June 20, 2023

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

Re: Closure Request
Red Bull 35 Federal 001
Incident Number NAPP2126444907
Lea County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of ConocoPhillips Company (COP), has prepared this *Closure Request* to document depth to groundwater determination and excavation soil sampling activities performed at the Red Bull 35 Federal 001 (Site). The depth to groundwater determination and excavation soil sampling activities were completed as outlined in the *Revised Remediation Work Plan (RRWP)*, submitted to the New Mexico Oil Conservation Division (NMOCD) on September 1, 2022, and approved by the NMOCD on September 9, 2022. Based on confirmed depth to groundwater and the excavation soil sample analytical results, COP is submitting this *Closure Request*, describing remediation that has occurred and requesting closure for Incident Number NAPP2126444907.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit K, Section 35, Township 25 South, Range 33 East, in Lea County, New Mexico (32.08518° N, 103.5452° W) and is associated with oil and gas exploration and production operations on private land.

On September 3, 2021, a flare released approximately 0.01 barrels (bbls) crude oil, which ignited and extinguished itself after reaching the ground. COP immediately reported the release to the NMOCD via email on September 3, 2021, and submitted a Release Notification Form C-141 (Form C-141) on September 21, 2021. The release was assigned Incident Number NAPP2126444907.

BACKGROUND

The *RRWP* detailed site characterization according to 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 site characterization are presented on page 3 of the Form C-141, Site Assessment/Characterization. Potential site receptors are identified on Figure 1. Based on the results of the Site Characterization, the following NMOCD Table I Closure Criteria (Closure Criteria) were applied:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg

- Total petroleum hydrocarbons (TPH) - gasoline range organics (GRO) and diesel range organics (DRO): 1,000 mg/kg
- TPH: 2,500 mg/kg
- Chloride: 20,000 mg/kg

Between September 2021 and March 2022, Site assessment and delineation activities were conducted at the Site to assess the lateral and vertical extent of impacted soil resulting from the September 3, 2021, crude oil flare fire. Based on the assessment and delineation soil sample analytical results, TPH impacted soil was identified in the top 2 feet of the release area. The impacted soil was laterally and vertically delineated to below the Site Closure Criteria. COP submitted a *Remediation Work Plan* (*Work Plan*) on July 29, 2022, proposing excavation and disposal of the impacted soil. Additional details regarding the delineation activities can be referenced in the July 29, 2022, *Work Plan.*

August 2, 2022, NMOCD denied the *Work Plan* for Incident Number NAPP2126444907 for the following reason:

- *Remediation Plan Denied. The depth to groundwater has not been adequately determined. When nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, and data should be no more than 25 years old, and well construction information should be provided in the submission. The responsible party may choose to remediate to the most stringent levels listed in Table 1 of 19.15.29 NMAC in lieu of drilling to determine the depth to groundwater. Release has not been sufficiently addressed to the most stringent criteria.*

In response to the NMOCD denial, COP submitted a *Revised Remediation Work Plan* (*RRWP*) on September 1, 2022, proposing to install a depth to water boring within 0.5 miles of the Site to confirm depth to groundwater is greater than 100 feet below ground surface (bgs) and excavation of impacted soil to below the confirmed Site Closure Criteria. The *RRWP* was approved by NMOCD on September 9, 2022.

Upon approval of the *RRWP*, COP proceeded with excavation of the impacted soil and installation of a soil boring for determination of groundwater depth, as outlined in the *RRWP*.

DEPTH TO WATER DETERMINATION

On April 18, 2023, a borehole (BH01) was advanced to a depth of 106 feet bgs via hollow stem auger for determination of groundwater depth. The borehole was located approximately 380 feet southeast of the Site and is depicted on Figure 1. A field geologist logged and described soils continuously. The borehole lithologic log is included in Appendix A. No groundwater was encountered in the borehole to a depth of 106 feet bgs. The borehole was left open for over 72 hours to allow for potential slow infill of groundwater. After the 72-hour waiting period, no groundwater was observed and the borehole was properly abandoned using hydrated bentonite chips.

Based on confirmed depth to groundwater greater than 100 feet bgs within 0.5 miles of the Site, the Table I Closure Criteria identified in the *RRWP* are applicable and appropriate for protection of groundwater at this Site.

EXCAVATION ACTIVITIES AND LABORATORY ANALYTICAL RESULTS

On August 22, 2022, Ensolum personnel were onsite to oversee excavation activities as outlined in the approved *RRWP.* Excavation activities were performed via back-hoe and transport vehicles. To direct excavation activities, soil was field screened for volatile organic compounds (VOCs) and chloride utilizing Hach® chloride QuanTab® test strips. The excavation was completed to depths ranging from 1-foot to 2.5 feet bgs. Photographic documentation of the excavation activities is included in Appendix B.

Following removal of impacted soil, 5-point composite soil samples were collected every 200 square feet from the floor and sidewalls of the excavation. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil samples FS01 through FS04 were collected from the floor of the excavation at depths ranging from 1-foot to 2 feet bgs. Composite soil samples SW01 and SW02 were collected from the sidewalls of the excavation at depths ranging from the ground surface to 2 feet bgs. The excavation extent and excavation soil sample locations were mapped utilizing a handheld GPS unit and are depicted on Figure 2.

The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported under strict chain-of-custody procedures to Eurofins Laboratories (Eurofins) in Carlsbad, New Mexico, for analysis of the following constituents of concern (COC): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0. Soil samples delivered to the laboratory the same day they are collected may not have equilibrated to the 6 degrees Celcius required for shipment, but are considered to have been received in acceptable condition.

Laboratory analytical results for excavation soil samples FS01, FS02, and SW01 indicated all COC concentrations were compliant with the Site Closure Criteria. Laboratory analytical results for excavation soil samples FS03, FS04, and SW02 indicated that TPH concentrations exceeded Site Closure Criteria.

Ensolum personnel returned to the Site on December 7, 2022, to oversee additional excavation activities to remove impacted soil from the floor and sidewall of the excavation in the vicinity of excavation soil samples FS03, FS04, and SW02. To direct excavation activities, soil was screened for VOCs and chloride. The excavation was completed to a total depth of 2.5 feet bgs. Upon completion of excavation activities, 5-point composite soil samples FS03A, FS04A, and SW03 were collected from the floor and sidewall of the excavation. The soil samples were collected, handled, and analyzed following the same procedure described above. Laboratory analytical results are provided on Table 1 and laboratory analytical reports are included as Appendix C.

The excavation measured approximately 800 square feet in areal extent. A total of approximately 35 cubic yards of impacted soil were removed during the excavation activities. The soil was transported and properly disposed of at the R360 Disposal Facility in Hobbs, New Mexico. After completion of confirmation sampling, the excavation was secured with fencing.

CLOSURE REQUEST

Delineation and excavation activities were conducted at the Site to address the impacted soil resulting from the September 3, 2021, crude oil flare fire. Excavation activities were completed as outlined in the approved *RRWP*. Laboratory analytical results for the excavation soil samples, collected from the final excavation extent, indicated all COC concentrations were compliant with the Site Closure Criteria.

Additionally, the release was laterally delineated at the surface to below the most stringent Table I Closure Criteria by assessment samples SS05 through SS09, as presented in the *RRWP*.

Depth to groundwater is confirmed to be greater than 100 feet bgs and no other sensitive receptors were identified near the release extent. Based on laboratory analytical results compliant with the Site Closure Criteria, no further remediation is required. As such, COP respectfully requests closure for Incident Number NAPP2126444907. COP backfilled the excavation with material purchased locally and recontour the Site to match pre-existing site conditions. The Final C-141 is included as Appendix D.

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

Sincerely,
Ensolum, LLC

Julianna Falcomata
Staff Geologist

Kalei Jennings
Senior Scientist

cc: Jacob Laird, COG Operating, LLC
New Mexico State Land Office

Appendices:

Figure 1	Site Receptor Map
Figure 2	Excavation Soil Sample Locations
Table 1	Soil Sample Analytical Results
Appendix A	Lithologic Sample Logs
Appendix B	Photographic Log
Appendix C	Laboratory Analytical Reports & Chain-of-Custody Documentation
Appendix D	Final C-141

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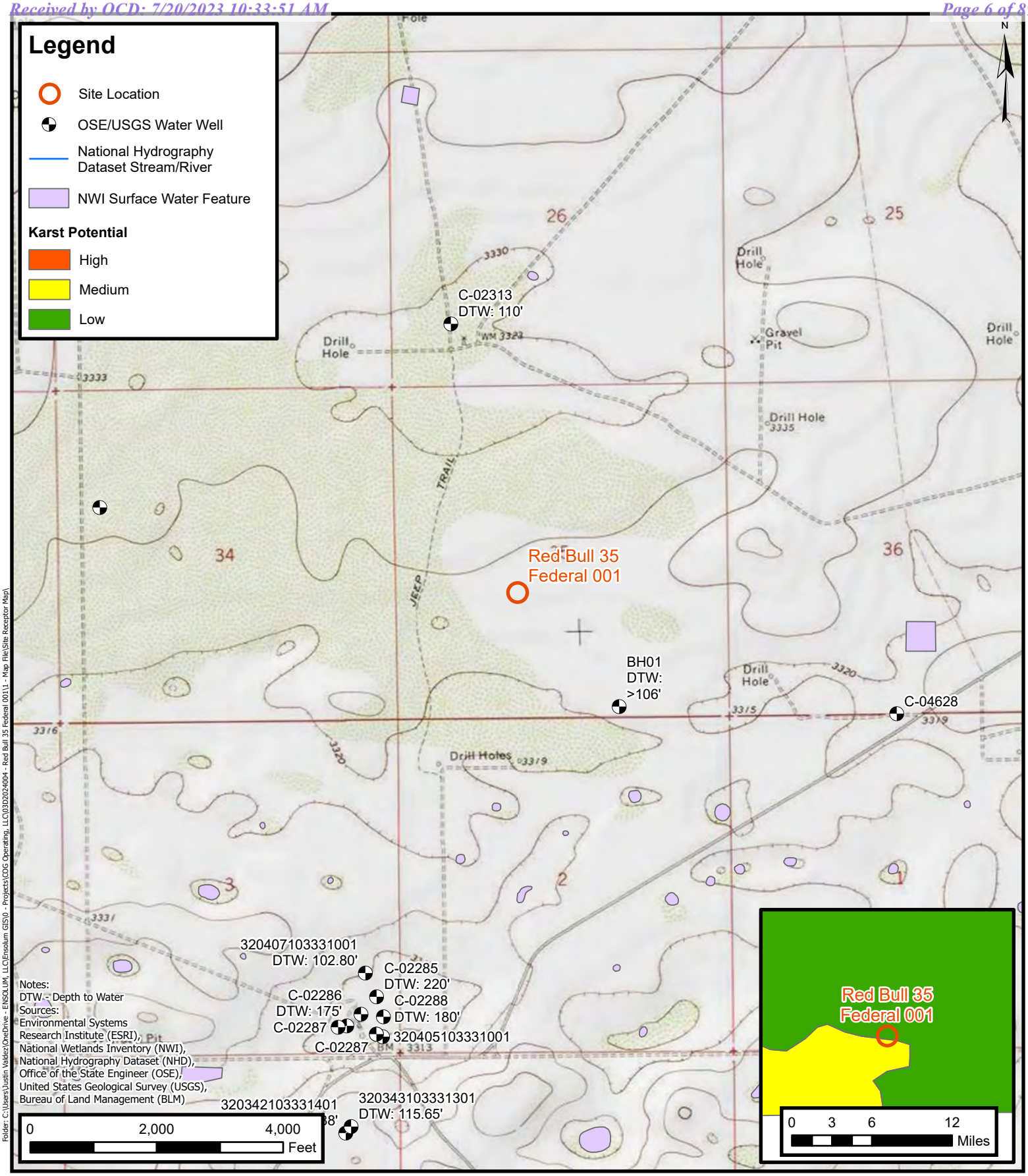
FIGURES



