excavation will be backfilled with locally sourced caliche and/or topsoil to match surrounding grade. Approximately 4 feet of topsoil will be placed on top of any caliche to support vegetative growth in the disturbed area. The backfilled area will be ripped and reseeded at most two weeks later. Soil in the vicinity of the release will be assessed for the proper application of Table 3 – *Revegetation Plans, Codes, and Soil Types for Southeastern New Mexico*, and a weed-free seed mix listed in the Seed Mixture Table below will be applied:

SEED MIXTURE TABLE

Common Name and Preferred Variety	Scientific Name	PLS Per Acre
Annual Quick-cover Grass		
Oats	*Avena sativa*	1.00
Cool Season Grass		
Western Wheatgrass	*Agropyron smithii*	2.50
Warm-Season Grass		
Black or Blue Grama	*Boutela gracilis var. Alma*	1.50
Little Bluestem	*Schizachyrium scoparium*	0.50
Sand Dropseed	*Sporobolus cryptandrus*	0.50
Sand Bluestem	*Andropogon hallii*	1.00
Indiangrass	*Sorghastrum nutans*	0.50
Sideoats Grama	*Bouteloua curtipendula var. Vaughn*	2.00
Wildflowers/ Forbs		
White prairie clover	*Dalea candida*	0.10
Scarlet globemallow	*Sphaeralcea coccinea*	0.10
Chia Sage	*Salvia columbariae*	0.10
Annual sunflower	*Helianthus annuus*	0.10
Annual buckwheat	*Eriogonum annuum*	0.10

The seed will be distributed with one or more of the following methods: push broadcaster seed spreader, tractor operated broadcast seed spreader, and/or drill seeding based on Site conditions and contractor availability. Application of the seed mixture will be at a coverage of 10 pounds of seeds per acre of reclaimed pasture with distribution by a drilling method or 20 pounds of seeds per acre of reclaimed pasture with distribution by a broadcast method.

Erosion control management will include prompt revegetation with mulching and contouring the surface to limit surface water flow. The area will be watered and photographed in landscape view including a timestamp with GPS data in decimal degrees.

Annual inspections (at a minimum) will take place in the pasture area until revegetation is consistent with local natural vegetation density. The Site will be inspected the following Spring to assess the success of regrowth. If necessary, an additional application of the seed mixture will be applied as well as any erosional control best management practices (BMP) needed to support growth and limit erosion. The inspections will also include monitoring for invasive and noxious species. If present, the species will be identified, inventoried and treated by a licensed contracted herbicide applicator or mechanically removed.

Schedule

Maverick will complete the delineation, excavation, and reclamation activities within 90 days of the date of approval of this *Work Plan* by the NMOCD and SLO. A final report requesting closure will be submitted within 30 days of receipt of final laboratory analytical results. Backfilling of the excavation will be scheduled and communicated to the SLO and NMOCD prior to initiation. Upon completion of revegetation, a copy of the C-103 submitted to the NMOCD will also be submitted to the SLO for final inspection and release.

Maverick believes the scope of work described above meets the requirements of 19.15.29 NMAC and is protective of human health, the environment, and groundwater. As such, Maverick respectfully requests approval of this *Work Plan* for Incident Number NAPP2304744550. The Form C-141 is included in Appendix E.

If you have any questions or comments, please contact Ms. Aimee Cole at (720) 384-7365 or acole@ensolum.com.

Sincerely,
Ensolum, LLC

Aimee Cole
Senior Managing Scientist

cc: Bryce Wagoner, Maverick Permian, LLC
State Land Office

Appendices:

Figure 1	Site Receptor Map
Figure 2	Assessment Soil Sample Locations
Table 1	Soil Analytical Results
Appendix A	Referenced Well Records
Appendix B	Photographic Log
Appendix C	Laboratory Analytical Reports
Appendix D	ROE Request for Remediation Form and ROE Permit
Appendix E	Form C-141

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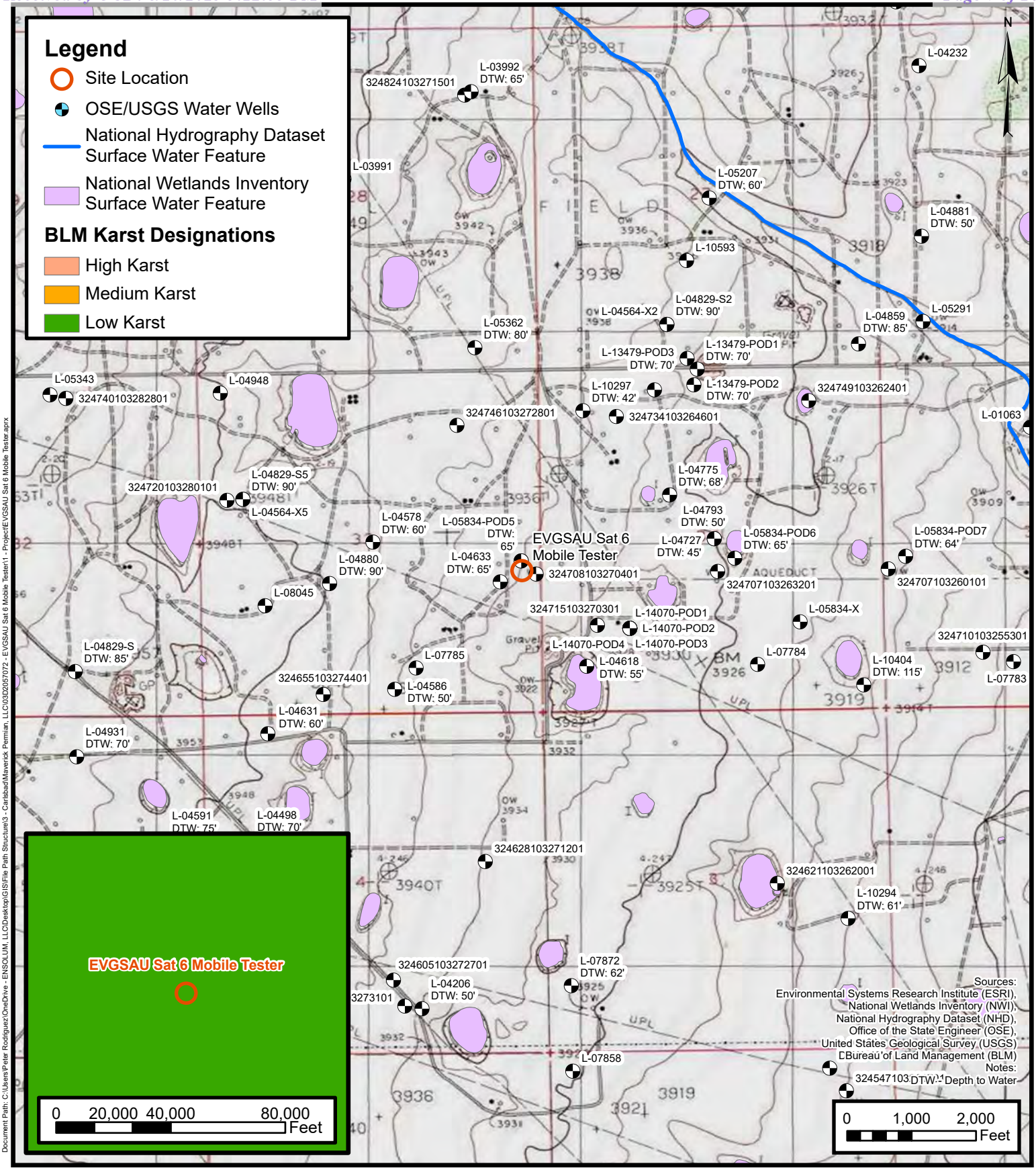
FIGURES



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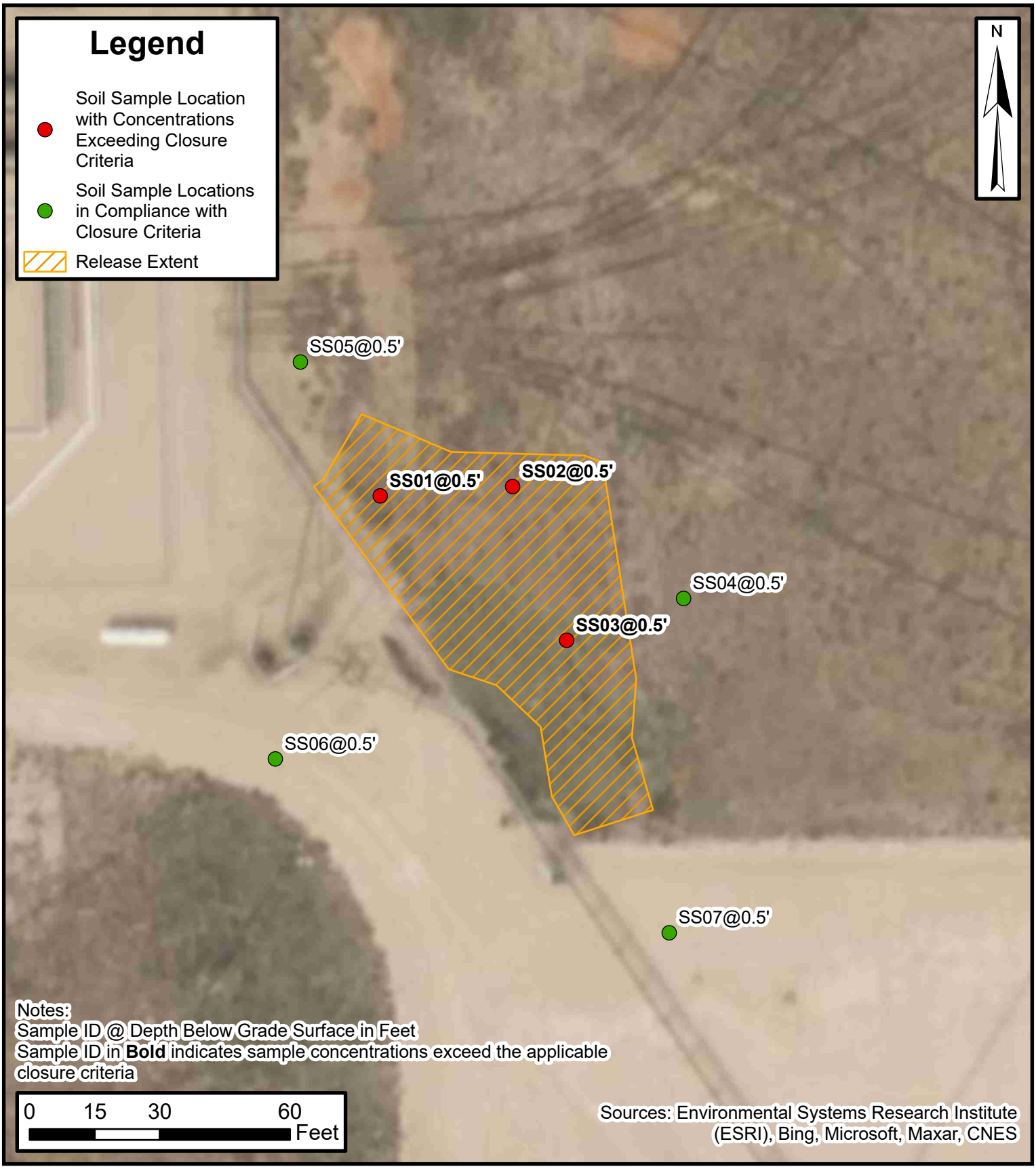
Environmental, Engineering and Hydrogeologic Consultants

Site Receptor Map

Maverick Permian, LLC
EVGSAU Sat 6 Mobile Tester
Incident ID: NAPP2304744550
Unit: I, Section 33, Township: 17S, Range: 35E,
Lea County, New Mexico

FIGURE
1



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Asssessment Soil Sample Locations

Maverick Permian, LLC
EVGSAU Sat 6 Mobile Tester
Incident Number: NAPP2304744550
Unit I, Sec 33, T17S, R35E
Lea County, New Mexico

FIGURE
2

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TABLES

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
EVGSAU Sat 6 Mobile Tester
Maverick Permian, 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)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			**10**	**50**	**NE**	**NE**	**NE**	**100**	**600**
Assessment Soil Samples									
SS01	2/8/2023	0.5	<0.099	25	1,110	20,000	2,810	**23,900**	**6,190**
SS02	2/8/2023	0.5	<0.099	**82**	736	17,300	2,250	**20,300**	**4,700**
SS03	2/8/2023	0.5	<0.101	28	308	8,480	1,100	**9,890**	**7,060**
SS04	2/8/2023	0.5	<0.002	<0.004	<50.0	<50.0	<50.0	<50.0	42.7
SS05	2/8/2023	0.5	<0.002	<0.004	<49.9	<49.9	<49.9	<49.9	11.1
SS06	2/8/2023	0.5	<0.002	<0.004	<49.9	<49.9	<49.9	<49.9	8.6
SS07	2/8/2023	0.5	<0.002	<0.004	<49.9	<49.9	<49.9	<49.9	114

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

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.*

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APPENDIX A

Referenced Well Records

New Mexico Office of the State Engineer
Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Twn	Rng	X	Y
	L 05834 POD5	2	2	4	33	17S	35E	644663	3629109*

Driller License: 46 **Driller Company:** ABBOTT BROTHERS COMPANY

Driller Name: MURRELL ABBOTT

Drill Start Date:	12/23/1971	**Drill Finish Date:**	12/28/1971	**Plug Date:**	
Log File Date:	01/13/1972	**PCW Rcv Date:**	03/29/1972	**Source:**	Shallow
Pump Type:	TURBIN	**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:		**Depth Well:**	234 feet	**Depth Water:**	65 feet

Water Bearing Stratifications:	Top	Bottom	Description
	65	152	Sandstone/Gravel/Conglomerate
	155	212	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	114	234

Meter Number:	19673	**Meter Make:**	
Meter Serial Number:	NO METER	**Meter Multiplier:**	1.0000
Number of Dials:	6	**Meter Type:**	Diversion
Unit of Measure:	Gallons	**Return Flow Percent:**	
Usage Multiplier:		**Reading Frequency:**	Quarterly

Meter Readings (in Acre-Feet)

Read Date	Year	Mtr Reading	Flag	Rdr	Comment	Mtr Amount	Online
01/01/2021	2021	6427	A	dd		0	
03/31/2021	2021	6427	A	dd		0	
06/30/2021	2021	6427	A	dd		0	
09/30/2021	2021	6427	A	dd		0	
11/12/2021	2021	0	A	dd		0	
01/01/2022	2021	0	A	dd		0	
03/31/2022	2022	0	A	dd		0	
07/01/2022	2022	0	A	WEB		0	X
10/01/2022	2022	0	A	WEB		0	X
01/01/2023	2022	0	A	WEB		0	X