Folder: C:\Users\Justin Valdez\OneDrive - ENSOLUM, LLC\Ensolum GIS\0 - Projects\COG Operating, LLC\03202024004 - Red Bull 35 Federal 001\1 - Map File\Site Receptor Map\

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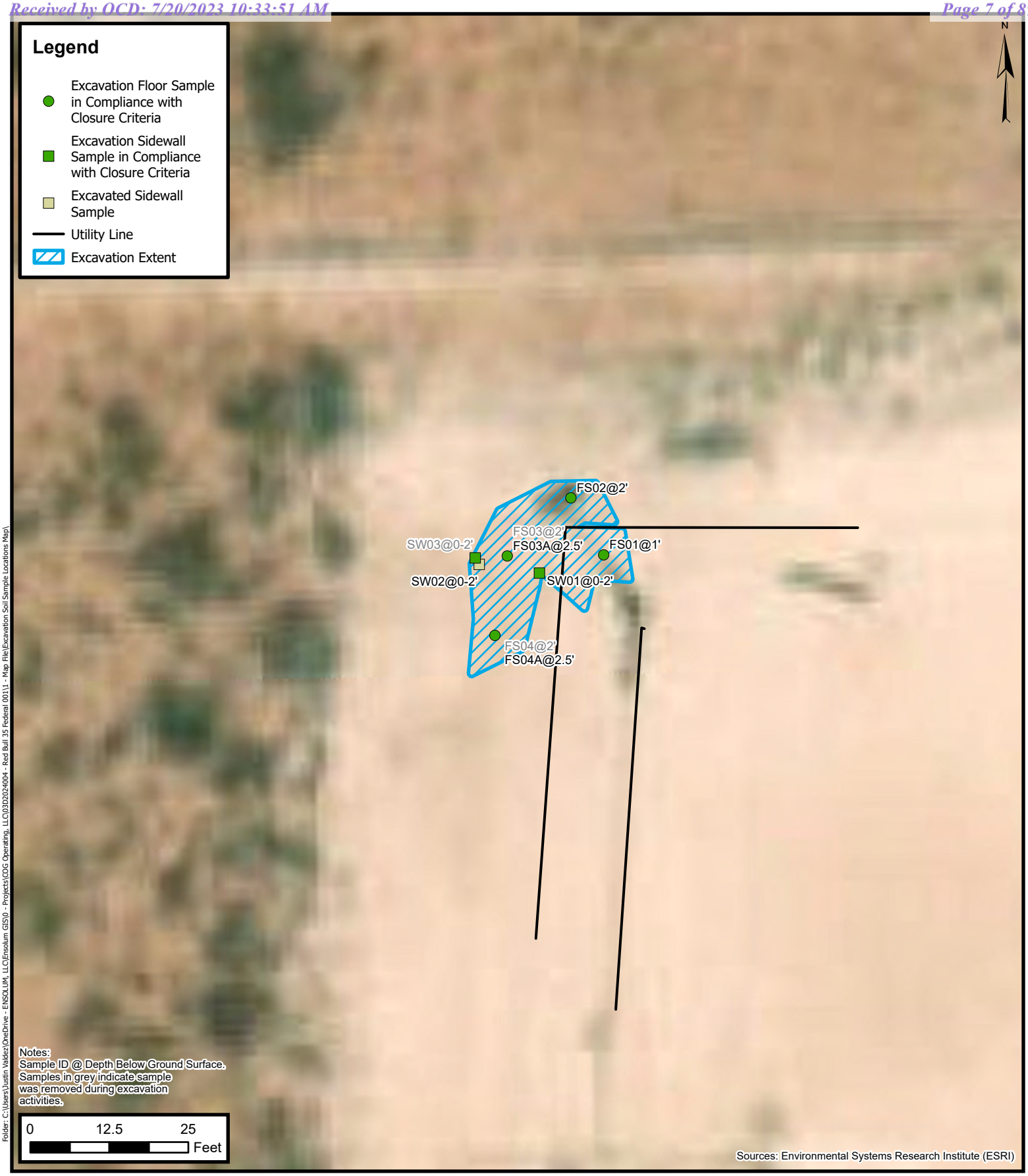
Environmental, Engineering and Hydrogeologic Consultants

Site Receptor Map

ConocoPhillips Company
Red Bull 35 Federal 001
Incident Number: NAPP2126444907
Unit K, Sec 35, T25S, R33E Lea County, NM
Lea County, NM

FIGURE 1



Folder: C:\Users\Justin Valdez\OneDrive - ENSOLUM, LLC\Ensolum GIS\0 - Projects\COG Operating, LLC\03202024004 - Red Bull 35 Federal 001\1 - Map File\Excavation Soil Sample Locations Map\

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Environmental, Engineering and Hydrogeologic Consultants

Excavation Soil Sample Locations

ConocoPhillips Company
Red Bull 35 Federal 001
Incident Number: NAPP2126444907
Unit K, Sec 35, T25S, R33E Lea County, NM
Lea County, NM

FIGURE 2

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TABLES

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
Red Bull 35 Federal 001
ConocoPhillips Company
Lea County, New Mexico

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			**10**	**50**	**NE**	**NE**	**NE**	**1,000**	**2,500**	**20,000**
Excavation Floor Samples										
FS01	08/22/2022	1	<0.00200	<0.00399	<50.0	79.1	<50.0	79.1	79.1	1,700
FS02	08/22/2022	2	<0.00201	<0.00402	<49.9	145	<49.9	145	145	1,610
FS03	08/22/2022	2	<0.0399	1	<49.9	2,930	407	**2,930**	**3,340**	1,280
FS03A	12/07/2022	2.5	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	15.6
FS04	08/22/2022	2	<0.0398	<0.0795	<50.0	2,190	273	**2,190**	**2,460**	628
FS04A	12/07/2022	2.5	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	13.6
Excavation Sidewall Samples										
SW01	08/22/2022	0 - 2	<0.00201	<0.00402	<49.8	62.1	<49.8	62.1	62.1	514
SW02	08/22/2022	0 - 2	<0.00200	<0.00399	<49.9	3,070	385.0	**3,070**	**3,460**	576
SW03	12/07/2022	0 - 2	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	55.1

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.*

Grey text represents samples that have been excavated

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APPENDIX A

Lithologic / Sampling Logs

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	Sample Name: BH01	Date: 04/18/2023
	Site Name: Redbull Federal 35	
	Incident Number: nAPP2126444907	
	Job Number: 03D2024004	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: J. Falcomata	Method: Hollow Stem
Coordinates: 32.0848815, -103.5447991	Hole Diameter: 5"	Total Depth: 106'

Comments: Soil boring was advanced to a total depth of 106' bgs. No water was observed within the soil boring after at least 72 hours. On 04/21/2023 the soil boring was plugged and abandoned using hydrated bentonite chips.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
								Note: Driller injected well with a water and soap mixture @ 50' to help stabilize well and prevent cave in. Due to collapse, well cased @ 60' using 2" polypipe casing.
Dry	-	-	N	-	-	10	SP-SC	(10') SAND: fine grained - med grained, trace amounts med sized gravel, poorly graded, tan - yellow brown, no odor, non plastic, non cohesive.
Dry	-	-	N	-	-	20	SP-SM	(20') SAND: fine grained, slightly silty poorly graded, med-reddish brown, no odor, non plastic, non cohesive
Dry	-	-	N	-	-	30	SP-SM	(30') SAND: fine grained, slightly silty, poorly graded, reddish brown - slightly orange, no odor, non plastic, non cohesive.
Dry	-	-	N	-	-	40	SP-SM	(40') SAND: fine grained, slightly silty, poorly graded, orangish brown, no odor, non plastic, non cohesive.
Dry	-	-	N	-	-	50	SP-SM	(50') SAND: fine grained, silty, poorly sorted, orangish brown to medium brown, no odor, non plastic, non cohesive.
Dry	-	-	N	-	-	60	SP-SM	(60') SAND: fine grained, silty, poorly sorted, orangish brown to medium brown, no odor, non plastic, non cohesive.
Wet	-	-	N	-	-	70	SP-SM	(70') SAND: fine grained, silty, poorly graded, medium brown - tan, wet from injection, no odor, non plastic, non cohesive.
Wet	-	-	N	-	-	80	SP-SM	(80') SAND: fine grained, silty, poorly graded, , medium, wet from injection, no odor, non plastic, non cohesive.
Wet	-	-	N	-	-	90	SP-SM	(90') SAND: fine grained, silty, poorly graded, , medium, wet from injection, no odor, non plastic, non cohesive.
Wet	-	-	N	-	-	100	SP-SM	(100') SAND: fine grained, silty, poorly sorted, medium brown - brown, wet from injection, no odor, non plastic, non cohesive.
Wet	-	-	N	-	-	106	SP-SM	AA

Total Depth @ 106 feet bgs

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APPENDIX B

Photographic Log

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Photographic Log
ConocoPhillips Company
Red Bull 35 Federal 001
Incident Number NAPP2126444907

Photograph 1 Date: 09/27/2021
Description: Photo of release extent taken during initial site assessment activities.