**YTD Meter Amounts:	Year	Amount
	2021	0
	2022	0

***UTM location was derived from PLSS - see Help**

New Mexico Office of the State Engineer
Water Right Summary

get image list

WR File Number: L 05834 **Subbasin:** L **Cross Reference:** -

Primary Purpose: IND INDUSTRIAL

Primary Status: PMT PERMIT

Total Acres: 0 **Subfile:** - **Header:** -

Total Diversion: 1150 **Cause/Case:** -

Owner: SOUTHWESTERN PUBLIC SERVICE CO

Contact: PATTY HILL

x

Documents on File

	Trn #	Doc	File/Act	Status 1	Status 2	Transaction Desc.	From/ To	Acres	Diversion	Consumptive
get images	495768	CLW	1969-01-23	PMT	MTR	L 05834	T	0	0	
get images	495768	CLW	1969-01-23	PMT	MTR	L 05834	F	0	0	
get images	495738	APPRO	1968-07-16	PMT	ET	L 05834	T	0	1150	

x

Current Points of Diversion

(NAD83 UTM in meters)

POD Number	Well Tag	Source	Q 64	Q16	Q4	Sec	Tws	Rng	X	Y	Other Location Desc
L 05834 POD5		Shallow	2	2	4	33	17S	35E	644663	3629109*	
L 05834 POD6		Shallow	1	1	4	34	17S	35E	645673	3629122*	
L 05834 POD7		Shallow	1	1	3	35	17S	35E	646481	3629131*	
L 05834 POD8		Shallow	4	1	4	36	17S	35E	649102	3628955*	N1/2

***An (*) after northing value indicates UTM location was derived from PLSS - see Help**

x

Priority Summary

Priority	Status	Acres	Diversion	Pod Number	
01/10/1966	PMT	0	1150	L 05834 POD5	Shallow
				L 05834 POD6	Shallow
				L 05834 POD7	Shallow
				L 05834 POD8	Shallow

x

Place of Use

Q 256	Q 64	Q16	Q4	Sec	Tws	Rng	Acres	Diversion	CU	Use	Priority	Status	Other Location Desc
			4	28	18S	36E	0	1150		IND	01/10/1966	PMT	ELECTRIC POWER GENERATION PLANT

x

Source

Acres	Diversion	CU	Use	Priority	Source	Description
0	1150		IND	01/10/1966	GW	

Water System Detail Information

Water System No.:	NM3593213	Federal Type:	NTNC
Water System Name:	XCEL ENERGY SPS CUNNINGHAM STATION	Federal Source:	GW
Principal County Served:	LEA	System Status:	A
Principal City Served:	HOBBS	Activity Date:	06-01-1977

Water System Contacts

Type	Contact	Communication	
AC - Administrative Contact	HILL, PATTY 970 CR 65 EARTH, TX 79031	**Electronic Type**	**Value**
		EMAIL - Email	patty.hill@xcelenergy.com
		Phone Type	**Value**
		BUS - Business	806-272-8028
		MOB - Mobile	806-638-9987
DO - Designated Operator	DENNIS, TERRY P O BOX 1650 HOBBS, NM 88240	**Electronic Type**	**Value**
		EMAIL - Email	terry.dennis@xcelenergy.com
		Phone Type	**Value**
		BUS - Business	575-393-5717
		FAX - Facsimile	575-393-5208

Annual Operating Period(s)

Eff. Begin Date	Eff. End Date	Start Month/Day	End Month/Day	Type	Population
12-21-2006	No End Date	1/1	12/31	NT	54

Service Connection(s)

Type	Count	Meter Type	Meter Size
CB	1	MU	0

Service Area(s)

Code	Name
NT	INDUSTRIAL/AGRICULTURAL

System Certification Requirements

Certification Name	Code	Begin Date

Water System Facilities

Fac. ID	Facility Name	Type Status Avail.	Unit Process Name / Treatment Objective Name / Treatment Process Name
93213000	DIST	DS - A - P	
93213030	TREATMENT PLANT #2	TP - A - P	CHLORINATION / DISINFECTION / HYPOCHLORINATION, POST
93213038	STORAGE TANK #2 (HIGH TANK)	ST - A - P	
93213039	DW #1	WL - A - P	
93213040	TREATMENT PLANT #1	TP - A - P	RO UNIT / INORGANICS REMOVAL / REVERSE OSMOSIS
93213001	WELL #1	WL - I - P	
93213002	WELL #2	WL - I - P	
93213003	WELL #3	WL - I - P	
93213004	WELL #4	WL - I - P	
93213005	WELL #5	WL - I - P	

93213006	WELL #6	WL - I - P	
93213007	WELL #7	WL - I - P	
93213008	WELL #8	WL - I - P	
93213009	WELL #9	WL - I - P	
93213010	WELL #10	WL - I - P	
93213011	WELL #11	WL - I - P	
93213012	WELL #12	WL - I - P	
93213013	WELL #13	WL - I - P	
93213014	WELL #14	WL - I - P	
93213015	WELL #15	WL - I - P	
93213016	WELL #16	WL - I - P	
93213017	WELL #17	WL - I - P	
93213018	WELL #18	WL - I - P	
93213019	WELL #19	WL - I - P	
93213020	WELL #20	WL - I - P	
93213021	WELL #21	WL - I - P	
93213022	WELL #22	WL - I - P	
93213023	WELL #23	WL - I - P	
93213024	WELL #24	WL - I - P	
93213025	WELL #25	WL - I - P	
93213026	WELL #26	WL - I - P	
93213027	WELL #27	WL - I - P	
93213028	WELL #28	WL - I - P	
93213029	SAMPLING STATION #1	SS - I - P	
93213031	WELL #11A -PW1	WL - I - P	
93213032	WELL #11B - PW2	WL - I - P	
93213033	WELL #11 TREATMENT SKID	OT - I - P	
93213034	WELL #11 TREATMENT SKID TREATMENT UNIT	TP - I - P	AERATION UNIT | ORGANICS REMOVAL | AERATION, CASCADE
93213035	BOOSTER STATION #1	PC - I - P	
93213036	PRESSURE TANK #1 (STANDPIPE)	PC - I - P	
93213037	STORAGE TANK #1 (RAW WATER STORAGE TANK)	ST - I - P	

Water System Facility Flows

Supplying Facility ID No.	Supplying Facility Name	Receiving Facility ID No.	Receiving Facility Name
TP - 93213030	TREATMENT PLANT #2	ST - 93213038	STORAGE TANK #2 (HIGH TANK)
ST - 93213038	STORAGE TANK #2 (HIGH TANK)	DS - 93213000	DIST
WL - 93213039	DW #1	TP - 93213040	TREATMENT PLANT #1
TP - 93213040	TREATMENT PLANT #1	TP - 93213030	TREATMENT PLANT #2

Water Purchases

Water System \ Treatment Status

No Water Purchases

Buyers of Water

Water System / Population / Availability (blank, (S)easonal, (E)mergency, (I)nterim, (P)ermanent, (O)ther

No Buyers

National Water Information System: Web Interface

USGS Water Resources

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

Click to hideNews Bulletins

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

Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 324708103270401

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

USGS 324708103270401 17S.35E.33.422442

Lea County, New Mexico
Latitude 32°47'23", Longitude 103°27'14" NAD27
Land-surface elevation 3,935.00 feet above NGVD29
The depth of the well is 234 feet below land surface.
This well is completed in the High Plains aquifer (N100HGHPLN) 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 of measurement	? Water-level approval status
1986-01-16		D	62610		3870.92	NGVD29	1	Z			A
1986-01-16		D	62611		3872.39	NAVD88	1	Z			A
1986-01-16		D	72019	64.08			1	Z			A
1990-12-20		D	62610		3868.06	NGVD29	1	Z			A
1990-12-20		D	62611		3869.53	NAVD88	1	Z			A
1990-12-20		D	72019	66.94			1	Z			A

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
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	Z	Other.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	A	Approved for publication -- Processing and review completed.

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New Mexico Office of the State Engineer
Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Twn	Rng	X	Y
	L 04633		2	4	33	17S	35E	644564	3629010*

Driller License: 46 **Driller Company:** ABBOTT BROTHERS COMPANY

Driller Name: ABBOTT, MURRELL

Drill Start Date:	04/20/1961	**Drill Finish Date:**	04/20/1961	**Plug Date:**	06/09/1961
Log File Date:	04/27/1961	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	
Casing Size:	6.63	**Depth Well:**	130 feet	**Depth Water:**	65 feet

Water Bearing Stratifications:	Top	Bottom	Description
	65	130	Sandstone/Gravel/Conglomerate

Casing Perforations:	Top	Bottom
	65	100

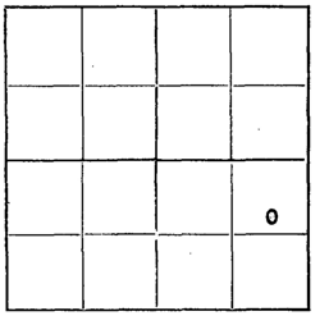
***UTM location was derived from PLSS - see Help**

Form WR-23 SANTA [redacted] STATE ENGINEER OFFICE [redacted]UM ABO [redacted]LL STATE "T" No. 7 495578

WELL RECORD

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1



(Plat of 640 acres)

(A) Owner of well HONDO DRILLING COMPANY
Street and Number P.O. Box 116
City Midland State Texas
Well was drilled under Permit No. L-4633 and is located in the
S½ ¼ NE ¼ SE ¼ of Section 33 Twp. 17 South Rge. 35 East
(B) Drilling Contractor Abbott Brothers License No. WD-46
Street and Number P.O. Box 637
City Hobbs State New Mexico
Drilling was commenced April 20 19
Drilling was completed April 20 19 61

Elevation at top of casing in feet above sea level Total depth of well 130
State whether well is shallow or artesian shallow Depth to water upon completion 65

Section 2 PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation
1	65	130	65	water sand
2				
3				
4				
5				

Section 3 RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth Top	Depth Bottom	Feet	Type Shoe	Perforations From	Perforations To
6 5/8	17	10	0	100	100	open	65	100

Section 4 RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used

STATE ENGINEER OFFICE SANTA FE, N. M. 1961 MAY -2 AM 8:25

Section 5 PLUGGING RECORD

Name of Plugging Contractor License No.
Street and Number City State
Tons of Clay used Tons of Roughage used Type of roughage
Plugging method used Date Plugged 19
Plugging approved by:

Basin Supervisor

Cement Plugs were placed as follows:

No.	Depth of Plug From	Depth of Plug To	No. of Sacks Used

FOR USE OF STATE ENGINEER ONLY

Date Received STATE ENGINEER OFFICE DISTRICT II ROSWELL, N. MEX. APR 27 AM 7:45 1961

File No. L-4633 Use O.W.D. Location No. 17.35.33.424

Section 6

LOG OF WELL

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color	Type of Material Encountered
0	1	1		soil
1	19	18		caliche
19	65	46		sand
65	130	65		water sand

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

Murrell Abbatt Jr

Well Driller

Form WR-23

SANTA FE

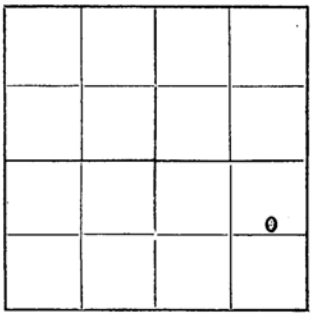
[redacted] STATE ENGINEER OFFICE [redacted]

Plugging WELL RECORD

445978

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the nearest district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1A and Section 5 need be completed.

Section 1



(Plat of 640 acres)

(A) Owner of well HONDO DRILLING COMPANY

Street and Number Box 116

City Midland State Texas

Well was drilled under Permit No. L-4633 and is located in the

S½ ¼ NE ¼ SE ¼ of Section 33 Twp. 17 S Rge. 35 E

(B) Drilling Contractor License No.

Street and Number

City State

Drilling was commenced 19

Drilling was completed 19

Elevation at top of casing in feet above sea level Total depth of well

State whether well is shallow or artesian Depth to water upon completion

Section 2 PRINCIPAL WATER-BEARING STRATA

No.	Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation
1				
2				
3				
4				
5				

STATE ENGINEER OFFICE SANTA FE, N. M. JUN 28 AM 8:49 1961

Section 3 RECORD OF CASING

Dia in.	Pounds ft.	Threads in	Depth Top	Depth Bottom	Feet	Type Shoe	Perforations From	Perforations To

Section 4 RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Diameter Hole in in.	Tons Clay	No. Sacks of Cement	Methods Used

Section 5 PLUGGING RECORD

Name of Plugging Contractor Abbott Brothers License No. WD-46

Street and Number Box 637 City Hobbs State New Mexico

Tons of Clay used Tons of Roughage used Type of roughage

Plugging method used Wet conc. plug over rubble fill Date Plugged June 9 19 61

Plugging approved by: James A. Gillham

Basin Supervisor

Cement Plugs were placed as follows:

No.	Depth of Plug From	Depth of Plug To	No. of Sacks Used
1	3	6	4

FOR USE OF STATE ENGINEER ONLY

Date Received

STATE ENGINEER OFFICE DISTRICT II ROSWELL, N. MEX. JUN 22 AM 8:11 1961

File No. L-4633 Use O.W.D. Location No. 17.35.33.42[illegible]

Section 6

LOG OF WELL

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color	Type of Material Encountered

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described well.

Well Driller

ENSOLUM

APPENDIX B

Photographic Log

ENSOLUM

Photographic Log
Maverick Natural Resources, LLC
EVGSAU Sat 6 Mobile Tester
NAPP2304744550

Photograph 1 Date: 2/8/2023
Description: Soil staining in release footprint
View: Southeast

Photograph 2 Date: 2/8/2023
Description: Soil staining in release footprint
View: Southwest

Photograph 3 Date: 2/8/2023
Description: Soil staining in release footprint
View: South

Photograph 4 Date: 2/8/2023
Description: Soil staining in release footprint
View: Northwest

ENSOLUM

APPENDIX C

Laboratory Analytical Reports & Chain of Custody Documentation

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 2/20/2023 4:42:55 PM

JOB DESCRIPTION

EVGSAU Sat 6 Mobile Tester
SDG NUMBER Lea County NM

JOB NUMBER

890-4095-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

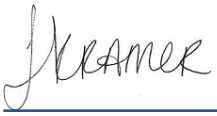
my EOL

Eurofins Carlsbad

Job Notes

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

Authorization



Generated
2/20/2023 4:42:55 PM

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

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Laboratory Job ID: 890-4095-1
SDG: Lea County NM

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Definitions/Glossary

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4095-1
SDG: Lea County NM

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	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: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4095-1
SDG: Lea County NM

Job ID: 890-4095-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-4095-1

Receipt
The samples were received on 2/13/2023 3:02 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.7°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: SS01 (890-4095-1), SS02 (890-4095-2) and SS03 (890-4095-3).

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-46469 and analytical batch 880-46483 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 sample was outside control limits: SS02 (890-4095-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following samples were outside control limits: SS01 (890-4095-1), SS02 (890-4095-2) and SS03 (890-4095-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: SS01 (890-4095-1), SS02 (890-4095-2) and SS03 (890-4095-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-46409 and analytical batch 880-46479 recovered outside control limits for the following analytes: Diesel Range Organics (Over C10-C28).

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

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

Client Sample Results

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4095-1
SDG: Lea County NM

Client Sample ID: SS01

Lab Sample ID: 890-4095-1
Matrix: Solid
Date Collected: 02/08/23 11:30
Date Received: 02/13/23 15:02
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0990	U	0.0990		mg/Kg		02/14/23 14:50	02/16/23 04:41	50
Toluene	**1.83**		0.0990		mg/Kg		02/14/23 14:50	02/16/23 04:41	50
Ethylbenzene	**8.96**		0.0990		mg/Kg		02/14/23 14:50	02/16/23 04:41	50
m-Xylene & p-Xylene	**9.24**		0.198		mg/Kg		02/14/23 14:50	02/16/23 04:41	50
o-Xylene	**4.51**		0.0990		mg/Kg		02/14/23 14:50	02/16/23 04:41	50
Xylenes, Total	**13.8**		0.198		mg/Kg		02/14/23 14:50	02/16/23 04:41	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*272*	*S1+*	*70 - 130*	*02/14/23 14:50*	*02/16/23 04:41*	*50*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*02/14/23 14:50*	*02/16/23 04:41*	*50*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**24.5**		0.198		mg/Kg			02/16/23 09:39	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**23900**		500		mg/Kg			02/19/23 12:25	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	**1110**		500		mg/Kg		02/15/23 11:56	02/17/23 04:21	10
Diesel Range Organics (Over C10-C28)	**20000**	***1**	500		mg/Kg		02/15/23 11:56	02/17/23 04:21	10
Oil Range Organics (Over C28-C36)	**2810**		500		mg/Kg		02/15/23 11:56	02/17/23 04:21	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*237*	*S1+*	*70 - 130*	*02/15/23 11:56*	*02/17/23 04:21*	*10*
o-Terphenyl	*413*	*S1+*	*70 - 130*	*02/15/23 11:56*	*02/17/23 04:21*	*10*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6190**		49.8		mg/Kg			02/16/23 21:34	10

Client Sample ID: SS02

Lab Sample ID: 890-4095-2
Matrix: Solid
Date Collected: 02/08/23 11:35
Date Received: 02/13/23 15:02
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0994	U	0.0994		mg/Kg		02/14/23 14:50	02/16/23 05:02	50
Toluene	**6.95**		0.0994		mg/Kg		02/14/23 14:50	02/16/23 05:02	50
Ethylbenzene	**26.5**		0.396		mg/Kg		02/15/23 16:11	02/16/23 19:35	200
m-Xylene & p-Xylene	**33.0**		0.199		mg/Kg		02/14/23 14:50	02/16/23 05:02	50
o-Xylene	**15.0**		0.0994		mg/Kg		02/14/23 14:50	02/16/23 05:02	50
Xylenes, Total	**48.0**		0.199		mg/Kg		02/14/23 14:50	02/16/23 05:02	50

Client Sample Results

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4095-1
SDG: Lea County NM

Client Sample ID: SS02

Lab Sample ID: 890-4095-2
Matrix: Solid
Date Collected: 02/08/23 11:35
Date Received: 02/13/23 15:02
Sample Depth: 0.5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	469	S1+	70 - 130	02/14/23 14:50	02/16/23 05:02	50
1,4-Difluorobenzene (Surr)	79		70 - 130	02/14/23 14:50	02/16/23 05:02	50

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	81.5		0.396	mg/Kg			02/16/23 09:39	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	20300		499	mg/Kg			02/19/23 12:25	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	736		499	mg/Kg		02/15/23 11:56	02/17/23 04:44	10
Diesel Range Organics (Over C10-C28)	17300	*1	499	mg/Kg		02/15/23 11:56	02/17/23 04:44	10
Oil Range Organics (Over C28-C36)	2250		499	mg/Kg		02/15/23 11:56	02/17/23 04:44	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	135	S1+	70 - 130	02/15/23 11:56	02/17/23 04:44	10
o-Terphenyl	351	S1+	70 - 130	02/15/23 11:56	02/17/23 04:44	10

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4700		50.0	mg/Kg			02/16/23 21:38	10

Client Sample ID: SS03

Lab Sample ID: 890-4095-3
Matrix: Solid
Date Collected: 02/08/23 11:40
Date Received: 02/13/23 15:02
Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.101	U	0.101	mg/Kg		02/14/23 14:50	02/16/23 05:22	50
Toluene	1.93		0.101	mg/Kg		02/14/23 14:50	02/16/23 05:22	50
Ethylbenzene	10.5		0.101	mg/Kg		02/14/23 14:50	02/16/23 05:22	50
m-Xylene & p-Xylene	10.4		0.201	mg/Kg		02/14/23 14:50	02/16/23 05:22	50
o-Xylene	4.87		0.101	mg/Kg		02/14/23 14:50	02/16/23 05:22	50
Xylenes, Total	15.3		0.201	mg/Kg		02/14/23 14:50	02/16/23 05:22	50

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	233	S1+	70 - 130	02/14/23 14:50	02/16/23 05:22	50
1,4-Difluorobenzene (Surr)	92		70 - 130	02/14/23 14:50	02/16/23 05:22	50

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	27.7		0.201	mg/Kg			02/16/23 09:39	1

Client Sample Results

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4095-1
SDG: Lea County NM

Client Sample ID: SS03

Date Collected: 02/08/23 11:40
Date Received: 02/13/23 15:02
Sample Depth: 0.5

Lab Sample ID: 890-4095-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	9890		250		mg/Kg			02/19/23 12:25	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	308		250		mg/Kg		02/15/23 11:56	02/17/23 05:06	5
Diesel Range Organics (Over C10-C28)	8480	*1	250		mg/Kg		02/15/23 11:56	02/17/23 05:06	5
Oil Range Organics (Over C28-C36)	1100		250		mg/Kg		02/15/23 11:56	02/17/23 05:06	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*02/15/23 11:56*	*02/17/23 05:06*	*5*
o-Terphenyl	*175*	*S1+*	*70 - 130*	*02/15/23 11:56*	*02/17/23 05:06*	*5*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7060		49.5		mg/Kg			02/16/23 21:43	10

Surrogate Summary

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4095-1
SDG: Lea County NM

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)
880-24811-A-1-D MS	Matrix Spike	109	94
880-24811-A-1-E MSD	Matrix Spike Duplicate	92	85
890-4095-1	SS01	272 S1+	94
890-4095-2	SS02	469 S1+	79
890-4095-3	SS03	233 S1+	92
890-4105-A-1-A MS	Matrix Spike	112	104
890-4105-A-1-B MSD	Matrix Spike Duplicate	114	109
LCS 880-46330/1-A	Lab Control Sample	112	100
LCS 880-46469/1-A	Lab Control Sample	105	107
LCSD 880-46330/2-A	Lab Control Sample Dup	114	109
LCSD 880-46469/2-A	Lab Control Sample Dup	106	107
MB 880-46300/5-A	Method Blank	77	92
MB 880-46330/5-A	Method Blank	79	90
MB 880-46469/5-A	Method Blank	78	91

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-24624-A-7-D MS	Matrix Spike	85	91
880-24624-A-7-E MSD	Matrix Spike Duplicate	99	107
890-4095-1	SS01	237 S1+	413 S1+
890-4095-2	SS02	135 S1+	351 S1+
890-4095-3	SS03	95	175 S1+
LCS 880-46409/2-A	Lab Control Sample	98	113
LCSD 880-46409/3-A	Lab Control Sample Dup	85	99
MB 880-46409/1-A	Method Blank	85	108

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4095-1
SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-46300/5-A
Matrix: Solid
Analysis Batch: 46358

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 46300

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/14/23 11:24	02/15/23 10:54	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/14/23 11:24	02/15/23 10:54	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/14/23 11:24	02/15/23 10:54	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/14/23 11:24	02/15/23 10:54	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/14/23 11:24	02/15/23 10:54	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/14/23 11:24	02/15/23 10:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*77*		*70 - 130*	*02/14/23 11:24*	*02/15/23 10:54*	*1*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*02/14/23 11:24*	*02/15/23 10:54*	*1*

Lab Sample ID: MB 880-46330/5-A
Matrix: Solid
Analysis Batch: 46358

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 46330

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/14/23 14:50	02/15/23 21:30	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/14/23 14:50	02/15/23 21:30	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/14/23 14:50	02/15/23 21:30	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/14/23 14:50	02/15/23 21:30	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/14/23 14:50	02/15/23 21:30	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/14/23 14:50	02/15/23 21:30	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*79*		*70 - 130*	*02/14/23 14:50*	*02/15/23 21:30*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*02/14/23 14:50*	*02/15/23 21:30*	*1*

Lab Sample ID: LCS 880-46330/1-A
Matrix: Solid
Analysis Batch: 46358

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 46330

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1083		mg/Kg		108	70 - 130		
Toluene			0.100	0.1038		mg/Kg		104	70 - 130		
Ethylbenzene			0.100	0.1058		mg/Kg		106	70 - 130		
m-Xylene & p-Xylene			0.200	0.2227		mg/Kg		111	70 - 130		
o-Xylene			0.100	0.1126		mg/Kg		113	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 880-46330/2-A
Matrix: Solid
Analysis Batch: 46358

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 46330

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1045		mg/Kg		104	70 - 130	4	35

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4095-1
SDG: Lea County NM

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

Lab Sample ID: LCSD 880-46330/2-A
Matrix: Solid
Analysis Batch: 46358

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 46330

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.1046		mg/Kg		105	70 - 130	1	35
Ethylbenzene			0.100	0.1105		mg/Kg		111	70 - 130	4	35
m-Xylene & p-Xylene			0.200	0.2331		mg/Kg		117	70 - 130	5	35
o-Xylene			0.100	0.1186		mg/Kg		119	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*

Lab Sample ID: 890-4105-A-1-A MS
Matrix: Solid
Analysis Batch: 46358

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 46330

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U	0.100	0.09306		mg/Kg		92	70 - 130
Toluene	0.00254		0.100	0.08782		mg/Kg		85	70 - 130
Ethylbenzene	<0.00202	U	0.100	0.09056		mg/Kg		90	70 - 130
m-Xylene & p-Xylene	0.00622		0.201	0.1922		mg/Kg		93	70 - 130
o-Xylene	<0.00202	U	0.100	0.09585		mg/Kg		94	70 - 130

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

Lab Sample ID: 890-4105-A-1-B MSD
Matrix: Solid
Analysis Batch: 46358

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 46330

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.0990	0.09725		mg/Kg		97	70 - 130	4	35
Toluene	0.00254		0.0990	0.09032		mg/Kg		89	70 - 130	3	35
Ethylbenzene	<0.00202	U	0.0990	0.09189		mg/Kg		93	70 - 130	1	35
m-Xylene & p-Xylene	0.00622		0.198	0.1949		mg/Kg		95	70 - 130	1	35
o-Xylene	<0.00202	U	0.0990	0.09513		mg/Kg		94	70 - 130	1	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*

Lab Sample ID: MB 880-46469/5-A
Matrix: Solid
Analysis Batch: 46483

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 46469

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/15/23 16:11	02/16/23 11:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/15/23 16:11	02/16/23 11:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/15/23 16:11	02/16/23 11:46	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/15/23 16:11	02/16/23 11:46	1

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4095-1
SDG: Lea County NM

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

Lab Sample ID: MB 880-46469/5-A
Matrix: Solid
Analysis Batch: 46483

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 46469

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/15/23 16:11	02/16/23 11:46	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/15/23 16:11	02/16/23 11:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*78*		*70 - 130*	*02/15/23 16:11*	*02/16/23 11:46*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*02/15/23 16:11*	*02/16/23 11:46*	*1*

Lab Sample ID: LCS 880-46469/1-A
Matrix: Solid
Analysis Batch: 46483

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 46469

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1288		mg/Kg		129	70 - 130		
Toluene			0.100	0.1150		mg/Kg		115	70 - 130		
Ethylbenzene			0.100	0.1162		mg/Kg		116	70 - 130		
m-Xylene & p-Xylene			0.200	0.2450		mg/Kg		123	70 - 130		
o-Xylene			0.100	0.1228		mg/Kg		123	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*

Lab Sample ID: LCSD 880-46469/2-A
Matrix: Solid
Analysis Batch: 46483

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 46469

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1225		mg/Kg		122	70 - 130	5	35
Toluene			0.100	0.1101		mg/Kg		110	70 - 130	4	35
Ethylbenzene			0.100	0.1099		mg/Kg		110	70 - 130	6	35
m-Xylene & p-Xylene			0.200	0.2312		mg/Kg		116	70 - 130	6	35
o-Xylene			0.100	0.1155		mg/Kg		115	70 - 130	6	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*106*		*70 - 130*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*

Lab Sample ID: 880-24811-A-1-D MS
Matrix: Solid
Analysis Batch: 46483

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 46469

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00202	U	0.101	0.08001		mg/Kg		79	70 - 130		
Toluene	<0.00202	U	0.101	0.07885		mg/Kg		78	70 - 130		
Ethylbenzene	0.0872	F1	0.101	0.1216	F1	mg/Kg		34	70 - 130		
m-Xylene & p-Xylene	0.285	F1	0.202	0.3421	F1	mg/Kg		28	70 - 130		
o-Xylene	0.0839	F1	0.101	0.1298	F1	mg/Kg		46	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4095-1
SDG: Lea County NM

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

Lab Sample ID: 880-24811-A-1-D MS
Matrix: Solid
Analysis Batch: 46483

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 46469

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: 880-24811-A-1-E MSD
Matrix: Solid
Analysis Batch: 46483

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 46469

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.0996	0.08370		mg/Kg		84	70 - 130	5	35
Toluene	<0.00202	U	0.0996	0.07632		mg/Kg		76	70 - 130	3	35
Ethylbenzene	0.0872	F1	0.0996	0.1221	F1	mg/Kg		35	70 - 130	0	35
m-Xylene & p-Xylene	0.285	F1	0.199	0.3245	F1	mg/Kg		20	70 - 130	5	35
o-Xylene	0.0839	F1	0.0996	0.1229	F1	mg/Kg		39	70 - 130	5	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		70 - 130
1,4-Difluorobenzene (Surr)	85		70 - 130

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

Lab Sample ID: MB 880-46409/1-A
Matrix: Solid
Analysis Batch: 46479

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 46409

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/15/23 11:56	02/16/23 19:48	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/15/23 11:56	02/16/23 19:48	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/15/23 11:56	02/16/23 19:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	85		70 - 130	02/15/23 11:56	02/16/23 19:48	1
o-Terphenyl	108		70 - 130	02/15/23 11:56	02/16/23 19:48	1

Lab Sample ID: LCS 880-46409/2-A
Matrix: Solid
Analysis Batch: 46479

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 46409

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1045		mg/Kg		104	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1061		mg/Kg		106	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	98		70 - 130
o-Terphenyl	113		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4095-1
SDG: Lea County NM

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

Lab Sample ID: LCSD 880-46409/3-A
Matrix: Solid
Analysis Batch: 46479

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 46409

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	893.1		mg/Kg		89	70 - 130	16	20
Diesel Range Organics (Over C10-C28)			1000	849.0	*1	mg/Kg		85	70 - 130	22	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*85*		*70 - 130*
o-Terphenyl	*99*		*70 - 130*

Lab Sample ID: 880-24624-A-7-D MS
Matrix: Solid
Analysis Batch: 46479

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 46409

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	1000	1023		mg/Kg		98	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U *1	1000	940.4		mg/Kg		92	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*85*		*70 - 130*
o-Terphenyl	*91*		*70 - 130*