Photograph 2 Date: 12/06/2021
Description: Photo of PH01 taken during delineation activities.

Photograph 3 Date: 03/10/2022
Description: Photo of PH02 taken during delineation activities.

Photograph 4 Date: 03/10/2022
Description: Photo of PH03 taken during delineation activities.

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Photographic Log
COG Operating, LLC
Red Bul 35 Federal 001
NAPP2126444907

Photograph: 1 Date: 8/25/2022
Description: Excavation Activities
View: North

Photograph: 2 Date: 8/25/2023
Description: Excavation activities
View: East

Photograph: 3 Date: 4/18/2023
Description: Drilling DTW well
View: Northwest

Photograph: 4 Date: 4/18/2023
Description: Completed DTW well
View: Southwest

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APPENDIX C

Laboratory Analytical Results

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 12/21/2022 2:23:02 PM

JOB DESCRIPTION

RED BULL 35 FED 1
SDG NUMBER New Mexico

JOB NUMBER

890-3596-1

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
12/21/2022 2:23:02 PM

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

Client: Ensolum
Project/Site: RED BULL 35 FED 1

Laboratory Job ID: 890-3596-1
SDG: New Mexico

Table of Contents

Definitions/Glossary

Client: Ensolum Job ID: 890-3596-1
Project/Site: RED BULL 35 FED 1 SDG: New Mexico

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.
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: RED BULL 35 FED 1

Job ID: 890-3596-1
SDG: New Mexico

Job ID: 890-3596-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-3596-1

Receipt
The samples were received on 12/7/2022 2:29 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 5.0°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: FS01 (890-3596-1) and FS02 (890-3596-2).

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 surrogate recovery for the blank associated with preparation batch 880-41625 and analytical batch 880-41693 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-41693/5) and (LCS 880-41625/2-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The method blank for preparation batch 880-41625 and analytical batch 880-41693 contained Gasoline Range Organics (GRO)-C6-C10 above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-41625 and analytical batch 880-41693 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: RED BULL 35 FED 1

Job ID: 890-3596-1
SDG: New Mexico

Client Sample ID: FS01

Lab Sample ID: 890-3596-1
Matrix: Solid
Date Collected: 12/07/22 08:22
Date Received: 12/07/22 14:29
Sample Depth: 1.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		12/17/22 16:57	12/21/22 11:59	1
Toluene	<0.00201	U	0.00201		mg/Kg		12/17/22 16:57	12/21/22 11:59	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		12/17/22 16:57	12/21/22 11:59	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		12/17/22 16:57	12/21/22 11:59	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		12/17/22 16:57	12/21/22 11:59	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		12/17/22 16:57	12/21/22 11:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*12/17/22 16:57*	*12/21/22 11:59*	*1*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*	*12/17/22 16:57*	*12/21/22 11:59*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			12/21/22 14:44	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			12/14/22 12:15	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		12/12/22 11:00	12/13/22 18:44	1
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9		mg/Kg		12/12/22 11:00	12/13/22 18:44	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/12/22 11:00	12/13/22 18:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*120*		*70 - 130*	*12/12/22 11:00*	*12/13/22 18:44*	*1*
o-Terphenyl	*113*		*70 - 130*	*12/12/22 11:00*	*12/13/22 18:44*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**15.6**		5.01		mg/Kg			12/14/22 02:45	1

Client Sample ID: FS02

Lab Sample ID: 890-3596-2
Matrix: Solid
Date Collected: 12/07/22 08:26
Date Received: 12/07/22 14:29
Sample Depth: 1.5

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		12/17/22 16:57	12/21/22 12:20	1
Toluene	<0.00198	U	0.00198		mg/Kg		12/17/22 16:57	12/21/22 12:20	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		12/17/22 16:57	12/21/22 12:20	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		12/17/22 16:57	12/21/22 12:20	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		12/17/22 16:57	12/21/22 12:20	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		12/17/22 16:57	12/21/22 12:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*	*12/17/22 16:57*	*12/21/22 12:20*	*1*

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: RED BULL 35 FED 1

Job ID: 890-3596-1
SDG: New Mexico

Client Sample ID: FS02

Date Collected: 12/07/22 08:26
Date Received: 12/07/22 14:29
Sample Depth: 1.5

Lab Sample ID: 890-3596-2

Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*12/17/22 16:57*	*12/21/22 12:20*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			12/21/22 14:44	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			12/14/22 12:15	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		12/12/22 11:00	12/13/22 19:06	1
Diesel Range Organics (Over C10-C28)	<49.9	U *1	49.9		mg/Kg		12/12/22 11:00	12/13/22 19:06	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/12/22 11:00	12/13/22 19:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*12/12/22 11:00*	*12/13/22 19:06*	*1*
o-Terphenyl	*104*		*70 - 130*	*12/12/22 11:00*	*12/13/22 19:06*	*1*

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**13.6**		4.98		mg/Kg			12/14/22 02:52	1

Surrogate Summary

Client: Ensolum
Project/Site: RED BULL 35 FED 1

Job ID: 890-3596-1
SDG: New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-3596-1	FS01	112	88
890-3596-1 MS	FS01	108	97
890-3596-1 MSD	FS01	103	95
890-3596-2	FS02	119	95
LCS 880-42102/1-A	Lab Control Sample	104	86
LCSD 880-42102/2-A	Lab Control Sample Dup	96	95
MB 880-42102/5-A	Method Blank	104	87

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-22478-A-1-E MS	Matrix Spike	125	104
880-22478-A-1-F MSD	Matrix Spike Duplicate	127	106
890-3596-1	FS01	120	113
890-3596-2	FS02	102	104
LCS 880-41625/2-A	Lab Control Sample	165 S1+	162 S1+
LCSD 880-41625/3-A	Lab Control Sample Dup	127	128
MB 880-41625/1-A	Method Blank	148 S1+	209 S1+

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: RED BULL 35 FED 1

Job ID: 890-3596-1
SDG: New Mexico

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-42102/5-A
Matrix: Solid
Analysis Batch: 42367

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 42102

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/17/22 16:57	12/21/22 11:37	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/17/22 16:57	12/21/22 11:37	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/17/22 16:57	12/21/22 11:37	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		12/17/22 16:57	12/21/22 11:37	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/17/22 16:57	12/21/22 11:37	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/17/22 16:57	12/21/22 11:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*12/17/22 16:57*	*12/21/22 11:37*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*12/17/22 16:57*	*12/21/22 11:37*	*1*

Lab Sample ID: LCS 880-42102/1-A
Matrix: Solid
Analysis Batch: 42367

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 42102

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09547		mg/Kg		95	70 - 130		
Toluene			0.100	0.09588		mg/Kg		96	70 - 130		
Ethylbenzene			0.100	0.09711		mg/Kg		97	70 - 130		
m-Xylene & p-Xylene			0.200	0.2098		mg/Kg		105	70 - 130		
o-Xylene			0.100	0.1046		mg/Kg		105	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*

Lab Sample ID: LCSD 880-42102/2-A
Matrix: Solid
Analysis Batch: 42367

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 42102

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09980		mg/Kg		100	70 - 130	4	35
Toluene			0.100	0.09557		mg/Kg		96	70 - 130	0	35
Ethylbenzene			0.100	0.09201		mg/Kg		92	70 - 130	5	35
m-Xylene & p-Xylene			0.200	0.1929		mg/Kg		96	70 - 130	8	35
o-Xylene			0.100	0.09532		mg/Kg		95	70 - 130	9	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: 890-3596-1 MS
Matrix: Solid
Analysis Batch: 42367

Client Sample ID: FS01
Prep Type: Total/NA
Prep Batch: 42102

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00201	U	0.100	0.08527		mg/Kg		85	70 - 130		
Toluene	<0.00201	U	0.100	0.07828		mg/Kg		78	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: RED BULL 35 FED 1

Job ID: 890-3596-1
SDG: New Mexico

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

Lab Sample ID: 890-3596-1 MS
Matrix: Solid
Analysis Batch: 42367

Client Sample ID: FS01
Prep Type: Total/NA
Prep Batch: 42102

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U	0.100	0.07303		mg/Kg		73	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.201	0.1563		mg/Kg		78	70 - 130
o-Xylene	<0.00201	U	0.100	0.07955		mg/Kg		79	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*

Lab Sample ID: 890-3596-1 MSD
Matrix: Solid
Analysis Batch: 42367

Client Sample ID: FS01
Prep Type: Total/NA
Prep Batch: 42102

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.0990	0.08417		mg/Kg		85	70 - 130	1	35
Toluene	<0.00201	U	0.0990	0.07691		mg/Kg		78	70 - 130	2	35
Ethylbenzene	<0.00201	U	0.0990	0.07004		mg/Kg		71	70 - 130	4	35
m-Xylene & p-Xylene	<0.00402	U	0.198	0.1496		mg/Kg		76	70 - 130	4	35
o-Xylene	<0.00201	U	0.0990	0.07544		mg/Kg		76	70 - 130	5	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

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

Lab Sample ID: MB 880-41625/1-A
Matrix: Solid
Analysis Batch: 41693

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 41625

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		12/12/22 11:00	12/13/22 08:06	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/12/22 11:00	12/13/22 08:06	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/12/22 11:00	12/13/22 08:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*148*	*S1+*	*70 - 130*	*12/12/22 11:00*	*12/13/22 08:06*	*1*
o-Terphenyl	*209*	*S1+*	*70 - 130*	*12/12/22 11:00*	*12/13/22 08:06*	*1*

Lab Sample ID: LCS 880-41625/2-A
Matrix: Solid
Analysis Batch: 41693

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 41625

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10			1000	949.4		mg/Kg		95	70 - 130
Diesel Range Organics (Over C10-C28)			1000	1175		mg/Kg		118	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: RED BULL 35 FED 1