Lab Sample ID: 880-24624-A-7-E MSD
Matrix: Solid
Analysis Batch: 46479

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 46409

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	1000	1044		mg/Kg		100	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.9	U *1	1000	1103		mg/Kg		109	70 - 130	16	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*99*		*70 - 130*
o-Terphenyl	*107*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-46459/1-A
Matrix: Solid
Analysis Batch: 46551

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			02/16/23 21:05	1

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4095-1
SDG: Lea County NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-46459/2-A
Matrix: Solid
Analysis Batch: 46551

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	238.5		mg/Kg		95	90 - 110		

Lab Sample ID: LCSD 880-46459/3-A
Matrix: Solid
Analysis Batch: 46551

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	261.8		mg/Kg		105	90 - 110	9	20

Lab Sample ID: 890-4094-A-1-E MS
Matrix: Solid
Analysis Batch: 46551

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	11.1		251	262.5		mg/Kg		100	90 - 110		

Lab Sample ID: 890-4094-A-1-F MSD
Matrix: Solid
Analysis Batch: 46551

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	11.1		251	267.7		mg/Kg		102	90 - 110	2	20

QC Association Summary

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4095-1
SDG: Lea County NM

GC VOA

Prep Batch: 46300

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-46300/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 46330

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4095-1	SS01	Total/NA	Solid	5035	
890-4095-2	SS02	Total/NA	Solid	5035	
890-4095-3	SS03	Total/NA	Solid	5035	
MB 880-46330/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-46330/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-46330/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-4105-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
890-4105-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 46358

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4095-1	SS01	Total/NA	Solid	8021B	46330
890-4095-2	SS02	Total/NA	Solid	8021B	46330
890-4095-3	SS03	Total/NA	Solid	8021B	46330
MB 880-46300/5-A	Method Blank	Total/NA	Solid	8021B	46300
MB 880-46330/5-A	Method Blank	Total/NA	Solid	8021B	46330
LCS 880-46330/1-A	Lab Control Sample	Total/NA	Solid	8021B	46330
LCSD 880-46330/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	46330
890-4105-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	46330
890-4105-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	46330

Prep Batch: 46469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4095-2	SS02	Total/NA	Solid	5035	
MB 880-46469/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-46469/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-46469/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-24811-A-1-D MS	Matrix Spike	Total/NA	Solid	5035	
880-24811-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 46483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4095-2	SS02	Total/NA	Solid	8021B	46469
MB 880-46469/5-A	Method Blank	Total/NA	Solid	8021B	46469
LCS 880-46469/1-A	Lab Control Sample	Total/NA	Solid	8021B	46469
LCSD 880-46469/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	46469
880-24811-A-1-D MS	Matrix Spike	Total/NA	Solid	8021B	46469
880-24811-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	46469

Analysis Batch: 46506

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4095-1	SS01	Total/NA	Solid	Total BTEX	
890-4095-2	SS02	Total/NA	Solid	Total BTEX	
890-4095-3	SS03	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4095-1
SDG: Lea County NM

GC Semi VOA

Prep Batch: 46409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4095-1	SS01	Total/NA	Solid	8015NM Prep	
890-4095-2	SS02	Total/NA	Solid	8015NM Prep	
890-4095-3	SS03	Total/NA	Solid	8015NM Prep	
MB 880-46409/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-46409/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-46409/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-24624-A-7-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-24624-A-7-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 46479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4095-1	SS01	Total/NA	Solid	8015B NM	46409
890-4095-2	SS02	Total/NA	Solid	8015B NM	46409
890-4095-3	SS03	Total/NA	Solid	8015B NM	46409
MB 880-46409/1-A	Method Blank	Total/NA	Solid	8015B NM	46409
LCS 880-46409/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	46409
LCSD 880-46409/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	46409
880-24624-A-7-D MS	Matrix Spike	Total/NA	Solid	8015B NM	46409
880-24624-A-7-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	46409

Analysis Batch: 46671

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4095-1	SS01	Total/NA	Solid	8015 NM	
890-4095-2	SS02	Total/NA	Solid	8015 NM	
890-4095-3	SS03	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 46459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4095-1	SS01	Soluble	Solid	DI Leach	
890-4095-2	SS02	Soluble	Solid	DI Leach	
890-4095-3	SS03	Soluble	Solid	DI Leach	
MB 880-46459/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-46459/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-46459/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4094-A-1-E MS	Matrix Spike	Soluble	Solid	DI Leach	
890-4094-A-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 46551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4095-1	SS01	Soluble	Solid	300.0	46459
890-4095-2	SS02	Soluble	Solid	300.0	46459
890-4095-3	SS03	Soluble	Solid	300.0	46459
MB 880-46459/1-A	Method Blank	Soluble	Solid	300.0	46459
LCS 880-46459/2-A	Lab Control Sample	Soluble	Solid	300.0	46459
LCSD 880-46459/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	46459
890-4094-A-1-E MS	Matrix Spike	Soluble	Solid	300.0	46459
890-4094-A-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	46459

Lab Chronicle

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4095-1
SDG: Lea County NM

Client Sample ID: SS01

Date Collected: 02/08/23 11:30
Date Received: 02/13/23 15:02

Lab Sample ID: 890-4095-1
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			5.05 g	5 mL	46330	02/14/23 14:50	MNR	EET MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	46358	02/16/23 04:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			46506	02/16/23 09:39	AJ	EET MID
Total/NA	Analysis	8015 NM		1			46671	02/19/23 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	46409	02/15/23 11:56	SM	EET MID
Total/NA	Analysis	8015B NM		10	1 uL	1 uL	46479	02/17/23 04:21	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	46459	02/15/23 15:35	KS	EET MID
Soluble	Analysis	300.0		10			46551	02/16/23 21:34	CH	EET MID

Client Sample ID: SS02

Date Collected: 02/08/23 11:35
Date Received: 02/13/23 15:02

Lab Sample ID: 890-4095-2
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			5.03 g	5 mL	46330	02/14/23 14:50	MNR	EET MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	46358	02/16/23 05:02	MNR	EET MID
Total/NA	Prep	5035			5.05 g	5 mL	46469	02/15/23 16:11	MNR	EET MID
Total/NA	Analysis	8021B		200	5 mL	5 mL	46483	02/16/23 19:35	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			46506	02/16/23 09:39	AJ	EET MID
Total/NA	Analysis	8015 NM		1			46671	02/19/23 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	46409	02/15/23 11:56	SM	EET MID
Total/NA	Analysis	8015B NM		10	1 uL	1 uL	46479	02/17/23 04:44	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	46459	02/15/23 15:35	KS	EET MID
Soluble	Analysis	300.0		10			46551	02/16/23 21:38	CH	EET MID

Client Sample ID: SS03

Date Collected: 02/08/23 11:40
Date Received: 02/13/23 15:02

Lab Sample ID: 890-4095-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	46330	02/14/23 14:50	MNR	EET MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	46358	02/16/23 05:22	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			46506	02/16/23 09:39	AJ	EET MID
Total/NA	Analysis	8015 NM		1			46671	02/19/23 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	46409	02/15/23 11:56	SM	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	46479	02/17/23 05:06	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	46459	02/15/23 15:35	KS	EET MID
Soluble	Analysis	300.0		10			46551	02/16/23 21:43	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: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4095-1
SDG: Lea County NM

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: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4095-1
SDG: Lea County NM

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: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4095-1
SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-4095-1	SS01	Solid	02/08/23 11:30	02/13/23 15:02	0.5
890-4095-2	SS02	Solid	02/08/23 11:35	02/13/23 15:02	0.5
890-4095-3	SS03	Solid	02/08/23 11:40	02/13/23 15:02	0.5

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Chain of Custody

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

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Kalei Jennings	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:	817-683-2503	Email:	kjennings@ensolum.com, dnikanorov@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:	EVGSAU Sat 6 Mobile Tester	Turn Around	☑ Routine ☐ Rush
Project Number:	03D2057072	Due Date:	
Project Location:	Lea County, NM	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Dmitry Nikanorov		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	TAM-007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	5.9
Total Containers:		Corrected Temperature:	5.7

Preservative Codes

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)
SS01	S	2/8/2023	11:30	0.5'	Grab	1		x	x	x
SS02	S	2/8/2023	11:35	0.5'	Grab	1		x	x	x
SS03	S	2/8/2023	11:40	0.5'	Grab	1		x	x	x

ANALYSIS REQUEST

890-4095 Chain of Custody

Sample Comments

Incident Number

DW

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		Amanda Stiff	2.13.23 1500			
3				4		
5				6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4095-1
SDG Number: Lea County NM

Login Number: 4095
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	

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 2/20/2023 2:43:12 PM

JOB DESCRIPTION

EVGSAU Sat 6 Mobile Tester
SDG NUMBER Lea County NM

JOB NUMBER

890-4096-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

my EOL

Eurofins Carlsbad

Job Notes

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

Authorization

Generated
2/20/2023 2:43:12 PM

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

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Laboratory Job ID: 890-4096-1
SDG: Lea County NM

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Definitions/Glossary

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4096-1
SDG: Lea County NM

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4096-1
SDG: Lea County NM

Job ID: 890-4096-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-4096-1

Receipt
The sample was received on 2/13/2023 3:02 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.7°C

Receipt Exceptions
The following sample was received and analyzed from an unpreserved bulk soil jar: SS04 (890-4096-1).

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

GC Semi VOA
Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-46409 and analytical batch 880-46479 recovered outside control limits for the following analytes: Diesel Range Organics (Over C10-C28).

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

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

Client Sample Results

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4096-1
SDG: Lea County NM

Client Sample ID: SS04

Date Collected: 02/08/23 12:45
Date Received: 02/13/23 15:02
Sample Depth: 0.5

Lab Sample ID: 890-4096-1

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		02/17/23 08:51	02/17/23 16:58	1
Toluene	<0.00199	U	0.00199		mg/Kg		02/17/23 08:51	02/17/23 16:58	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		02/17/23 08:51	02/17/23 16:58	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		02/17/23 08:51	02/17/23 16:58	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		02/17/23 08:51	02/17/23 16:58	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		02/17/23 08:51	02/17/23 16:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*	*02/17/23 08:51*	*02/17/23 16:58*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*02/17/23 08:51*	*02/17/23 16:58*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			02/20/23 13:47	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			02/19/23 12:25	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/15/23 11:56	02/17/23 04:00	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0		mg/Kg		02/15/23 11:56	02/17/23 04:00	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/15/23 11:56	02/17/23 04:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*02/15/23 11:56*	*02/17/23 04:00*	*1*
o-Terphenyl	*104*		*70 - 130*	*02/15/23 11:56*	*02/17/23 04:00*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**42.7**		5.01		mg/Kg			02/16/23 21:48	1

Surrogate Summary

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4096-1
SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-24598-A-1-F MS	Matrix Spike	96	98
880-24598-A-1-G MSD	Matrix Spike Duplicate	97	98
890-4096-1	SS04	122	103
LCS 880-46575/1-A	Lab Control Sample	100	97
LCSD 880-46575/2-A	Lab Control Sample Dup	107	93
MB 880-46575/5-A	Method Blank	98	91

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-24624-A-7-D MS	Matrix Spike	85	91
880-24624-A-7-E MSD	Matrix Spike Duplicate	99	107
890-4096-1	SS04	93	104
LCS 880-46409/2-A	Lab Control Sample	98	113
LCSD 880-46409/3-A	Lab Control Sample Dup	85	99
MB 880-46409/1-A	Method Blank	85	108

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4096-1
SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-46575/5-A
Matrix: Solid
Analysis Batch: 46569

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 46575

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/17/23 08:51	02/17/23 15:36	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/17/23 08:51	02/17/23 15:36	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/17/23 08:51	02/17/23 15:36	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/17/23 08:51	02/17/23 15:36	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/17/23 08:51	02/17/23 15:36	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/17/23 08:51	02/17/23 15:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*02/17/23 08:51*	*02/17/23 15:36*	*1*
1,4-Difluorobenzene (Surr)	*91*		*70 - 130*	*02/17/23 08:51*	*02/17/23 15:36*	*1*

Lab Sample ID: LCS 880-46575/1-A
Matrix: Solid
Analysis Batch: 46569

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 46575

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09721		mg/Kg		97	70 - 130		
Toluene			0.100	0.1009		mg/Kg		101	70 - 130		
Ethylbenzene			0.100	0.09383		mg/Kg		94	70 - 130		
m-Xylene & p-Xylene			0.200	0.1812		mg/Kg		91	70 - 130		
o-Xylene			0.100	0.09381		mg/Kg		94	70 - 130		

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

Lab Sample ID: LCSD 880-46575/2-A
Matrix: Solid
Analysis Batch: 46569

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 46575

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1111		mg/Kg		111	70 - 130	13	35
Toluene			0.100	0.1198		mg/Kg		120	70 - 130	17	35
Ethylbenzene			0.100	0.1137		mg/Kg		114	70 - 130	19	35
m-Xylene & p-Xylene			0.200	0.2200		mg/Kg		110	70 - 130	19	35
o-Xylene			0.100	0.1124		mg/Kg		112	70 - 130	18	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*

Lab Sample ID: 880-24598-A-1-F MS
Matrix: Solid
Analysis Batch: 46569

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 46575

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00201	U	0.101	0.09359		mg/Kg		92	70 - 130		
Toluene	<0.00201	U	0.101	0.09616		mg/Kg		95	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4096-1
SDG: Lea County NM

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

Lab Sample ID: 880-24598-A-1-F MS
Matrix: Solid
Analysis Batch: 46569

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 46575

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U	0.101	0.08569		mg/Kg		85	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.202	0.1646		mg/Kg		82	70 - 130
o-Xylene	<0.00201	U	0.101	0.08652		mg/Kg		85	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: 880-24598-A-1-G MSD
Matrix: Solid
Analysis Batch: 46569

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 46575

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.0996	0.1038		mg/Kg		103	70 - 130	10	35
Toluene	<0.00201	U	0.0996	0.1047		mg/Kg		105	70 - 130	9	35
Ethylbenzene	<0.00201	U	0.0996	0.09296		mg/Kg		93	70 - 130	8	35
m-Xylene & p-Xylene	<0.00402	U	0.199	0.1791		mg/Kg		90	70 - 130	8	35
o-Xylene	<0.00201	U	0.0996	0.09331		mg/Kg		93	70 - 130	8	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

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

Lab Sample ID: MB 880-46409/1-A
Matrix: Solid
Analysis Batch: 46479

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 46409

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/15/23 11:56	02/16/23 19:48	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/15/23 11:56	02/16/23 19:48	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/15/23 11:56	02/16/23 19:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*02/15/23 11:56*	*02/16/23 19:48*	*1*
o-Terphenyl	*108*		*70 - 130*	*02/15/23 11:56*	*02/16/23 19:48*	*1*

Lab Sample ID: LCS 880-46409/2-A
Matrix: Solid
Analysis Batch: 46479

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 46409

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10			1000	1045		mg/Kg		104	70 - 130
Diesel Range Organics (Over C10-C28)			1000	1061		mg/Kg		106	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4096-1
SDG: Lea County NM

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

Lab Sample ID: LCS 880-46409/2-A
Matrix: Solid
Analysis Batch: 46479

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 46409

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	98		70 - 130
o-Terphenyl	113		70 - 130

Lab Sample ID: LCSD 880-46409/3-A
Matrix: Solid
Analysis Batch: 46479

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 46409

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	893.1		mg/Kg		89	70 - 130	16	20
Diesel Range Organics (Over C10-C28)			1000	849.0	*1	mg/Kg		85	70 - 130	22	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	85		70 - 130
o-Terphenyl	99		70 - 130

Lab Sample ID: 880-24624-A-7-D MS
Matrix: Solid
Analysis Batch: 46479

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 46409

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	1000	1023		mg/Kg		98	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U *1	1000	940.4		mg/Kg		92	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	85		70 - 130
o-Terphenyl	91		70 - 130

Lab Sample ID: 880-24624-A-7-E MSD
Matrix: Solid
Analysis Batch: 46479

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 46409

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	1000	1044		mg/Kg		100	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.9	U *1	1000	1103		mg/Kg		109	70 - 130	16	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	99		70 - 130
o-Terphenyl	107		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4096-1
SDG: Lea County NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-46459/1-A
Matrix: Solid
Analysis Batch: 46551

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			02/16/23 21:05	1

Lab Sample ID: LCS 880-46459/2-A
Matrix: Solid
Analysis Batch: 46551

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	238.5		mg/Kg		95	90 - 110		

Lab Sample ID: LCSD 880-46459/3-A
Matrix: Solid
Analysis Batch: 46551

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	261.8		mg/Kg		105	90 - 110	9	20

Lab Sample ID: 890-4094-A-1-E MS
Matrix: Solid
Analysis Batch: 46551

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	11.1		251	262.5		mg/Kg		100	90 - 110		

Lab Sample ID: 890-4094-A-1-F MSD
Matrix: Solid
Analysis Batch: 46551

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	11.1		251	267.7		mg/Kg		102	90 - 110	2	20

QC Association Summary

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4096-1
SDG: Lea County NM

GC VOA

Analysis Batch: 46569

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4096-1	SS04	Total/NA	Solid	8021B	46575
MB 880-46575/5-A	Method Blank	Total/NA	Solid	8021B	46575
LCS 880-46575/1-A	Lab Control Sample	Total/NA	Solid	8021B	46575
LCSD 880-46575/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	46575
880-24598-A-1-F MS	Matrix Spike	Total/NA	Solid	8021B	46575
880-24598-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	46575

Prep Batch: 46575

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4096-1	SS04	Total/NA	Solid	5035	
MB 880-46575/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-46575/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-46575/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-24598-A-1-F MS	Matrix Spike	Total/NA	Solid	5035	
880-24598-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 46725

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4096-1	SS04	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 46409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4096-1	SS04	Total/NA	Solid	8015NM Prep	
MB 880-46409/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-46409/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-46409/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-24624-A-7-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-24624-A-7-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 46479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4096-1	SS04	Total/NA	Solid	8015B NM	46409
MB 880-46409/1-A	Method Blank	Total/NA	Solid	8015B NM	46409
LCS 880-46409/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	46409
LCSD 880-46409/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	46409
880-24624-A-7-D MS	Matrix Spike	Total/NA	Solid	8015B NM	46409
880-24624-A-7-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	46409

Analysis Batch: 46670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4096-1	SS04	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 46459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4096-1	SS04	Soluble	Solid	DI Leach	
MB 880-46459/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-46459/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-46459/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4096-1
SDG: Lea County NM

HPLC/IC (Continued)

Leach Batch: 46459 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4094-A-1-E MS	Matrix Spike	Soluble	Solid	DI Leach	
890-4094-A-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 46551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4096-1	SS04	Soluble	Solid	300.0	46459
MB 880-46459/1-A	Method Blank	Soluble	Solid	300.0	46459
LCS 880-46459/2-A	Lab Control Sample	Soluble	Solid	300.0	46459
LCSD 880-46459/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	46459
890-4094-A-1-E MS	Matrix Spike	Soluble	Solid	300.0	46459
890-4094-A-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	46459

Lab Chronicle

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4096-1
SDG: Lea County NM

Client Sample ID: SS04
Date Collected: 02/08/23 12:45
Date Received: 02/13/23 15:02

Lab Sample ID: 890-4096-1
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	46575	02/17/23 08:51	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	46569	02/17/23 16:58	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			46725	02/20/23 13:47	AJ	EET MID
Total/NA	Analysis	8015 NM		1			46670	02/19/23 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	46409	02/15/23 11:56	SM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	46479	02/17/23 04:00	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	46459	02/15/23 15:35	KS	EET MID
Soluble	Analysis	300.0		1			46551	02/16/23 21:48	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: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4096-1
SDG: Lea County NM

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: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4096-1
SDG: Lea County NM

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: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4096-1
SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-4096-1	SS04	Solid	02/08/23 12:45	02/13/23 15:02	0.5

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Chain of Custody

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

Work Order No: _____

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Project Manager:	Kalei Jennings	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:	817-683-2503	Email:	kjennings@ensolum.com, dnikanorov@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:	EVGSAU Sat 6 Mobile Tester	Turn Around	
Project Number:	03D2057072	☑ Routine ☐ Rush	
Project Location:	Lea County, NM	Due Date:	
Sampler's Name:	Dmitry Nikanorov	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:	TMM-001	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No N/A	Temperature Reading:	5.4	
Total Containers:		Corrected Temperature:	5.7	

ANALYSIS REQUEST

Preservative Codes

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)
SS04	S	2/8/2023	12:45	0.5'	Grab	1		x	x	x

890-4096 Chain of Custody

Sample Comments

Incident Number

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 DNik	Amanda Sitz	2-13-23 1502			
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4096-1
SDG Number: Lea County NM

Login Number: 4096
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: 890-4096-1
SDG Number: Lea County NM

Login Number: 4096
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 02/15/23 12:16 PM

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	

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 2/19/2023 12:47:40 PM

JOB DESCRIPTION

EVGSAU Sat 6 Mobile Tester
SDG NUMBER Lea County NM

JOB NUMBER

890-4094-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

my EOL

Eurofins Carlsbad

Job Notes

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

Authorization

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Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Laboratory Job ID: 890-4094-1
SDG: Lea County NM

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Definitions/Glossary

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4094-1
SDG: Lea County NM

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4094-1
SDG: Lea County NM

Job ID: 890-4094-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-4094-1

Receipt
The sample was received on 2/13/2023 3:02 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.7°C

Receipt Exceptions
The following sample was received and analyzed from an unpreserved bulk soil jar: SS05 (890-4094-1).

GC VOA
Method 8021B: Spike compounds were inadvertently omitted during the extraction process for the matrix spike/matrix spike duplicate (MS/MSD); therefore, matrix spike recoveries are unavailable for preparation batch 880-46437 and analytical batch 880-46371. The associated laboratory control sample (LCS) met acceptance criteria.

Method 8021B: Surrogate recovery for the following samples were outside control limits: SS05 (890-4094-1) and (880-24648-A-1-C MSD). 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 RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-46409 and analytical batch 880-46479 recovered outside control limits for the following analytes: Diesel Range Organics (Over C10-C28).

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

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

Client Sample Results

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4094-1
SDG: Lea County NM

Client Sample ID: SS05

Date Collected: 02/08/23 12:50
Date Received: 02/13/23 15:02
Sample Depth: 0.5

Lab Sample ID: 890-4094-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/15/23 14:46	02/16/23 06:34	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/15/23 14:46	02/16/23 06:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/15/23 14:46	02/16/23 06:34	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		02/15/23 14:46	02/16/23 06:34	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/15/23 14:46	02/16/23 06:34	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		02/15/23 14:46	02/16/23 06:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*68*	*S1-*	*70 - 130*	*02/15/23 14:46*	*02/16/23 06:34*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*02/15/23 14:46*	*02/16/23 06:34*	*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			02/16/23 10:01	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/19/23 12:25	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/15/23 11:56	02/17/23 03:37	1
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9		mg/Kg		02/15/23 11:56	02/17/23 03:37	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/15/23 11:56	02/17/23 03:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*02/15/23 11:56*	*02/17/23 03:37*	*1*
o-Terphenyl	*98*		*70 - 130*	*02/15/23 11:56*	*02/17/23 03:37*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11.1**		5.02		mg/Kg			02/16/23 21:19	1

Surrogate Summary

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4094-1
SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)											
		BFB1	DFBZ1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
880-24332-A-1 MB	Method Blank	88	86										
880-24648-A-1-B MS	Matrix Spike	104	94										
880-24648-A-1-C MSD	Matrix Spike Duplicate	66 S1-	85										
890-4094-1	SS05	68 S1-	86										
LCS 880-46437/1-A	Lab Control Sample	100	95										
LCSD 880-46437/2-A	Lab Control Sample Dup	111	95										
MB 880-46437/5-A	Method Blank	98	88										

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)											
		1CO1	OTPH1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
880-24624-A-7-D MS	Matrix Spike	85	91										
880-24624-A-7-E MSD	Matrix Spike Duplicate	99	107										
890-4094-1	SS05	91	98										
LCS 880-46409/2-A	Lab Control Sample	98	113										
LCSD 880-46409/3-A	Lab Control Sample Dup	85	99										
MB 880-46409/1-A	Method Blank	85	108										

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4094-1
SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: 880-24332-A-1 MB
Matrix: Solid
Analysis Batch: 46371

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

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg			02/15/23 18:50	1
Toluene	<0.00200	U	0.00200		mg/Kg			02/15/23 18:50	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg			02/15/23 18:50	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg			02/15/23 18:50	1
o-Xylene	<0.00200	U	0.00200		mg/Kg			02/15/23 18:50	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg			02/15/23 18:50	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*		*02/15/23 18:50*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*		*02/15/23 18:50*	*1*

Lab Sample ID: MB 880-46437/5-A
Matrix: Solid
Analysis Batch: 46371

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 46437

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/15/23 14:46	02/16/23 02:15	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/15/23 14:46	02/16/23 02:15	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/15/23 14:46	02/16/23 02:15	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/15/23 14:46	02/16/23 02:15	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/15/23 14:46	02/16/23 02:15	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/15/23 14:46	02/16/23 02:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*02/15/23 14:46*	*02/16/23 02:15*	*1*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*	*02/15/23 14:46*	*02/16/23 02:15*	*1*

Lab Sample ID: LCS 880-46437/1-A
Matrix: Solid
Analysis Batch: 46371

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 46437

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09855		mg/Kg		99	70 - 130		
Toluene			0.100	0.1014		mg/Kg		101	70 - 130		
Ethylbenzene			0.100	0.09828		mg/Kg		98	70 - 130		
m-Xylene & p-Xylene			0.200	0.1950		mg/Kg		97	70 - 130		
o-Xylene			0.100	0.09407		mg/Kg		94	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: LCSD 880-46437/2-A
Matrix: Solid
Analysis Batch: 46371

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 46437

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09235		mg/Kg		92	70 - 130	6	35

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4094-1
SDG: Lea County NM

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

Lab Sample ID: LCSD 880-46437/2-A
Matrix: Solid
Analysis Batch: 46371

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 46437

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.08620		mg/Kg		86	70 - 130	16	35
Ethylbenzene			0.100	0.09424		mg/Kg		94	70 - 130	4	35
m-Xylene & p-Xylene			0.200	0.1877		mg/Kg		94	70 - 130	4	35
o-Xylene			0.100	0.09030		mg/Kg		90	70 - 130	4	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: 880-24648-A-1-B MS
Matrix: Solid
Analysis Batch: 46371

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 46437

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U F1	0.100	0.08816		mg/Kg		88	70 - 130
Toluene	<0.00199	U F1	0.100	0.09260		mg/Kg		92	70 - 130
Ethylbenzene	<0.00199	U F1	0.100	0.09146		mg/Kg		91	70 - 130
m-Xylene & p-Xylene	<0.00398	U F1	0.200	0.1811		mg/Kg		90	70 - 130
o-Xylene	<0.00199	U F1	0.100	0.08751		mg/Kg		87	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*

Lab Sample ID: 880-24648-A-1-C MSD
Matrix: Solid
Analysis Batch: 46371

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 46437

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U F1	0.101	<0.00202	U F1	mg/Kg		0	70 - 130	NC	35
Toluene	<0.00199	U F1	0.101	<0.00202	U F1	mg/Kg		0	70 - 130	NC	35
Ethylbenzene	<0.00199	U F1	0.101	<0.00202	U F1	mg/Kg		0	70 - 130	NC	35
m-Xylene & p-Xylene	<0.00398	U F1	0.202	<0.00403	U F1	mg/Kg		0	70 - 130	NC	35
o-Xylene	<0.00199	U F1	0.101	<0.00202	U F1	mg/Kg		0	70 - 130	NC	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*66*	*S1-*	*70 - 130*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*

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

Lab Sample ID: MB 880-46409/1-A
Matrix: Solid
Analysis Batch: 46479

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 46409

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/15/23 11:56	02/16/23 19:48	1

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4094-1
SDG: Lea County NM

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

Lab Sample ID: MB 880-46409/1-A
Matrix: Solid
Analysis Batch: 46479

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 46409

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		02/15/23 11:56	02/16/23 19:48	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/15/23 11:56	02/16/23 19:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*02/15/23 11:56*	*02/16/23 19:48*	*1*
o-Terphenyl	*108*		*70 - 130*	*02/15/23 11:56*	*02/16/23 19:48*	*1*

Lab Sample ID: LCS 880-46409/2-A
Matrix: Solid
Analysis Batch: 46479

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 46409

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1045		mg/Kg		104	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1061		mg/Kg		106	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*98*		*70 - 130*
o-Terphenyl	*113*		*70 - 130*

Lab Sample ID: LCSD 880-46409/3-A
Matrix: Solid
Analysis Batch: 46479

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 46409

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	893.1		mg/Kg		89	70 - 130	16	20
Diesel Range Organics (Over C10-C28)			1000	849.0	*1	mg/Kg		85	70 - 130	22	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*85*		*70 - 130*
o-Terphenyl	*99*		*70 - 130*

Lab Sample ID: 880-24624-A-7-D MS
Matrix: Solid
Analysis Batch: 46479

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 46409

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	1000	1023		mg/Kg		98	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U *1	1000	940.4		mg/Kg		92	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*85*		*70 - 130*
o-Terphenyl	*91*		*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4094-1
SDG: Lea County NM

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

Lab Sample ID: 880-24624-A-7-E MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 46479 — **Prep Batch: 46409**

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	1000	1044		mg/Kg		100	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.9	U *1	1000	1103		mg/Kg		109	70 - 130	16	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*99*		*70 - 130*
o-Terphenyl	*107*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-46459/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 46551

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			02/16/23 21:05	1

Lab Sample ID: LCS 880-46459/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 46551

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	238.5		mg/Kg		95	90 - 110		

Lab Sample ID: LCSD 880-46459/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 46551

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	261.8		mg/Kg		105	90 - 110	9	20

Lab Sample ID: 890-4094-1 MS — **Client Sample ID: SS05**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 46551