Job ID: 890-3596-1
SDG: New Mexico

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

Lab Sample ID: LCS 880-41625/2-A
Matrix: Solid
Analysis Batch: 41693

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 41625

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	165	S1+	70 - 130
o-Terphenyl	162	S1+	70 - 130

Lab Sample ID: LCSD 880-41625/3-A
Matrix: Solid
Analysis Batch: 41693

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 41625

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	922.3		mg/Kg		92	70 - 130	3	20
Diesel Range Organics (Over C10-C28)			1000	925.4	*1	mg/Kg		93	70 - 130	24	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	127		70 - 130
o-Terphenyl	128		70 - 130

Lab Sample ID: 880-22478-A-1-E MS
Matrix: Solid
Analysis Batch: 41693

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 41625

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	999	1156		mg/Kg		113	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U *1	999	1148		mg/Kg		113	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	125		70 - 130
o-Terphenyl	104		70 - 130

Lab Sample ID: 880-22478-A-1-F MSD
Matrix: Solid
Analysis Batch: 41693

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 41625

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	997	1120		mg/Kg		109	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<50.0	U *1	997	1190		mg/Kg		117	70 - 130	4	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	127		70 - 130
o-Terphenyl	106		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: RED BULL 35 FED 1

Job ID: 890-3596-1
SDG: New Mexico

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-41605/1-A
Matrix: Solid
Analysis Batch: 41692

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			12/13/22 23:15	1

Lab Sample ID: LCS 880-41605/2-A
Matrix: Solid
Analysis Batch: 41692

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	244.7		mg/Kg		98	90 - 110		

Lab Sample ID: LCSD 880-41605/3-A
Matrix: Solid
Analysis Batch: 41692

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	244.5		mg/Kg		98	90 - 110	0	20

Lab Sample ID: 880-22580-A-11-B MS
Matrix: Solid
Analysis Batch: 41692

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	172		248	426.2		mg/Kg		102	90 - 110		

Lab Sample ID: 880-22580-A-11-C MSD
Matrix: Solid
Analysis Batch: 41692

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	172		248	425.6		mg/Kg		102	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: RED BULL 35 FED 1

Job ID: 890-3596-1
SDG: New Mexico

GC VOA

Prep Batch: 42102

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3596-1	FS01	Total/NA	Solid	5035	
890-3596-2	FS02	Total/NA	Solid	5035	
MB 880-42102/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-42102/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-42102/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3596-1 MS	FS01	Total/NA	Solid	5035	
890-3596-1 MSD	FS01	Total/NA	Solid	5035	

Analysis Batch: 42367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3596-1	FS01	Total/NA	Solid	8021B	42102
890-3596-2	FS02	Total/NA	Solid	8021B	42102
MB 880-42102/5-A	Method Blank	Total/NA	Solid	8021B	42102
LCS 880-42102/1-A	Lab Control Sample	Total/NA	Solid	8021B	42102
LCSD 880-42102/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	42102
890-3596-1 MS	FS01	Total/NA	Solid	8021B	42102
890-3596-1 MSD	FS01	Total/NA	Solid	8021B	42102

Analysis Batch: 42425

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3596-1	FS01	Total/NA	Solid	Total BTEX	
890-3596-2	FS02	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 41625

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3596-1	FS01	Total/NA	Solid	8015NM Prep	
890-3596-2	FS02	Total/NA	Solid	8015NM Prep	
MB 880-41625/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-41625/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-41625/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-22478-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-22478-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 41693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3596-1	FS01	Total/NA	Solid	8015B NM	41625
890-3596-2	FS02	Total/NA	Solid	8015B NM	41625
MB 880-41625/1-A	Method Blank	Total/NA	Solid	8015B NM	41625
LCS 880-41625/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	41625
LCSD 880-41625/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	41625
880-22478-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	41625
880-22478-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	41625

Analysis Batch: 41812

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3596-1	FS01	Total/NA	Solid	8015 NM	
890-3596-2	FS02	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Ensolum
Project/Site: RED BULL 35 FED 1

Job ID: 890-3596-1
SDG: New Mexico

HPLC/IC

Leach Batch: 41605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3596-1	FS01	Soluble	Solid	DI Leach	
890-3596-2	FS02	Soluble	Solid	DI Leach	
MB 880-41605/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-41605/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-41605/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-22580-A-11-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-22580-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 41692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3596-1	FS01	Soluble	Solid	300.0	41605
890-3596-2	FS02	Soluble	Solid	300.0	41605
MB 880-41605/1-A	Method Blank	Soluble	Solid	300.0	41605
LCS 880-41605/2-A	Lab Control Sample	Soluble	Solid	300.0	41605
LCSD 880-41605/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	41605
880-22580-A-11-B MS	Matrix Spike	Soluble	Solid	300.0	41605
880-22580-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	41605

Lab Chronicle

Client: Ensolum
Project/Site: RED BULL 35 FED 1

Job ID: 890-3596-1
SDG: New Mexico

Client Sample ID: FS01
Date Collected: 12/07/22 08:22
Date Received: 12/07/22 14:29

Lab Sample ID: 890-3596-1
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			4.97 g	5 mL	42102	12/17/22 16:57	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	42367	12/21/22 11:59	SM	EET MID
Total/NA	Analysis	Total BTEX		1			42425	12/21/22 14:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			41812	12/14/22 12:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	41625	12/12/22 11:00	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	41693	12/13/22 18:44	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	41605	12/12/22 10:15	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	41692	12/14/22 02:45	CH	EET MID

Client Sample ID: FS02
Date Collected: 12/07/22 08:26
Date Received: 12/07/22 14:29

Lab Sample ID: 890-3596-2
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			5.05 g	5 mL	42102	12/17/22 16:57	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	42367	12/21/22 12:20	SM	EET MID
Total/NA	Analysis	Total BTEX		1			42425	12/21/22 14:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			41812	12/14/22 12:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	41625	12/12/22 11:00	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	41693	12/13/22 19:06	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	41605	12/12/22 10:15	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	41692	12/14/22 02:52	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: RED BULL 35 FED 1

Job ID: 890-3596-1
SDG: New Mexico

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: RED BULL 35 FED 1

Job ID: 890-3596-1
SDG: New Mexico

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

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: RED BULL 35 FED 1

Job ID: 890-3596-1
SDG: New Mexico

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3596-1	FS01	Solid	12/07/22 08:22	12/07/22 14:29	1.5
890-3596-2	FS02	Solid	12/07/22 08:26	12/07/22 14:29	1.5

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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 Street, Suite 400	Address:	
City, State ZIP:	Midland, TX 79701	City, State ZIP:	
Phone:	432-557-8895	Email:	Hgreen@ensolum.com; Kjennings@ensolum.com

Work Order Comments

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

Project Name:	RED BULL 35 FED 1	Turn Around	
Project Number:	03D2024004	☒ Routine ~~Rush~~	
Project Location:	NEW MEXICO	Due Date: ~~72 HR~~	
Sampler's Name:	HADLIE GREEN	TAT starts the day received by the lab, if received by 4:30pm	
PO #:	03D2024004	WORK ORDER	

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Samples Received Intact:	Yes No	Thermometer ID:	IR#007	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No N/A	Temperature Reading:	5.2	
Total Containers:		Corrected Temperature:	5.0	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	TPH 8015	BTEX 8021	CHLORIDE 300
FS01	SL	12-7-22	0922	1.5	C	1		X	X	X
FS02	SL	12-7-22	0926	1.5	C	1		X	X	X

890-3596 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

2 - 4oz

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 Hadlie Green	Clue Alp	12-7-22 1420	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev: 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3596-1
SDG Number: New Mexico

Login Number: 3596
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: 890-3596-1
SDG Number: New Mexico

Login Number: 3596
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 12/12/22 02:26 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: Hadlie Green
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 4/27/2023 6:47:51 PM

JOB DESCRIPTION

Red Bull 35 Federal 001
SDG NUMBER 03D2024004

JOB NUMBER

890-4555-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

my EOL

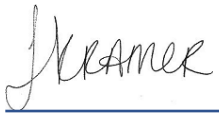
Eurofins Carlsbad

Job Notes

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

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

Authorization



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

Client: Ensolum
Project/Site: Red Bull 35 Federal 001

Laboratory Job ID: 890-4555-1
SDG: 03D2024004

Table of Contents

Definitions/Glossary

Client: Ensolum Job ID: 890-4555-1
Project/Site: Red Bull 35 Federal 001 SDG: 03D2024004

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: Red Bull 35 Federal 001

Job ID: 890-4555-1
SDG: 03D2024004

Job ID: 890-4555-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-4555-1

Receipt
The sample was received on 4/20/2023 3:56 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 6.0°C

Receipt Exceptions
The following sample was received and analyzed from an unpreserved bulk soil jar: SW03 (890-4555-1).

GC VOA
Method 8021B: Surrogate recovery for the following sample was outside control limits: SW03 (890-4555-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-51848 and analytical batch 880-51824 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (LCSD 880-51848/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (890-4554-A-11-B). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (CCV 880-51824/5). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (CCV 880-51824/31). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 880-51848 and analytical batch 880-51824 was outside control limits. Sample non-homogeneity is suspected.

Method 8015MOD_NM: The continuing calibration verification (CCV) associated with batch 880-51824 recovered above the upper control limit for Gasoline Range Organics (GRO)-C6-C10. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 880-51824/5).

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

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-51907 and 880-51907 and analytical batch 880-52121 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.The associated samples are: SW03 (890-4555-1), (890-4548-A-6-F), (890-4548-A-6-G MS) and (890-4548-A-6-H MSD).