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	11.1		251	262.5		mg/Kg		100	90 - 110		

Lab Sample ID: 890-4094-1 MSD — **Client Sample ID: SS05**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 46551

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	11.1		251	267.7		mg/Kg		102	90 - 110	2	20

QC Association Summary

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4094-1
SDG: Lea County NM

GC VOA

Analysis Batch: 46371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4094-1	SS05	Total/NA	Solid	8021B	46437
880-24332-A-1 MB	Method Blank	Total/NA	Solid	8021B	
MB 880-46437/5-A	Method Blank	Total/NA	Solid	8021B	46437
LCS 880-46437/1-A	Lab Control Sample	Total/NA	Solid	8021B	46437
LCSD 880-46437/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	46437
880-24648-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	46437
880-24648-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	46437

Prep Batch: 46437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4094-1	SS05	Total/NA	Solid	5035	
MB 880-46437/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-46437/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-46437/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-24648-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-24648-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 46513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4094-1	SS05	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 46409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4094-1	SS05	Total/NA	Solid	8015NM Prep	
MB 880-46409/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-46409/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-46409/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-24624-A-7-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-24624-A-7-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 46479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4094-1	SS05	Total/NA	Solid	8015B NM	46409
MB 880-46409/1-A	Method Blank	Total/NA	Solid	8015B NM	46409
LCS 880-46409/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	46409
LCSD 880-46409/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	46409
880-24624-A-7-D MS	Matrix Spike	Total/NA	Solid	8015B NM	46409
880-24624-A-7-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	46409

Analysis Batch: 46669

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4094-1	SS05	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 46459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4094-1	SS05	Soluble	Solid	DI Leach	
MB 880-46459/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-46459/2-A	Lab Control Sample	Soluble	Solid	DI Leach	

QC Association Summary

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4094-1
SDG: Lea County NM

HPLC/IC (Continued)

Leach Batch: 46459 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-46459/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4094-1 MS	SS05	Soluble	Solid	DI Leach	
890-4094-1 MSD	SS05	Soluble	Solid	DI Leach	

Analysis Batch: 46551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4094-1	SS05	Soluble	Solid	300.0	46459
MB 880-46459/1-A	Method Blank	Soluble	Solid	300.0	46459
LCS 880-46459/2-A	Lab Control Sample	Soluble	Solid	300.0	46459
LCSD 880-46459/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	46459
890-4094-1 MS	SS05	Soluble	Solid	300.0	46459
890-4094-1 MSD	SS05	Soluble	Solid	300.0	46459

Lab Chronicle

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4094-1
SDG: Lea County NM

Client Sample ID: SS05

Date Collected: 02/08/23 12:50
Date Received: 02/13/23 15:02

Lab Sample ID: 890-4094-1

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	46437	02/15/23 14:46	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	46371	02/16/23 06:34	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			46513	02/16/23 10:01	AJ	EET MID
Total/NA	Analysis	8015 NM		1			46669	02/19/23 12:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	46409	02/15/23 11:56	SM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	46479	02/17/23 03:37	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	46459	02/15/23 15:35	KS	EET MID
Soluble	Analysis	300.0		1			46551	02/16/23 21:19	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: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4094-1
SDG: Lea County NM

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: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4094-1
SDG: Lea County NM

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: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4094-1
SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-4094-1	SS05	Solid	02/08/23 12:50	02/13/23 15:02	0.5

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Chain of Custody

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

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Kalei Jennings	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:	817-683-2503	Email:	kjennings@ensolum.com, dnikanorov@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:	EVGSAU Sat 6 Mobile Tester	Turn Around	☑ Routine ☐ Rush
Project Number:	03D2057072	Due Date:	
Project Location:	Lea County, NM	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Dmitry Nikanorov		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	THM-007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	5.4
Total Containers:		Corrected Temperature:	5.2

Preservative Codes

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)	Sample Comments
SS05	S	2/8/2023	12:50	0.5'	Grab	1		x	x	x	

Parameters / ANALYSIS REQUEST

890-4094 Chain of Custody

Incident Number

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4094-1
SDG Number: Lea County NM

Login Number: 4094
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: 890-4094-1
SDG Number: Lea County NM

Login Number: 4094
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 02/15/23 12:16 PM

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	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4095-1
SDG Number: Lea County NM

Login Number: 4095
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 02/15/23 12:16 PM

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	

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 2/20/2023 2:58:12 PM

JOB DESCRIPTION

EVGSAU Sat 6 Mobile Tester
SDG NUMBER Lea County NM

JOB NUMBER

890-4097-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

my EOL

Eurofins Carlsbad

Job Notes

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

Authorization

Generated
2/20/2023 2:58:12 PM

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

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Laboratory Job ID: 890-4097-1
SDG: Lea County NM

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Definitions/Glossary

Client: Ensolum Job ID: 890-4097-1
Project/Site: EVGSAU Sat 6 Mobile Tester SDG: Lea County NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1+	Surrogate recovery exceeds control limits, 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: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4097-1
SDG: Lea County NM

Job ID: 890-4097-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-4097-1

Receipt
The sample was received on 2/13/2023 3:02 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.7°C

Receipt Exceptions
The following sample was received and analyzed from an unpreserved bulk soil jar: SS06 (890-4097-1).

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-46342 and analytical batch 880-46568 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

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

HPLC/IC
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: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4097-1
SDG: Lea County NM

Client Sample ID: SS06

Date Collected: 02/08/23 12:55
Date Received: 02/13/23 15:02
Sample Depth: 0.5

Lab Sample ID: 890-4097-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		02/14/23 16:34	02/17/23 17:39	1
Toluene	<0.00198	U	0.00198		mg/Kg		02/14/23 16:34	02/17/23 17:39	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		02/14/23 16:34	02/17/23 17:39	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		02/14/23 16:34	02/17/23 17:39	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		02/14/23 16:34	02/17/23 17:39	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		02/14/23 16:34	02/17/23 17:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*02/14/23 16:34*	*02/17/23 17:39*	*1*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*02/14/23 16:34*	*02/17/23 17:39*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			02/20/23 14:15	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/20/23 15:10	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		02/16/23 09:41	02/17/23 13:40	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/16/23 09:41	02/17/23 13:40	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/16/23 09:41	02/17/23 13:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*02/16/23 09:41*	*02/17/23 13:40*	*1*
o-Terphenyl	*105*		*70 - 130*	*02/16/23 09:41*	*02/17/23 13:40*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8.63**		5.01		mg/Kg			02/16/23 22:03	1

Surrogate Summary

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4097-1
SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-4089-A-1-B MS	Matrix Spike	126	114
890-4089-A-1-C MSD	Matrix Spike Duplicate	132 S1+	104
890-4097-1	SS06	105	85
LCS 880-46342/1-A	Lab Control Sample	109	105
LCSD 880-46342/2-A	Lab Control Sample Dup	116	103
MB 880-46342/5-A	Method Blank	76	96

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-4097-1	SS06	100	105
890-4100-A-1-D MS	Matrix Spike	113	110
890-4100-A-1-E MSD	Matrix Spike Duplicate	109	107
LCS 880-46507/2-A	Lab Control Sample	98	114
LCSD 880-46507/3-A	Lab Control Sample Dup	114	125
MB 880-46507/1-A	Method Blank	91	112

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4097-1
SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-46342/5-A
Matrix: Solid
Analysis Batch: 46568

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 46342

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/14/23 16:34	02/17/23 14:09	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/14/23 16:34	02/17/23 14:09	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/14/23 16:34	02/17/23 14:09	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/14/23 16:34	02/17/23 14:09	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/14/23 16:34	02/17/23 14:09	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/14/23 16:34	02/17/23 14:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*76*		*70 - 130*	*02/14/23 16:34*	*02/17/23 14:09*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*02/14/23 16:34*	*02/17/23 14:09*	*1*

Lab Sample ID: LCS 880-46342/1-A
Matrix: Solid
Analysis Batch: 46568

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 46342

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1214		mg/Kg		121	70 - 130		
Toluene			0.100	0.1106		mg/Kg		111	70 - 130		
Ethylbenzene			0.100	0.1137		mg/Kg		114	70 - 130		
m-Xylene & p-Xylene			0.200	0.2456		mg/Kg		123	70 - 130		
o-Xylene			0.100	0.1219		mg/Kg		122	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: LCSD 880-46342/2-A
Matrix: Solid
Analysis Batch: 46568

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 46342

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1054		mg/Kg		105	70 - 130	14	35
Toluene			0.100	0.1042		mg/Kg		104	70 - 130	6	35
Ethylbenzene			0.100	0.1073		mg/Kg		107	70 - 130	6	35
m-Xylene & p-Xylene			0.200	0.2301		mg/Kg		115	70 - 130	6	35
o-Xylene			0.100	0.1157		mg/Kg		116	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: 890-4089-A-1-B MS
Matrix: Solid
Analysis Batch: 46568

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 46342

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00202	U F1 F2	0.100	0.1523	F1	mg/Kg		152	70 - 130		
Toluene	<0.00202	U	0.100	0.09819		mg/Kg		98	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4097-1
SDG: Lea County NM

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

Lab Sample ID: 890-4089-A-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 46568 — **Prep Batch: 46342**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00202	U	0.100	0.09453		mg/Kg		94	70 - 130
m-Xylene & p-Xylene	<0.00403	U	0.200	0.2043		mg/Kg		102	70 - 130
o-Xylene	<0.00202	U	0.100	0.1039		mg/Kg		104	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*

Lab Sample ID: 890-4089-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 46568 — **Prep Batch: 46342**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U F1 F2	0.0990	0.1032	F2	mg/Kg		104	70 - 130	38	35
Toluene	<0.00202	U	0.0990	0.09209		mg/Kg		93	70 - 130	6	35
Ethylbenzene	<0.00202	U	0.0990	0.09634		mg/Kg		97	70 - 130	2	35
m-Xylene & p-Xylene	<0.00403	U	0.198	0.2071		mg/Kg		105	70 - 130	1	35
o-Xylene	<0.00202	U	0.0990	0.1053		mg/Kg		106	70 - 130	1	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*132*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

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

Lab Sample ID: MB 880-46507/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 46558 — **Prep Batch: 46507**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		02/16/23 09:40	02/17/23 08:54	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		02/16/23 09:40	02/17/23 08:54	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		02/16/23 09:40	02/17/23 08:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*02/16/23 09:40*	*02/17/23 08:54*	*1*
o-Terphenyl	*112*		*70 - 130*	*02/16/23 09:40*	*02/17/23 08:54*	*1*

Lab Sample ID: LCS 880-46507/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 46558 — **Prep Batch: 46507**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	860.8		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	1000	994.1		mg/Kg		99	70 - 130

Eurofins Carlsbad

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4097-1
SDG: Lea County NM

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

Lab Sample ID: LCS 880-46507/2-A
Matrix: Solid
Analysis Batch: 46558

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 46507

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	98		70 - 130
o-Terphenyl	114		70 - 130

Lab Sample ID: LCSD 880-46507/3-A
Matrix: Solid
Analysis Batch: 46558

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 46507

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	988.4		mg/Kg		99	70 - 130	14	20
Diesel Range Organics (Over C10-C28)			1000	1078		mg/Kg		108	70 - 130	8	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	114		70 - 130
o-Terphenyl	125		70 - 130

Lab Sample ID: 890-4100-A-1-D MS
Matrix: Solid
Analysis Batch: 46558

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 46507

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	1000	1059		mg/Kg		101	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U	1000	1114		mg/Kg		110	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	113		70 - 130
o-Terphenyl	110		70 - 130

Lab Sample ID: 890-4100-A-1-E MSD
Matrix: Solid
Analysis Batch: 46558

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 46507

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	1000	1047		mg/Kg		100	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<49.8	U	1000	1079		mg/Kg		106	70 - 130	3	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	109		70 - 130
o-Terphenyl	107		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4097-1
SDG: Lea County NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-46459/1-A
Matrix: Solid
Analysis Batch: 46551

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			02/16/23 21:05	1

Lab Sample ID: LCS 880-46459/2-A
Matrix: Solid
Analysis Batch: 46551

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	238.5		mg/Kg		95	90 - 110		

Lab Sample ID: LCSD 880-46459/3-A
Matrix: Solid
Analysis Batch: 46551

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	261.8		mg/Kg		105	90 - 110	9	20

Lab Sample ID: 890-4094-A-1-E MS
Matrix: Solid
Analysis Batch: 46551

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	11.1		251	262.5		mg/Kg		100	90 - 110		

Lab Sample ID: 890-4094-A-1-F MSD
Matrix: Solid
Analysis Batch: 46551

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	11.1		251	267.7		mg/Kg		102	90 - 110	2	20

QC Association Summary

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4097-1
SDG: Lea County NM

GC VOA

Prep Batch: 46342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4097-1	SS06	Total/NA	Solid	5035	
MB 880-46342/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-46342/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-46342/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-4089-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
890-4089-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 46568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4097-1	SS06	Total/NA	Solid	8021B	46342
MB 880-46342/5-A	Method Blank	Total/NA	Solid	8021B	46342
LCS 880-46342/1-A	Lab Control Sample	Total/NA	Solid	8021B	46342
LCSD 880-46342/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	46342
890-4089-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	46342
890-4089-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	46342

Analysis Batch: 46744

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4097-1	SS06	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 46507

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4097-1	SS06	Total/NA	Solid	8015NM Prep	
MB 880-46507/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-46507/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-46507/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-4100-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-4100-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 46558

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4097-1	SS06	Total/NA	Solid	8015B NM	46507
MB 880-46507/1-A	Method Blank	Total/NA	Solid	8015B NM	46507
LCS 880-46507/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	46507
LCSD 880-46507/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	46507
890-4100-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	46507
890-4100-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	46507

Analysis Batch: 46784

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4097-1	SS06	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 46459

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4097-1	SS06	Soluble	Solid	DI Leach	
MB 880-46459/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-46459/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-46459/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4097-1
SDG: Lea County NM

HPLC/IC (Continued)

Leach Batch: 46459 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4094-A-1-E MS	Matrix Spike	Soluble	Solid	DI Leach	
890-4094-A-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 46551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4097-1	SS06	Soluble	Solid	300.0	46459
MB 880-46459/1-A	Method Blank	Soluble	Solid	300.0	46459
LCS 880-46459/2-A	Lab Control Sample	Soluble	Solid	300.0	46459
LCSD 880-46459/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	46459
890-4094-A-1-E MS	Matrix Spike	Soluble	Solid	300.0	46459
890-4094-A-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	46459

Lab Chronicle

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4097-1
SDG: Lea County NM

Client Sample ID: SS06
Date Collected: 02/08/23 12:55
Date Received: 02/13/23 15:02

Lab Sample ID: 890-4097-1
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			5.04 g	5 mL	46342	02/14/23 16:34	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	46568	02/17/23 17:39	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			46744	02/20/23 14:15	AJ	EET MID
Total/NA	Analysis	8015 NM		1			46784	02/20/23 15:10	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	46507	02/16/23 09:41	SM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	46558	02/17/23 13:40	AJ	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	46459	02/15/23 15:35	KS	EET MID
Soluble	Analysis	300.0		1			46551	02/16/23 22:03	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: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4097-1
SDG: Lea County NM

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: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4097-1
SDG: Lea County NM

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: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4097-1
SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-4097-1	SS06	Solid	02/08/23 12:55	02/13/23 15:02	0.5

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Chain of Custody

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

Work Order No: _____

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Project Manager:	Kalei Jennings	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:	817-683-2503	Email:	kjennings@ensolum.com, dnikanorov@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:	EVGSAU Sat 6 Mobile Tester	Turn Around	☑ Routine ☐ Rush
Project Number:	03D2057072	Due Date:	
Project Location:	Lea County, NM	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Dmitry Nikanorov		
PO #:			

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Samples Received Intact:	Yes No	Thermometer ID:	TAM-007	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No N/A	Temperature Reading:	5.4	
Total Containers:		Corrected Temperature:	5.7	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)
SS06	S	2/8/2023	12:55	0.5'	Grab	1		x	x	x

890-4097 Chain of Custody

Preservative Codes

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

Sample Comments

Incident Number

DN

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			4		
3			6		
5					

Revised Date 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4097-1
SDG Number: Lea County NM

Login Number: 4097
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: 890-4097-1
SDG Number: Lea County NM

Login Number: 4097
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 02/15/23 12:16 PM

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	

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 2/20/2023 2:49:21 PM

JOB DESCRIPTION

EVGSAU Sat 6 Mobile Tester
SDG NUMBER Lea County NM

JOB NUMBER

890-4098-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

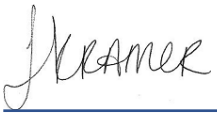
See page two for job notes and contact information.