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

Client Sample Results

Client: Ensolum
Project/Site: Red Bull 35 Federal 001

Job ID: 890-4555-1
SDG: 03D2024004

Client Sample ID: SW03

Date Collected: 04/20/23 09:45
Date Received: 04/20/23 15:56
Sample Depth: 0-2

Lab Sample ID: 890-4555-1

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		04/24/23 11:53	04/25/23 00:56	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/24/23 11:53	04/25/23 00:56	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/24/23 11:53	04/25/23 00:56	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/24/23 11:53	04/25/23 00:56	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/24/23 11:53	04/25/23 00:56	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/24/23 11:53	04/25/23 00:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*62*	*S1-*	*70 - 130*	*04/24/23 11:53*	*04/25/23 00:56*	*1*
1,4-Difluorobenzene (Surr)	*77*		*70 - 130*	*04/24/23 11:53*	*04/25/23 00:56*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			04/25/23 10:30	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			04/25/23 10:20	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		04/24/23 12:29	04/24/23 17:43	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/24/23 12:29	04/24/23 17:43	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/24/23 12:29	04/24/23 17:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*04/24/23 12:29*	*04/24/23 17:43*	*1*
o-Terphenyl	*116*		*70 - 130*	*04/24/23 12:29*	*04/24/23 17:43*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**55.1**		4.97		mg/Kg			04/27/23 17:13	1

Surrogate Summary

Client: Ensolum
Project/Site: Red Bull 35 Federal 001

Job ID: 890-4555-1
SDG: 03D2024004

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)											
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)										
890-4555-1	SW03	62 S1-	77										
890-4559-A-1-A MS	Matrix Spike	122	110										
890-4559-A-1-B MSD	Matrix Spike Duplicate	109	110										
LCS 880-51842/1-A	Lab Control Sample	114	87										
LCSD 880-51842/2-A	Lab Control Sample Dup	117	109										
MB 880-51796/5-A	Method Blank	74	82										
MB 880-51842/5-A	Method Blank	76	80										

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)											
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)										
890-4554-A-11-C MS	Matrix Spike	91	103										
890-4554-A-11-D MSD	Matrix Spike Duplicate	109	117										
890-4555-1	SW03	101	116										
LCS 880-51848/2-A	Lab Control Sample	106	130										
LCSD 880-51848/3-A	Lab Control Sample Dup	124	150 S1+										
MB 880-51848/1-A	Method Blank	119	154 S1+										

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Red Bull 35 Federal 001

Job ID: 890-4555-1
SDG: 03D2024004

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-51796/5-A
Matrix: Solid
Analysis Batch: 51793

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 51796

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/24/23 08:38	04/24/23 11:49	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/24/23 08:38	04/24/23 11:49	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/24/23 08:38	04/24/23 11:49	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/24/23 08:38	04/24/23 11:49	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/24/23 08:38	04/24/23 11:49	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/24/23 08:38	04/24/23 11:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*74*		*70 - 130*	*04/24/23 08:38*	*04/24/23 11:49*	*1*
1,4-Difluorobenzene (Surr)	*82*		*70 - 130*	*04/24/23 08:38*	*04/24/23 11:49*	*1*

Lab Sample ID: MB 880-51842/5-A
Matrix: Solid
Analysis Batch: 51793

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 51842

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/24/23 11:53	04/24/23 23:12	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/24/23 11:53	04/24/23 23:12	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/24/23 11:53	04/24/23 23:12	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/24/23 11:53	04/24/23 23:12	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/24/23 11:53	04/24/23 23:12	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/24/23 11:53	04/24/23 23:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*76*		*70 - 130*	*04/24/23 11:53*	*04/24/23 23:12*	*1*
1,4-Difluorobenzene (Surr)	*80*		*70 - 130*	*04/24/23 11:53*	*04/24/23 23:12*	*1*

Lab Sample ID: LCS 880-51842/1-A
Matrix: Solid
Analysis Batch: 51793

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 51842

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.07865		mg/Kg		79	70 - 130		
Toluene			0.100	0.08718		mg/Kg		87	70 - 130		
Ethylbenzene			0.100	0.08717		mg/Kg		87	70 - 130		
m-Xylene & p-Xylene			0.200	0.1841		mg/Kg		92	70 - 130		
o-Xylene			0.100	0.09410		mg/Kg		94	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*

Lab Sample ID: LCSD 880-51842/2-A
Matrix: Solid
Analysis Batch: 51793

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 51842

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.08353		mg/Kg		84	70 - 130	6	35

Eurofins Carlsbad

QC Sample Results

Client: Ensolum
Project/Site: Red Bull 35 Federal 001

Job ID: 890-4555-1
SDG: 03D2024004

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

Lab Sample ID: LCSD 880-51842/2-A
Matrix: Solid
Analysis Batch: 51793

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 51842

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.09106		mg/Kg		91	70 - 130	4	35
Ethylbenzene			0.100	0.08957		mg/Kg		90	70 - 130	3	35
m-Xylene & p-Xylene			0.200	0.1885		mg/Kg		94	70 - 130	2	35
o-Xylene			0.100	0.09665		mg/Kg		97	70 - 130	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*

Lab Sample ID: 890-4559-A-1-A MS
Matrix: Solid
Analysis Batch: 51793

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 51842

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.0990	0.07712		mg/Kg		78	70 - 130
Toluene	<0.00200	U	0.0990	0.07818		mg/Kg		79	70 - 130
Ethylbenzene	<0.00200	U	0.0990	0.08385		mg/Kg		85	70 - 130
m-Xylene & p-Xylene	<0.00399	U	0.198	0.1760		mg/Kg		89	70 - 130
o-Xylene	<0.00200	U	0.0990	0.08930		mg/Kg		90	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*

Lab Sample ID: 890-4559-A-1-B MSD
Matrix: Solid
Analysis Batch: 51793

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 51842

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.101	0.08184		mg/Kg		81	70 - 130	6	35
Toluene	<0.00200	U	0.101	0.07949		mg/Kg		79	70 - 130	2	35
Ethylbenzene	<0.00200	U	0.101	0.07477		mg/Kg		74	70 - 130	11	35
m-Xylene & p-Xylene	<0.00399	U	0.202	0.1522		mg/Kg		75	70 - 130	15	35
o-Xylene	<0.00200	U	0.101	0.07719		mg/Kg		77	70 - 130	15	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*

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

Lab Sample ID: MB 880-51848/1-A
Matrix: Solid
Analysis Batch: 51824

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 51848

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		04/24/23 12:29	04/24/23 15:31	1

QC Sample Results

Client: Ensolum
Project/Site: Red Bull 35 Federal 001

Job ID: 890-4555-1
SDG: 03D2024004

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

Lab Sample ID: MB 880-51848/1-A
Matrix: Solid
Analysis Batch: 51824

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 51848

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		04/24/23 12:29	04/24/23 15:31	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/24/23 12:29	04/24/23 15:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*119*		*70 - 130*	*04/24/23 12:29*	*04/24/23 15:31*	*1*
o-Terphenyl	*154*	*S1+*	*70 - 130*	*04/24/23 12:29*	*04/24/23 15:31*	*1*

Lab Sample ID: LCS 880-51848/2-A
Matrix: Solid
Analysis Batch: 51824

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 51848

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	969.9		mg/Kg		97	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	911.5		mg/Kg		91	70 - 130		

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

Lab Sample ID: LCSD 880-51848/3-A
Matrix: Solid
Analysis Batch: 51824

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 51848

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1095		mg/Kg		109	70 - 130	12	20
Diesel Range Organics (Over C10-C28)			1000	1052		mg/Kg		105	70 - 130	14	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*124*		*70 - 130*
o-Terphenyl	*150*	*S1+*	*70 - 130*

Lab Sample ID: 890-4554-A-11-C MS
Matrix: Solid
Analysis Batch: 51824

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 51848

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F2	997	913.0		mg/Kg		92	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	997	1056		mg/Kg		106	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*91*		*70 - 130*
o-Terphenyl	*103*		*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: Red Bull 35 Federal 001

Job ID: 890-4555-1
SDG: 03D2024004

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

Lab Sample ID: 890-4554-A-11-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 51824 — **Prep Batch: 51848**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F2	998	1200	F2	mg/Kg		120	70 - 130	27	20
Diesel Range Organics (Over C10-C28)	<50.0	U	998	1231		mg/Kg		123	70 - 130	15	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*109*		*70 - 130*
o-Terphenyl	*117*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-51907/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 52121

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			04/27/23 14:42	1

Lab Sample ID: LCS 880-51907/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 52121

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	273.1		mg/Kg		109	90 - 110		

Lab Sample ID: LCSD 880-51907/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 52121

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	262.9		mg/Kg		105	90 - 110	4	20

Lab Sample ID: 890-4548-A-6-G MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 52121

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	875	F1	248	1026	F1	mg/Kg		61	90 - 110		

Lab Sample ID: 890-4548-A-6-H MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 52121

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	875	F1	248	1019	F1	mg/Kg		58	90 - 110	1	20

QC Association Summary

Client: Ensolum
Project/Site: Red Bull 35 Federal 001

Job ID: 890-4555-1
SDG: 03D2024004

GC VOA

Analysis Batch: 51793

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4555-1	SW03	Total/NA	Solid	8021B	51842
MB 880-51796/5-A	Method Blank	Total/NA	Solid	8021B	51796
MB 880-51842/5-A	Method Blank	Total/NA	Solid	8021B	51842
LCS 880-51842/1-A	Lab Control Sample	Total/NA	Solid	8021B	51842
LCSD 880-51842/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	51842
890-4559-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	51842
890-4559-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	51842

Prep Batch: 51796

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-51796/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 51842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4555-1	SW03	Total/NA	Solid	5035	
MB 880-51842/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-51842/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-51842/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-4559-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
890-4559-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 51939

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4555-1	SW03	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 51824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4555-1	SW03	Total/NA	Solid	8015B NM	51848
MB 880-51848/1-A	Method Blank	Total/NA	Solid	8015B NM	51848
LCS 880-51848/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	51848
LCSD 880-51848/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	51848
890-4554-A-11-C MS	Matrix Spike	Total/NA	Solid	8015B NM	51848
890-4554-A-11-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	51848

Prep Batch: 51848

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4555-1	SW03	Total/NA	Solid	8015NM Prep	
MB 880-51848/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-51848/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-51848/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-4554-A-11-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-4554-A-11-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 51934

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4555-1	SW03	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Ensolum
Project/Site: Red Bull 35 Federal 001

Job ID: 890-4555-1
SDG: 03D2024004

HPLC/IC

Leach Batch: 51907

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4555-1	SW03	Soluble	Solid	DI Leach	
MB 880-51907/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-51907/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-51907/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4548-A-6-G MS	Matrix Spike	Soluble	Solid	DI Leach	
890-4548-A-6-H MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 52121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4555-1	SW03	Soluble	Solid	300.0	51907
MB 880-51907/1-A	Method Blank	Soluble	Solid	300.0	51907
LCS 880-51907/2-A	Lab Control Sample	Soluble	Solid	300.0	51907
LCSD 880-51907/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	51907
890-4548-A-6-G MS	Matrix Spike	Soluble	Solid	300.0	51907
890-4548-A-6-H MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	51907

Lab Chronicle

Client: Ensolum
Project/Site: Red Bull 35 Federal 001

Job ID: 890-4555-1
SDG: 03D2024004

Client Sample ID: SW03

Date Collected: 04/20/23 09:45
Date Received: 04/20/23 15:56

Lab Sample ID: 890-4555-1

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			5.02 g	5 mL	51842	04/24/23 11:53	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	51793	04/25/23 00:56	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			51939	04/25/23 10:30	SM	EET MID
Total/NA	Analysis	8015 NM		1			51934	04/25/23 10:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	51848	04/24/23 12:29	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	51824	04/24/23 17:43	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	51907	04/25/23 07:45	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	52121	04/27/23 17:13	SMC	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: Red Bull 35 Federal 001

Job ID: 890-4555-1
SDG: 03D2024004

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: Red Bull 35 Federal 001

Job ID: 890-4555-1
SDG: 03D2024004

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: Red Bull 35 Federal 001

Job ID: 890-4555-1
SDG: 03D2024004

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-4555-1	SW03	Solid	04/20/23 09:45	04/20/23 15:56	0-2

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Chain of Custody

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

Work Order No: _____

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

Work Order Comments

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

Project Name:	Red Bull 35 Federal 001	Turn Around	☐ Routine ☑ Rush
Project Number:	03D2024004	Due Date:	3 DAY
Project Location:	32.08518, -103.5452	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Kase Parker		
PO #:	03D2024004		

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	TMn007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	6.2
Total Containers:		Corrected Temperature:	6.0

ANALYSIS REQUEST

Pres. Code

Parameters: TPH 8015 | BTEX 8021 | Chloride 300

890-4555 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 Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	TPH 8015	BTEX 8021	Chloride 300	Sample Comments
SW03	SL	4/20/2023	9:45	0 - 2	Comp	1	X	X	X	1 - 32 oz jar

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 Bloy	4/20/23 1590			
3				4		
5				6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4555-1
SDG Number: 03D2024004

Login Number: 4555
List Number: 1
Creator: Stutzman, Amanda

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4555-1
SDG Number: 03D2024004

Login Number: 4555
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 04/24/23 09:11 AM

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

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-2848-1
Laboratory Sample Delivery Group: 03D2024004
Client Project/Site: Red Bull 35 Federal 001

For:
Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Kalei Jennings

JKramer

Authorized for release by:
8/30/2022 11:55:09 AM

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

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

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

Client: Ensolum
Project/Site: Red Bull 35 Federal 001

Laboratory Job ID: 890-2848-1
SDG: 03D2024004

Table of Contents

Definitions/Glossary

Client: Ensolum Job ID: 890-2848-1
Project/Site: Red Bull 35 Federal 001 SDG: 03D2024004

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*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: Red Bull 35 Federal 001

Job ID: 890-2848-1
SDG: 03D2024004

Job ID: 890-2848-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2848-1

Receipt
The samples were received on 8/25/2022 3:19 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 1.4°C

GC VOA
Method 8021B: The matrix spike (MS) recoveries for preparation batch 880-33069 and analytical batch 880-33162 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-33157/2-A) and (LCSD 880-33157/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-33157 and analytical batch 880-33143 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: Red Bull 35 Federal 001

Job ID: 890-2848-1
SDG: 03D2024004

Client Sample ID: FS01

Lab Sample ID: 890-2848-1
Matrix: Solid
Date Collected: 08/25/22 09:00
Date Received: 08/25/22 15:19
Sample Depth: 0.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/27/22 14:13	08/29/22 18:32	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/27/22 14:13	08/29/22 18:32	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/27/22 14:13	08/29/22 18:32	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/27/22 14:13	08/29/22 18:32	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/27/22 14:13	08/29/22 18:32	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/27/22 14:13	08/29/22 18:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*	*08/27/22 14:13*	*08/29/22 18:32*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*08/27/22 14:13*	*08/29/22 18:32*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			08/30/22 10:24	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**79.1**		50.0		mg/Kg			08/30/22 09:24	1

Method: 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 *1	50.0		mg/Kg		08/29/22 08:34	08/29/22 14:46	1
Diesel Range Organics (Over C10-C28)	**79.1**		50.0		mg/Kg		08/29/22 08:34	08/29/22 14:46	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/29/22 08:34	08/29/22 14:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*08/29/22 08:34*	*08/29/22 14:46*	*1*
o-Terphenyl	*100*		*70 - 130*	*08/29/22 08:34*	*08/29/22 14:46*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1700**		25.2		mg/Kg			08/29/22 12:34	5

Client Sample ID: FS02

Lab Sample ID: 890-2848-2
Matrix: Solid
Date Collected: 08/25/22 09:10
Date Received: 08/25/22 15:19
Sample Depth: 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		08/27/22 14:13	08/29/22 18:53	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/27/22 14:13	08/29/22 18:53	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/27/22 14:13	08/29/22 18:53	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/27/22 14:13	08/29/22 18:53	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/27/22 14:13	08/29/22 18:53	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/27/22 14:13	08/29/22 18:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*08/27/22 14:13*	*08/29/22 18:53*	*1*

Client Sample Results

Client: Ensolum
Project/Site: Red Bull 35 Federal 001

Job ID: 890-2848-1
SDG: 03D2024004

Client Sample ID: FS02

Date Collected: 08/25/22 09:10
Date Received: 08/25/22 15:19
Sample Depth: 2

Lab Sample ID: 890-2848-2

Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*	*08/27/22 14:13*	*08/29/22 18:53*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			08/30/22 10:24	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**145**		49.9		mg/Kg			08/30/22 09:24	1

Method: 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		08/29/22 08:34	08/29/22 14:03	1
Diesel Range Organics (Over C10-C28)	**145**		49.9		mg/Kg		08/29/22 08:34	08/29/22 14:03	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/29/22 08:34	08/29/22 14:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*08/29/22 08:34*	*08/29/22 14:03*	*1*
o-Terphenyl	*81*		*70 - 130*	*08/29/22 08:34*	*08/29/22 14:03*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1610**		25.0		mg/Kg			08/29/22 12:58	5

Client Sample ID: FS03

Date Collected: 08/25/22 09:20
Date Received: 08/25/22 15:19
Sample Depth: 1

Lab Sample ID: 890-2848-3

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0399	U	0.0399		mg/Kg		08/27/22 14:13	08/29/22 19:54	20
Toluene	**0.0743**		0.0399		mg/Kg		08/27/22 14:13	08/29/22 19:54	20
Ethylbenzene	**0.153**		0.0399		mg/Kg		08/27/22 14:13	08/29/22 19:54	20
m-Xylene & p-Xylene	**0.744**		0.0798		mg/Kg		08/27/22 14:13	08/29/22 19:54	20
o-Xylene	**0.338**		0.0399		mg/Kg		08/27/22 14:13	08/29/22 19:54	20
Xylenes, Total	**1.08**		0.0798		mg/Kg		08/27/22 14:13	08/29/22 19:54	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*08/27/22 14:13*	*08/29/22 19:54*	*20*
1,4-Difluorobenzene (Surr)	*85*		*70 - 130*	*08/27/22 14:13*	*08/29/22 19:54*	*20*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**1.31**		0.0798		mg/Kg			08/30/22 10:24	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**3340**		49.9		mg/Kg			08/30/22 09:24	1

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Client Sample Results

Client: Ensolum
Project/Site: Red Bull 35 Federal 001

Job ID: 890-2848-1
SDG: 03D2024004

Client Sample ID: FS03

Lab Sample ID: 890-2848-3
Matrix: Solid
Date Collected: 08/25/22 09:20
Date Received: 08/25/22 15:19
Sample Depth: 1

Method: 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		08/29/22 08:34	08/29/22 12:58	1
Diesel Range Organics (Over C10-C28)	**2930**		49.9		mg/Kg		08/29/22 08:34	08/29/22 12:58	1
Oil Range Organics (Over C28-C36)	**407**		49.9		mg/Kg		08/29/22 08:34	08/29/22 12:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*08/29/22 08:34*	*08/29/22 12:58*	*1*
o-Terphenyl	*75*		*70 - 130*	*08/29/22 08:34*	*08/29/22 12:58*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1280**		25.2		mg/Kg			08/29/22 13:06	5

Client Sample ID: FS04

Lab Sample ID: 890-2848-4
Matrix: Solid
Date Collected: 08/25/22 09:30
Date Received: 08/25/22 15:19
Sample Depth: 1.5

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0398	U	0.0398		mg/Kg		08/27/22 14:13	08/29/22 20:14	20
Toluene	<0.0398	U	0.0398		mg/Kg		08/27/22 14:13	08/29/22 20:14	20
Ethylbenzene	<0.0398	U	0.0398		mg/Kg		08/27/22 14:13	08/29/22 20:14	20
m-Xylene & p-Xylene	<0.0795	U	0.0795		mg/Kg		08/27/22 14:13	08/29/22 20:14	20
o-Xylene	<0.0398	U	0.0398		mg/Kg		08/27/22 14:13	08/29/22 20:14	20
Xylenes, Total	<0.0795	U	0.0795		mg/Kg		08/27/22 14:13	08/29/22 20:14	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*08/27/22 14:13*	*08/29/22 20:14*	*20*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*08/27/22 14:13*	*08/29/22 20:14*	*20*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0795	U	0.0795		mg/Kg			08/30/22 10:24	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**2460**		50.0		mg/Kg			08/30/22 09:24	1

Method: 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 *1	50.0		mg/Kg		08/29/22 08:34	08/29/22 13:41	1
Diesel Range Organics (Over C10-C28)	**2190**		50.0		mg/Kg		08/29/22 08:34	08/29/22 13:41	1
Oil Range Organics (Over C28-C36)	**273**		50.0		mg/Kg		08/29/22 08:34	08/29/22 13:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*08/29/22 08:34*	*08/29/22 13:41*	*1*