Eurofins Carlsbad

Job Notes

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

Authorization



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

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Laboratory Job ID: 890-4098-1
SDG: Lea County NM

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Definitions/Glossary

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4098-1
SDG: Lea County NM

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
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: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4098-1
SDG: Lea County NM

Job ID: 890-4098-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-4098-1

Receipt
The sample was received on 2/13/2023 3:02 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.7°C

Receipt Exceptions
The following sample was received and analyzed from an unpreserved bulk soil jar: SS07 (890-4098-1).

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-46342 and analytical batch 880-46568 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

GC Semi VOA
Method 8015MOD_NM: The method blank for preparation batch 880-46509 and analytical batch 880-46560 contained Gasoline Range Organics (GRO)-C6-C10 and Diesel Range Organics (Over C10-C28) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-46509 and analytical batch 880-46560 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

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: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4098-1
SDG: Lea County NM

Client Sample ID: SS07

Date Collected: 02/08/23 13:00
Date Received: 02/13/23 15:02
Sample Depth: 0.5

Lab Sample ID: 890-4098-1

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		02/14/23 16:34	02/17/23 18:00	1
Toluene	<0.00202	U	0.00202		mg/Kg		02/14/23 16:34	02/17/23 18:00	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		02/14/23 16:34	02/17/23 18:00	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		02/14/23 16:34	02/17/23 18:00	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		02/14/23 16:34	02/17/23 18:00	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		02/14/23 16:34	02/17/23 18:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*02/14/23 16:34*	*02/17/23 18:00*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*02/14/23 16:34*	*02/17/23 18:00*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			02/20/23 14:15	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			02/19/23 12:20	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		02/16/23 09:47	02/17/23 18:10	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		02/16/23 09:47	02/17/23 18:10	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		02/16/23 09:47	02/17/23 18:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*79*		*70 - 130*	*02/16/23 09:47*	*02/17/23 18:10*	*1*
o-Terphenyl	*77*		*70 - 130*	*02/16/23 09:47*	*02/17/23 18:10*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**114**		5.05		mg/Kg			02/16/23 23:59	1

Surrogate Summary

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4098-1
SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-4089-A-1-B MS	Matrix Spike	126	114
890-4089-A-1-C MSD	Matrix Spike Duplicate	132 S1+	104
890-4098-1	SS07	104	90
LCS 880-46342/1-A	Lab Control Sample	109	105
LCSD 880-46342/2-A	Lab Control Sample Dup	116	103
MB 880-46342/5-A	Method Blank	76	96

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-4098-1	SS07	79	77
890-4099-A-1-C MS	Matrix Spike	105	93
890-4099-A-1-D MSD	Matrix Spike Duplicate	101	90
LCS 880-46509/2-A	Lab Control Sample	100	90
LCSD 880-46509/3-A	Lab Control Sample Dup	100	99
MB 880-46509/1-A	Method Blank	100	94

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4098-1
SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-46342/5-A
Matrix: Solid
Analysis Batch: 46568

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 46342

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/14/23 16:34	02/17/23 14:09	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/14/23 16:34	02/17/23 14:09	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/14/23 16:34	02/17/23 14:09	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		02/14/23 16:34	02/17/23 14:09	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/14/23 16:34	02/17/23 14:09	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		02/14/23 16:34	02/17/23 14:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*76*		*70 - 130*	*02/14/23 16:34*	*02/17/23 14:09*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*02/14/23 16:34*	*02/17/23 14:09*	*1*

Lab Sample ID: LCS 880-46342/1-A
Matrix: Solid
Analysis Batch: 46568

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 46342

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1214		mg/Kg		121	70 - 130		
Toluene			0.100	0.1106		mg/Kg		111	70 - 130		
Ethylbenzene			0.100	0.1137		mg/Kg		114	70 - 130		
m-Xylene & p-Xylene			0.200	0.2456		mg/Kg		123	70 - 130		
o-Xylene			0.100	0.1219		mg/Kg		122	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: LCSD 880-46342/2-A
Matrix: Solid
Analysis Batch: 46568

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 46342

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1054		mg/Kg		105	70 - 130	14	35
Toluene			0.100	0.1042		mg/Kg		104	70 - 130	6	35
Ethylbenzene			0.100	0.1073		mg/Kg		107	70 - 130	6	35
m-Xylene & p-Xylene			0.200	0.2301		mg/Kg		115	70 - 130	6	35
o-Xylene			0.100	0.1157		mg/Kg		116	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: 890-4089-A-1-B MS
Matrix: Solid
Analysis Batch: 46568

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 46342

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00202	U F1 F2	0.100	0.1523	F1	mg/Kg		152	70 - 130		
Toluene	<0.00202	U	0.100	0.09819		mg/Kg		98	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4098-1
SDG: Lea County NM

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

Lab Sample ID: 890-4089-A-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 46568 — **Prep Batch: 46342**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00202	U	0.100	0.09453		mg/Kg		94	70 - 130
m-Xylene & p-Xylene	<0.00403	U	0.200	0.2043		mg/Kg		102	70 - 130
o-Xylene	<0.00202	U	0.100	0.1039		mg/Kg		104	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*126*		*70 - 130*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*

Lab Sample ID: 890-4089-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 46568 — **Prep Batch: 46342**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U F1 F2	0.0990	0.1032	F2	mg/Kg		104	70 - 130	38	35
Toluene	<0.00202	U	0.0990	0.09209		mg/Kg		93	70 - 130	6	35
Ethylbenzene	<0.00202	U	0.0990	0.09634		mg/Kg		97	70 - 130	2	35
m-Xylene & p-Xylene	<0.00403	U	0.198	0.2071		mg/Kg		105	70 - 130	1	35
o-Xylene	<0.00202	U	0.0990	0.1053		mg/Kg		106	70 - 130	1	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*132*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

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

Lab Sample ID: MB 880-46509/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 46560 — **Prep Batch: 46509**

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		02/16/23 09:47	02/17/23 08:54	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/16/23 09:47	02/17/23 08:54	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/16/23 09:47	02/17/23 08:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*02/16/23 09:47*	*02/17/23 08:54*	*1*
o-Terphenyl	*94*		*70 - 130*	*02/16/23 09:47*	*02/17/23 08:54*	*1*

Lab Sample ID: LCS 880-46509/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 46560 — **Prep Batch: 46509**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10			1000	825.8		mg/Kg		83	70 - 130
Diesel Range Organics (Over C10-C28)			1000	912.4		mg/Kg		91	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4098-1
SDG: Lea County NM

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

Lab Sample ID: LCS 880-46509/2-A
Matrix: Solid
Analysis Batch: 46560

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 46509

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	100		70 - 130
o-Terphenyl	90		70 - 130

Lab Sample ID: LCSD 880-46509/3-A
Matrix: Solid
Analysis Batch: 46560

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 46509

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1126	*1	mg/Kg		113	70 - 130	31	20
Diesel Range Organics (Over C10-C28)			1000	1011		mg/Kg		101	70 - 130	10	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	100		70 - 130
o-Terphenyl	99		70 - 130

Lab Sample ID: 890-4099-A-1-C MS
Matrix: Solid
Analysis Batch: 46560

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 46509

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 *1	1000	1085		mg/Kg		105	70 - 130
Diesel Range Organics (Over C10-C28)	<49.8	U	1000	886.5		mg/Kg		87	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	105		70 - 130
o-Terphenyl	93		70 - 130

Lab Sample ID: 890-4099-A-1-D MSD
Matrix: Solid
Analysis Batch: 46560

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 46509

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 *1	1000	1111		mg/Kg		107	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.8	U	1000	863.0		mg/Kg		85	70 - 130	3	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	101		70 - 130
o-Terphenyl	90		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4098-1
SDG: Lea County NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-46462/1-A
Matrix: Solid
Analysis Batch: 46553

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			02/16/23 23:40	1

Lab Sample ID: LCS 880-46462/2-A
Matrix: Solid
Analysis Batch: 46553

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	240.4		mg/Kg		96	90 - 110		

Lab Sample ID: LCSD 880-46462/3-A
Matrix: Solid
Analysis Batch: 46553

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	238.9		mg/Kg		96	90 - 110	1	20

Lab Sample ID: 890-4098-1 MS
Matrix: Solid
Analysis Batch: 46553

Client Sample ID: SS07
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	114		253	360.3		mg/Kg		97	90 - 110		

Lab Sample ID: 890-4098-1 MSD
Matrix: Solid
Analysis Batch: 46553

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	114		253	361.6		mg/Kg		98	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4098-1
SDG: Lea County NM

GC VOA

Prep Batch: 46342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4098-1	SS07	Total/NA	Solid	5035	
MB 880-46342/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-46342/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-46342/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-4089-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
890-4089-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 46568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4098-1	SS07	Total/NA	Solid	8021B	46342
MB 880-46342/5-A	Method Blank	Total/NA	Solid	8021B	46342
LCS 880-46342/1-A	Lab Control Sample	Total/NA	Solid	8021B	46342
LCSD 880-46342/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	46342
890-4089-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	46342
890-4089-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	46342

Analysis Batch: 46745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4098-1	SS07	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 46509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4098-1	SS07	Total/NA	Solid	8015NM Prep	
MB 880-46509/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-46509/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-46509/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-4099-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-4099-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 46560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4098-1	SS07	Total/NA	Solid	8015B NM	46509
MB 880-46509/1-A	Method Blank	Total/NA	Solid	8015B NM	46509
LCS 880-46509/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	46509
LCSD 880-46509/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	46509
890-4099-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	46509
890-4099-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	46509

Analysis Batch: 46663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4098-1	SS07	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 46462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4098-1	SS07	Soluble	Solid	DI Leach	
MB 880-46462/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-46462/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-46462/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4098-1
SDG: Lea County NM

HPLC/IC (Continued)

Leach Batch: 46462 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4098-1 MS	SS07	Soluble	Solid	DI Leach	
890-4098-1 MSD	SS07	Soluble	Solid	DI Leach	

Analysis Batch: 46553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4098-1	SS07	Soluble	Solid	300.0	46462
MB 880-46462/1-A	Method Blank	Soluble	Solid	300.0	46462
LCS 880-46462/2-A	Lab Control Sample	Soluble	Solid	300.0	46462
LCSD 880-46462/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	46462
890-4098-1 MS	SS07	Soluble	Solid	300.0	46462
890-4098-1 MSD	SS07	Soluble	Solid	300.0	46462

Lab Chronicle

Client: Ensolum
Project/Site: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4098-1
SDG: Lea County NM

Client Sample ID: SS07
Date Collected: 02/08/23 13:00
Date Received: 02/13/23 15:02

Lab Sample ID: 890-4098-1
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			4.95 g	5 mL	46342	02/14/23 16:34	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	46568	02/17/23 18:00	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			46745	02/20/23 14:15	AJ	EET MID
Total/NA	Analysis	8015 NM		1			46663	02/19/23 12:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	46509	02/16/23 09:47	SM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	46560	02/17/23 18:10	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	46462	02/15/23 15:39	KS	EET MID
Soluble	Analysis	300.0		1			46553	02/16/23 23:59	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: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4098-1
SDG: Lea County NM

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: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4098-1
SDG: Lea County NM

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: EVGSAU Sat 6 Mobile Tester

Job ID: 890-4098-1
SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-4098-1	SS07	Solid	02/08/23 13:00	02/13/23 15:02	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:	Kalei Jennings	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:	817-683-2503	Email:	kjennings@ensolum.com, dnikanorov@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:	EVGSAU Sat 6 Mobile Tester	Turn Around	☑ Routine ☐ Rush
Project Number:	03D2057072	Due Date:	
Project Location:	Lea County, NM	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Dmitry Nikanorov		
PO #:			

SAMPLE RECEIPT				
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No	
Samples Received Intact:	(Yes) No	Thermometer ID:	TAM007	
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	5.9	
Total Containers:		Corrected Temperature:	5.7	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)
SS07	S	2/8/2023	13:00	0.5'	Grab	1		x	x	x

ANALYSIS REQUEST

890-4098 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

Incident Number

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

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

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	DN	Amanda Stutz	2.13.23 1502			
3				4		
5				6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4098-1
SDG Number: Lea County NM

Login Number: 4098
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: 890-4098-1
SDG Number: Lea County NM

Login Number: 4098
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 02/15/23 12:16 PM

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

ENSOLUM

APPENDIX D

ROE Request for Remediation Form and ROE Permit

Stephanie Garcia Richard
COMMISSIONER

State of New Mexico
Commissioner of Public Lands
310 OLD SANTA FE TRAIL
P.O. BOX 1148
SANTA FE, NEW MEXICO 87504-1148

COMMISSIONER'S OFFICE
Phone (505) 827-5760
Fax (505) 827-5766
www.nmstatelands.org

May 1, 2023

Maverick Natural Resources, LLC
1410 NW County Rd
Hobbs, NM 88240

Attn: Bryce Wagoner

Re: Right-of-Entry Permit No.: **RE-6493/EVGSAU Sat 6 Mobile Tester**

Dear Applicant:

Enclosed is the completed captioned Right-of-Entry permit. If any corrections are necessary, please let us know and we will retype or amend this permit as necessary.

The New Mexico State Land Office requires you to notify any surface lessees that will be impacted by your project prior to construction.

If you have any questions, or if we may be of further assistance, please do not hesitate to contact Amy Velazquez of my staff at (505) 827-5789.