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Client Sample Results

Client: Ensolum
Project/Site: Red Bull 35 Federal 001

Job ID: 890-2848-1
SDG: 03D2024004

Client Sample ID: FS04

Lab Sample ID: 890-2848-4
Matrix: Solid
Date Collected: 08/25/22 09:30
Date Received: 08/25/22 15:19
Sample Depth: 1.5

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
o-Terphenyl	*77*		*70 - 130*	*08/29/22 08:34*	*08/29/22 13:41*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**628**		25.1	mg/Kg			08/29/22 13:14	5

Client Sample ID: SW01

Lab Sample ID: 890-2848-5
Matrix: Solid
Date Collected: 08/25/22 09:40
Date Received: 08/25/22 15:19
Sample Depth: 0 - 2

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		08/27/22 14:13	08/29/22 19:13	1
Toluene	<0.00201	U	0.00201	mg/Kg		08/27/22 14:13	08/29/22 19:13	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		08/27/22 14:13	08/29/22 19:13	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		08/27/22 14:13	08/29/22 19:13	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		08/27/22 14:13	08/29/22 19:13	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		08/27/22 14:13	08/29/22 19:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*	*08/27/22 14:13*	*08/29/22 19:13*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*08/27/22 14:13*	*08/29/22 19:13*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			08/30/22 10:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**62.1**		49.8	mg/Kg			08/30/22 09:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *1	49.8	mg/Kg		08/29/22 08:34	08/29/22 14:25	1
Diesel Range Organics (Over C10-C28)	**62.1**		49.8	mg/Kg		08/29/22 08:34	08/29/22 14:25	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		08/29/22 08:34	08/29/22 14:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*08/29/22 08:34*	*08/29/22 14:25*	*1*
o-Terphenyl	*84*		*70 - 130*	*08/29/22 08:34*	*08/29/22 14:25*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**514**		24.9	mg/Kg			08/29/22 13:21	5

Client Sample Results

Client: Ensolum
Project/Site: Red Bull 35 Federal 001

Job ID: 890-2848-1
SDG: 03D2024004

Client Sample ID: SW02

Date Collected: 08/25/22 09:50
Date Received: 08/25/22 15:19
Sample Depth: 0 - 1.5

Lab Sample ID: 890-2848-6

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/27/22 14:13	08/29/22 19:34	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/27/22 14:13	08/29/22 19:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/27/22 14:13	08/29/22 19:34	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		08/27/22 14:13	08/29/22 19:34	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/27/22 14:13	08/29/22 19:34	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		08/27/22 14:13	08/29/22 19:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*	*08/27/22 14:13*	*08/29/22 19:34*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*08/27/22 14:13*	*08/29/22 19:34*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			08/30/22 10:24	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**3460**		49.9		mg/Kg			08/30/22 09:24	1

Method: 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		08/29/22 08:34	08/29/22 13:19	1
Diesel Range Organics (Over C10-C28)	**3070**		49.9		mg/Kg		08/29/22 08:34	08/29/22 13:19	1
Oil Range Organics (Over C28-C36)	**385**		49.9		mg/Kg		08/29/22 08:34	08/29/22 13:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*08/29/22 08:34*	*08/29/22 13:19*	*1*
o-Terphenyl	*75*		*70 - 130*	*08/29/22 08:34*	*08/29/22 13:19*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**576**		24.8		mg/Kg			08/29/22 13:45	5

Surrogate Summary

Client: Ensolum
Project/Site: Red Bull 35 Federal 001

Job ID: 890-2848-1
SDG: 03D2024004

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)
890-2842-A-1-E MS	Matrix Spike	97	104
890-2842-A-1-F MSD	Matrix Spike Duplicate	91	100
890-2848-1	FS01	91	106
890-2848-2	FS02	92	111
890-2848-3	FS03	90	85
890-2848-4	FS04	100	92
890-2848-5	SW01	89	107
890-2848-6	SW02	85	108
LCS 880-33069/1-A	Lab Control Sample	95	101
LCSD 880-33069/2-A	Lab Control Sample Dup	92	105
MB 880-33069/5-A	Method Blank	78	120

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)
880-18525-A-1-D MS	Matrix Spike	95	81
880-18525-A-1-E MSD	Matrix Spike Duplicate	90	78
890-2848-1	FS01	95	100
890-2848-2	FS02	85	81
890-2848-3	FS03	96	75
890-2848-4	FS04	104	77
890-2848-5	SW01	92	84
890-2848-6	SW02	98	75
LCS 880-33157/2-A	Lab Control Sample	178 S1+	177 S1+
LCSD 880-33157/3-A	Lab Control Sample Dup	189 S1+	185 S1+
MB 880-33157/1-A	Method Blank	97	108

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Red Bull 35 Federal 001

Job ID: 890-2848-1
SDG: 03D2024004

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-33069/5-A
Matrix: Solid
Analysis Batch: 33162

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 33069

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/27/22 14:13	08/29/22 16:12	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/27/22 14:13	08/29/22 16:12	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/27/22 14:13	08/29/22 16:12	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/27/22 14:13	08/29/22 16:12	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/27/22 14:13	08/29/22 16:12	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/27/22 14:13	08/29/22 16:12	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*78*		*70 - 130*	*08/27/22 14:13*	*08/29/22 16:12*	*1*
1,4-Difluorobenzene (Surr)	*120*		*70 - 130*	*08/27/22 14:13*	*08/29/22 16:12*	*1*

Lab Sample ID: LCS 880-33069/1-A
Matrix: Solid
Analysis Batch: 33162

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 33069

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09832		mg/Kg		98	70 - 130		
Toluene			0.100	0.1039		mg/Kg		104	70 - 130		
Ethylbenzene			0.100	0.1038		mg/Kg		104	70 - 130		
m-Xylene & p-Xylene			0.200	0.1932		mg/Kg		97	70 - 130		
o-Xylene			0.100	0.1029		mg/Kg		103	70 - 130		

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

Lab Sample ID: LCSD 880-33069/2-A
Matrix: Solid
Analysis Batch: 33162

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 33069

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1050		mg/Kg		105	70 - 130	7	35
Toluene			0.100	0.1026		mg/Kg		103	70 - 130	1	35
Ethylbenzene			0.100	0.1002		mg/Kg		100	70 - 130	4	35
m-Xylene & p-Xylene			0.200	0.1844		mg/Kg		92	70 - 130	5	35
o-Xylene			0.100	0.09694		mg/Kg		97	70 - 130	6	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: 890-2842-A-1-E MS
Matrix: Solid
Analysis Batch: 33162

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 33069

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U	0.0998	0.07083		mg/Kg		71	70 - 130		
Toluene	<0.00199	U	0.0998	0.07660		mg/Kg		77	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: Red Bull 35 Federal 001

Job ID: 890-2848-1
SDG: 03D2024004

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

Lab Sample ID: 890-2842-A-1-E MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 33162 — **Prep Batch: 33069**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U	0.0998	0.07257		mg/Kg		73	70 - 130
m-Xylene & p-Xylene	<0.00398	U F1	0.200	0.1321	F1	mg/Kg		66	70 - 130
o-Xylene	<0.00199	U	0.0998	0.07263		mg/Kg		73	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: 890-2842-A-1-F MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 33162 — **Prep Batch: 33069**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.100	0.08963		mg/Kg		89	70 - 130	23	35
Toluene	<0.00199	U	0.100	0.09049		mg/Kg		90	70 - 130	17	35
Ethylbenzene	<0.00199	U	0.100	0.08761		mg/Kg		87	70 - 130	19	35
m-Xylene & p-Xylene	<0.00398	U F1	0.201	0.1610		mg/Kg		80	70 - 130	20	35
o-Xylene	<0.00199	U	0.100	0.08501		mg/Kg		85	70 - 130	16	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

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

Lab Sample ID: MB 880-33157/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 33143 — **Prep Batch: 33157**

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		08/29/22 08:34	08/29/22 10:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		08/29/22 08:34	08/29/22 10:47	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		08/29/22 08:34	08/29/22 10:47	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*08/29/22 08:34*	*08/29/22 10:47*	*1*
o-Terphenyl	*108*		*70 - 130*	*08/29/22 08:34*	*08/29/22 10:47*	*1*

Lab Sample ID: LCS 880-33157/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 33143 — **Prep Batch: 33157**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1063		mg/Kg		106	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1076		mg/Kg		108	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Red Bull 35 Federal 001

Job ID: 890-2848-1
SDG: 03D2024004

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

Lab Sample ID: LCS 880-33157/2-A
Matrix: Solid
Analysis Batch: 33143

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 33157

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	178	S1+	70 - 130
o-Terphenyl	177	S1+	70 - 130

Lab Sample ID: LCSD 880-33157/3-A
Matrix: Solid
Analysis Batch: 33143

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 33157

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	801.1	*1	mg/Kg		80	70 - 130	28	20
Diesel Range Organics (Over C10-C28)			1000	1131		mg/Kg		113	70 - 130	5	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	189	S1+	70 - 130
o-Terphenyl	185	S1+	70 - 130

Lab Sample ID: 880-18525-A-1-D MS
Matrix: Solid
Analysis Batch: 33143

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 33157

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 *1	999	696.8		mg/Kg		70	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	999	1049		mg/Kg		105	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	95		70 - 130
o-Terphenyl	81		70 - 130

Lab Sample ID: 880-18525-A-1-E MSD
Matrix: Solid
Analysis Batch: 33143

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 33157

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 *1	998	703.7		mg/Kg		71	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<49.9	U	998	993.7		mg/Kg		100	70 - 130	5	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	90		70 - 130
o-Terphenyl	78		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Red Bull 35 Federal 001

Job ID: 890-2848-1
SDG: 03D2024004

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-33190/1-A
Matrix: Solid
Analysis Batch: 33232

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			08/29/22 12:11	1

Lab Sample ID: LCS 880-33190/2-A
Matrix: Solid
Analysis Batch: 33232

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	240.0		mg/Kg		96	90 - 110		

Lab Sample ID: LCSD 880-33190/3-A
Matrix: Solid
Analysis Batch: 33232

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	241.3		mg/Kg		97	90 - 110	1	20

Lab Sample ID: 890-2848-1 MS
Matrix: Solid
Analysis Batch: 33232

Client Sample ID: FS01
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	1700		1260	2911		mg/Kg		96	90 - 110		