Sincerely,

James S. Bordegaray
Director, Commercial Resources Division

JSB/alv

NEW MEXICO STATE LAND OFFICE
Commissioner of Public Lands
Stephanie Garcia Richard
New Mexico State Land Office Building
P.O. Box 1148, Santa Fe, NM 87504-1148

RIGHT OF ENTRY PERMIT
CONTRACT NO. RE – 6493

This Agreement is made and entered into between the COMMISSIONER OF PUBLIC LANDS (the "Commissioner") and

Maverick Natural Resources, LLC
1410 NW County Rd
Hobbs, NM 88240

("Permittee"). The parties agree as follows:

1. RIGHT OF ENTRY ("ROE")

The Commissioner grants to Permittee, and its authorized representatives, employees, and contractors, permission to use the state trust lands identified below (the "Premises"), and ingress and egress to the Premises, for the sole purposes of (1) surveying/conducting an environmental investigation on the site of a produced water and crude oil spill (the "Premises"), Incident No. nAPP2304744550, and (2) conducting surface reclamation activities, including removal of equipment and debris, and any required remediation per 19.2.100.67 NMAC.

The Premises is situated in the following location in **Lea County**, New Mexico:

Section	Township	Range	Subdivision	County	Longitude/Latitude
33	17S	35E	NE4SE4	Lea	32.7900,-103.4551

2. TERM AND TERMINATION

Right of entry is granted for a term of **180 days**, commencing on the execution date of this document by the Commissioner of Public Lands.

3. FEES

$ 50.00 Application Fee
$ 500.00 Permit Fee
$ 550.00 Total Fee

4. CONDITIONS OF USE

A. The issuance of this ROE does not guarantee that any subsequent lease, permit or any other instrument will be issued to Permittee for the Premises.
B. No blading or widening of any roads that provide access to the Premises is permitted under this ROE.
C. No sale of any material extracted from the Premises is allowed under this ROE.
D. Permittee shall observe all applicable federal, state and local laws and regulations.
E. Permittee shall take all reasonable precautions to prevent and suppress forest, brush and grass fires and prevent pollution of waters on or in the vicinity of the Premises.
F. Permittee shall not block or disrupt roads or trails commonly in use.
G. This ROE is subject to any and all easements and rights-of-way previously granted and now in force and affect.
H. Permittee shall be responsible for repair and restitution for damage to any Premises or improvements as a result of activities related to this ROE.
I. Prior to entering the Premises, Permittee must identify and contact any existing surface lessees. The grant of this ROE does not allow access across private lands.
J. Permittee may utilize this ROE upon its execution for inspection of the Premises and to conduct any necessary tests or inspections. Permittee may not conduct remediation or reclamation work until it has submitted a written plan for such work, and received State Land Office approval.
K. Personnel present on State Land: **Maverick Natural Resources personnel and contractors.**
L. Equipment and materials present on State Land: **Heavy equipment, trucks, and associated materials.**

5. SITE CONDITIONS

A. No surface disturbance, other than soil sampling, except as described in a reclamation plan submitted to and approved by the State Land Office.
B. Access to the Premises shall be over existing roads.
C. The natural environmental conditions that exist contemporaneously with this grant of ROE shall be preserved and protected. Permittee must follow all applicable environmental and cultural resource protection laws and regulations.

6. INDEMNITY

Permittee shall save, hold harmless, indemnify and defend the State of New Mexico, the Commissioner and Commissioner's employees, agents and contractors, in both their official and individual capacities, from any and all liability, claims, losses, damages, or expenses of any character or nature whatsoever, including but not limited to attorney's fees, court costs, loss of land value or use, third party claims, penalties, or removal, remedial or restoration costs arising out of, or alleged to arise out of Permittee's operations or presence on the Premises (or operations or presence of his representatives, employees, or contractors).

7. SURVIVAL OF TERMS

Permittee's obligations regarding indemnity, site conditions, and compliance with applicable standards and laws, shall survive the termination, cancellation or relinquishment of this Agreement, and any cause of action of the Commissioner to enforce any right, liability, claim, loss, damage or expense under those paragraphs shall not be deemed to accrue until the Commissioner's actual discovery of said right, liability, claim, loss, damage or expense.

8. NOTIFICATION

Permittee must notify the State Land Office immediately in the event Permittee or his representatives, employees, or contractors observe any spill, fire, or other emergency on the Premises, or if Permittee or his representatives, employees, or contractors experience any serious injury while on the Premises.

WITNESS the hands of PERMITTEE and COMMISSIONER on the day(s) and year entered below.

PERMITTEE SIGNATURE

DATE: 4/13/23

Bryce Wagoner

HSE Specialist

PERMITTEE NAME AND TITLE (PRINT)

SEAL:

BY: _____

Stephanie Garcia Richard
Commissioner of Public Lands

DATE: 05/01/2023

Stephanie Garcia Richard
Commissioner of Public Lands

RIGHT OF ENTRY REQUEST FOR REMEDIATION

Company Name _____
Address _____
City, State, Zip _____
Contact Person: _____
Telephone #: _____
Email: _____

Purpose of request: _____
_____
_____

Section _____ Township _____ Range _____ Unit Letter _____

Qtr/Qtr _____ County_____

GPS Location (decimal degrees): Latitude _____ W Longitude _____ N

If this is a remediation for a spill please attach a copy of the OCD C-141 form.

Is the completed C-141 attached? Yes ☐ No ☐

Square footage of spill impacted surface: _____

Estimated square footage of total disturbance: _____

Reclamation Plan (*attach addl. sheet if necessary*) _____
_____
_____

Driving directions from nearest state highway or road (*attach a map of the location*):
_____
_____

Lease number associated with the ROE request: _____

Well Name and/or Operator (if applicable):_____

Time expected to complete remediation:_____

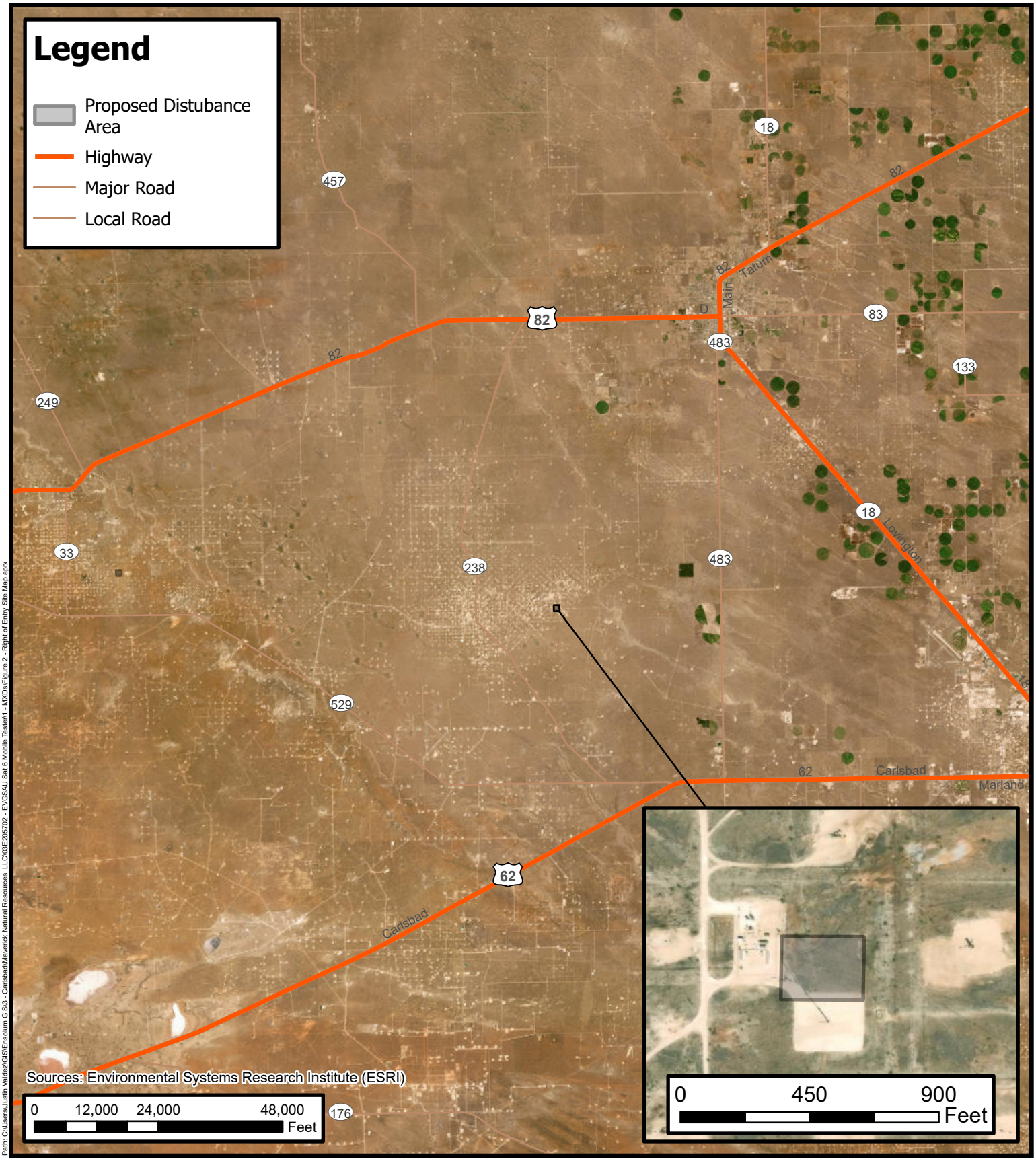
Personnel present on State Land_____

Equipment & materials present on State Land_____

$50.00 application fee and $500.00 permit amount (based on 180 days) renewable for up to 3 yrs.

Payable to: The Commissioner of Public Lands
P. O. Box 1148
Santa Fe, NM 87504-1148

* ***When you provide a check as payment, you authorize the State of New Mexico to either use information from your check to make a one-time electronic fund transfer from your account or to process the payment as a check transaction.***



Path: C:\Users\Justin Valdez\GIS\Ensolum GIS\3 - Carlsbad\Maverick Natural Resources, LLC\03E20S702 - EVGSAU Sat 6 Mobile Tester\1 - MXDs\Figure 2 - Right of Entry Site Map.aprx

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Site Access Map

Maverick Permian, LLC
EVGSAU Sat 6 Mobile Tester
Incident ID: NAPP2304744550
NESE, Sec 33, T17S, R35E
Lea County, New Mexico

FIGURE
2

ENSOLUM

APPENDIX E

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	NAPP2304744550
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: Maverick Permian, LLC	OGRID: 331199
Contact Name: Bryce Wagoner	Contact Telephone: 928-241-1862
Contact email: Bryce.Wagoner@mavresources.com	Incident # *(assigned by OCD)* NAPP2304744550
Contact mailing address: 1410 NW County Road Hobbs, NM 88240	

Location of Release Source

Latitude 32.7900 Longitude -103.4551
(NAD 83 in decimal degrees to 5 decimal places)

Site Name EVGSAU Sat 6 Mobile Tester	Site Type
Date Release Discovered February 4, 2023	API# *(if applicable) 30-025-20330*

Unit Letter	Section	Township	Range	County
I	33	17S	35E	Lea

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) 3 bbls	Volume Recovered (bbls) 0 bbls
☒ Produced Water	Volume Released (bbls) 17 bbls	Volume Recovered (bbls) 16 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
The release was caused by a gasket failure on a mobile tester. The release occurred on and off pad. The source of the release has been stopped and the impacted area has been secured.

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2304744550
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: ____Bryce Wagoner _____ Title: ___Permian HSE Specialist II_____

Signature: _____ Date: __2/09/2023_____

email: _____Bryce.Wagoner@mavresources.com____ Telephone: ___928-241-1862_____

OCD Only

Received by: ____Jocelyn Harimon_____ Date: 02/16/2023

NAPP2304744550

Pooled Fluids on the Surface										
	Length (ft.)	Width (ft.)	Depth (in)	# of Boundaries *edges of pool where depth is 0 . don't count shared boundaries*	Oil-Water Ratio (%)	Pooled Area (ft^2)	Estimated Average Depth (ft.)	Pooled Volume (bbl.)	Volume of Oil in Subsurface (bbl.)	Volume of Water in Subsurface (bbl.)
Rectangle A	75.0	45.0	1.0	4.0	0.20	3375.0	0.0	12.5	2.50	10.01
Rectangle B					0.01	0.0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle C						0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle D						0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Rectangle E						0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
							Total Volume (bbls):	**12.52**	**2.50**	**10.01**

Subsurface Fluids										
	Length (ft.)	Width (ft.)	Depth (in.)	Saturation (%) *10% in consolidated sediments after rain to 50% in sand with no precipitation*	Oil-Water Ratio (%)	Area (ft^2)	Volume (bbl.)	Estimated Volume in Subsurface (bbl.)	Volume of Oil in Subsurface (bbl.)	Volume of Water in Subsurface (bbl.)
Rectangle A	75.0	35.0	2.0	0.1	0.20	2625.0	77.9	7.8	1.56	6.2
Rectangle B						0.0	0.0	0.0	0.00	0.0
Rectangle C						0.0	0.0	0.0	0.00	0.0
Rectangle D						0.0	0.0	0.0	0.00	0.0
Rectangle E						0.0	0.0	0.0	0.00	0.0
Rectangle F						0.0	0.0	0.0	0.00	0.0
Rectangle G						0.0	0.0	0.0	0.00	0.0
Rectangle H						0.0	0.0	0.0	0.00	0.0
Rectangle I						0.0	0.0	0.0	0.00	0.0
Rectangle J						0.0	0.0	0.0	0.00	0.0
							Total Volume (bbls):	**7.79**	**1.56**	**6.23**

TOTAL RELEASE VOLUME (bbls):	**20.3**

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 187209

CONDITIONS

Operator: Maverick Permian LLC 1111 Bagby Street Suite 1600 Houston, TX 77002	OGRID: 331199
	Action Number: 187209
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	None	2/20/2023

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2304744550
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

Form C-141
Page 4

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2304744550
District RP	
Facility ID	
Application ID	

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

Printed Name: Bryce Wagoner Title: Permian HSE Specialist II

Signature: Date: 8/4/23

email: Bryce.Wagoner@mavresources.com Telephone: 928-241-1862

OCD Only

Received by: Shelly Wells Date: 8/11/2023

Form C-141
Page 5

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2304744550
District RP	
Facility ID	
Application ID	

Remediation Plan

Remediation Plan Checklist: ***Each of the following items must be included in the plan.***

☒ Detailed description of proposed remediation technique
☒ Scaled sitemap with GPS coordinates showing delineation points
☒ Estimated volume of material to be remediated
☒ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
☒ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: ***Each of the following items must be confirmed as part of any request for deferral of remediation.***

☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.

☐ Extents of contamination must be fully delineated.

☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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: Bryce Wagoner Title: Permian HSE Specialist II

Signature: Bryce Wagoner Date: 8/4/23

email: Bryce.Wagoner@mavresources.com Telephone: 928-241-1862

OCD Only

Received by: Shelly Wells Date: 8/11/2023

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: Nelson Velez Date: 11/17/2023

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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 250706

CONDITIONS

Operator: Maverick Permian LLC 1000 Main Street, Suite 2900 Houston, TX 77002	OGRID: 331199
	Action Number: 250706
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Remediation plan is approved as written. Remediation Due date updated to February 15, 2023 to submit it appropriate or final closure report.	11/17/2023