Lab Sample ID: 890-2848-1 MSD
Matrix: Solid
Analysis Batch: 33232

Client Sample ID: FS01
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1700		1260	2914		mg/Kg		97	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: Red Bull 35 Federal 001

Job ID: 890-2848-1
SDG: 03D2024004

GC VOA

Prep Batch: 33069

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2848-1	FS01	Total/NA	Solid	5035	
890-2848-2	FS02	Total/NA	Solid	5035	
890-2848-3	FS03	Total/NA	Solid	5035	
890-2848-4	FS04	Total/NA	Solid	5035	
890-2848-5	SW01	Total/NA	Solid	5035	
890-2848-6	SW02	Total/NA	Solid	5035	
MB 880-33069/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-33069/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-33069/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2842-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
890-2842-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 33162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2848-1	FS01	Total/NA	Solid	8021B	33069
890-2848-2	FS02	Total/NA	Solid	8021B	33069
890-2848-3	FS03	Total/NA	Solid	8021B	33069
890-2848-4	FS04	Total/NA	Solid	8021B	33069
890-2848-5	SW01	Total/NA	Solid	8021B	33069
890-2848-6	SW02	Total/NA	Solid	8021B	33069
MB 880-33069/5-A	Method Blank	Total/NA	Solid	8021B	33069
LCS 880-33069/1-A	Lab Control Sample	Total/NA	Solid	8021B	33069
LCSD 880-33069/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	33069
890-2842-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	33069
890-2842-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	33069

Analysis Batch: 33331

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2848-1	FS01	Total/NA	Solid	Total BTEX	
890-2848-2	FS02	Total/NA	Solid	Total BTEX	
890-2848-3	FS03	Total/NA	Solid	Total BTEX	
890-2848-4	FS04	Total/NA	Solid	Total BTEX	
890-2848-5	SW01	Total/NA	Solid	Total BTEX	
890-2848-6	SW02	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 33143

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2848-1	FS01	Total/NA	Solid	8015B NM	33157
890-2848-2	FS02	Total/NA	Solid	8015B NM	33157
890-2848-3	FS03	Total/NA	Solid	8015B NM	33157
890-2848-4	FS04	Total/NA	Solid	8015B NM	33157
890-2848-5	SW01	Total/NA	Solid	8015B NM	33157
890-2848-6	SW02	Total/NA	Solid	8015B NM	33157
MB 880-33157/1-A	Method Blank	Total/NA	Solid	8015B NM	33157
LCS 880-33157/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	33157
LCSD 880-33157/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	33157
880-18525-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	33157
880-18525-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	33157

QC Association Summary

Client: Ensolum
Project/Site: Red Bull 35 Federal 001

Job ID: 890-2848-1
SDG: 03D2024004

GC Semi VOA

Prep Batch: 33157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2848-1	FS01	Total/NA	Solid	8015NM Prep	
890-2848-2	FS02	Total/NA	Solid	8015NM Prep	
890-2848-3	FS03	Total/NA	Solid	8015NM Prep	
890-2848-4	FS04	Total/NA	Solid	8015NM Prep	
890-2848-5	SW01	Total/NA	Solid	8015NM Prep	
890-2848-6	SW02	Total/NA	Solid	8015NM Prep	
MB 880-33157/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-33157/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-33157/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-18525-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-18525-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 33314

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2848-1	FS01	Total/NA	Solid	8015 NM	
890-2848-2	FS02	Total/NA	Solid	8015 NM	
890-2848-3	FS03	Total/NA	Solid	8015 NM	
890-2848-4	FS04	Total/NA	Solid	8015 NM	
890-2848-5	SW01	Total/NA	Solid	8015 NM	
890-2848-6	SW02	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 33190

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2848-1	FS01	Soluble	Solid	DI Leach	
890-2848-2	FS02	Soluble	Solid	DI Leach	
890-2848-3	FS03	Soluble	Solid	DI Leach	
890-2848-4	FS04	Soluble	Solid	DI Leach	
890-2848-5	SW01	Soluble	Solid	DI Leach	
890-2848-6	SW02	Soluble	Solid	DI Leach	
MB 880-33190/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-33190/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-33190/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2848-1 MS	FS01	Soluble	Solid	DI Leach	
890-2848-1 MSD	FS01	Soluble	Solid	DI Leach	

Analysis Batch: 33232

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2848-1	FS01	Soluble	Solid	300.0	33190
890-2848-2	FS02	Soluble	Solid	300.0	33190
890-2848-3	FS03	Soluble	Solid	300.0	33190
890-2848-4	FS04	Soluble	Solid	300.0	33190
890-2848-5	SW01	Soluble	Solid	300.0	33190
890-2848-6	SW02	Soluble	Solid	300.0	33190
MB 880-33190/1-A	Method Blank	Soluble	Solid	300.0	33190
LCS 880-33190/2-A	Lab Control Sample	Soluble	Solid	300.0	33190
LCSD 880-33190/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	33190
890-2848-1 MS	FS01	Soluble	Solid	300.0	33190
890-2848-1 MSD	FS01	Soluble	Solid	300.0	33190

Lab Chronicle

Client: Ensolum
Project/Site: Red Bull 35 Federal 001

Job ID: 890-2848-1
SDG: 03D2024004

Client Sample ID: FS01

Lab Sample ID: 890-2848-1
Matrix: Solid
Date Collected: 08/25/22 09:00
Date Received: 08/25/22 15:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	33069	08/27/22 14:13	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33162	08/29/22 18:32	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33331	08/30/22 10:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			33314	08/30/22 09:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	33157	08/29/22 08:34	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33143	08/29/22 14:46	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	33190	08/29/22 10:38	SMC	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	33232	08/29/22 12:34	CH	EET MID

Client Sample ID: FS02

Lab Sample ID: 890-2848-2
Matrix: Solid
Date Collected: 08/25/22 09:10
Date Received: 08/25/22 15:19

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	33069	08/27/22 14:13	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33162	08/29/22 18:53	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33331	08/30/22 10:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			33314	08/30/22 09:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	33157	08/29/22 08:34	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33143	08/29/22 14:03	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	33190	08/29/22 10:38	SMC	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	33232	08/29/22 12:58	CH	EET MID

Client Sample ID: FS03

Lab Sample ID: 890-2848-3
Matrix: Solid
Date Collected: 08/25/22 09:20
Date Received: 08/25/22 15:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	33069	08/27/22 14:13	MR	EET MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	33162	08/29/22 19:54	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33331	08/30/22 10:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			33314	08/30/22 09:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	33157	08/29/22 08:34	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33143	08/29/22 12:58	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	33190	08/29/22 10:38	SMC	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	33232	08/29/22 13:06	CH	EET MID

Client Sample ID: FS04

Lab Sample ID: 890-2848-4
Matrix: Solid
Date Collected: 08/25/22 09:30
Date Received: 08/25/22 15:19

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	33069	08/27/22 14:13	MR	EET MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	33162	08/29/22 20:14	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33331	08/30/22 10:24	SM	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: Red Bull 35 Federal 001

Job ID: 890-2848-1
SDG: 03D2024004

Client Sample ID: FS04

Date Collected: 08/25/22 09:30
Date Received: 08/25/22 15:19

Lab Sample ID: 890-2848-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			33314	08/30/22 09:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	33157	08/29/22 08:34	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33143	08/29/22 13:41	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	33190	08/29/22 10:38	SMC	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	33232	08/29/22 13:14	CH	EET MID

Client Sample ID: SW01

Date Collected: 08/25/22 09:40
Date Received: 08/25/22 15:19

Lab Sample ID: 890-2848-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	33069	08/27/22 14:13	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33162	08/29/22 19:13	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33331	08/30/22 10:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			33314	08/30/22 09:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	33157	08/29/22 08:34	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33143	08/29/22 14:25	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	33190	08/29/22 10:38	SMC	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	33232	08/29/22 13:21	CH	EET MID

Client Sample ID: SW02

Date Collected: 08/25/22 09:50
Date Received: 08/25/22 15:19

Lab Sample ID: 890-2848-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	33069	08/27/22 14:13	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33162	08/29/22 19:34	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33331	08/30/22 10:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			33314	08/30/22 09:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	33157	08/29/22 08:34	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33143	08/29/22 13:19	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	33190	08/29/22 10:38	SMC	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	33232	08/29/22 13:45	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: Red Bull 35 Federal 001

Job ID: 890-2848-1
SDG: 03D2024004

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

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

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

Method Summary

Client: Ensolum
Project/Site: Red Bull 35 Federal 001

Job ID: 890-2848-1
SDG: 03D2024004

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

Protocol References:

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: Red Bull 35 Federal 001

Job ID: 890-2848-1
SDG: 03D2024004

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2848-1	FS01	Solid	08/25/22 09:00	08/25/22 15:19	0.5
890-2848-2	FS02	Solid	08/25/22 09:10	08/25/22 15:19	2
890-2848-3	FS03	Solid	08/25/22 09:20	08/25/22 15:19	1
890-2848-4	FS04	Solid	08/25/22 09:30	08/25/22 15:19	1.5
890-2848-5	SW01	Solid	08/25/22 09:40	08/25/22 15:19	0 - 2
890-2848-6	SW02	Solid	08/25/22 09:50	08/25/22 15:19	0 - 1.5

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 Jennigns
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

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:	Red Bull 35 Federal 001	Turn Around	
Project Number:	03D2024004	☐ Routine ☑ Rush	
Project Location:	Lea County, NM	Due Date:	24 Hours
Sampler's Name:	Gilbert Moreno	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:	TM-007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	1.6
Total Containers:		Corrected Temperature:	1.4

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)
FS01	S	8/25/2022	9:00	0.5'	comp	1		X	X	X
FS02	S	8/25/2022	9:10	2'	comp	1		X	X	X
FS03	S	8/25/2022	9:20	1'	comp	1		X	X	X
FS04	S	8/25/2022	9:30	1.5'	comp	1		X	X	X
SW01	S	8/25/2022	9:40	0-2'	comp	1		X	X	X
SW02	S	8/25/2022	9:50	0-1.5'	comp	1		X	X	X

890-2848 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
NAPP2126444907

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		8/25/22 1519	4		
3			6		
5					

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2848-1
SDG Number: 03D2024004

Login Number: 2848
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.	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: 890-2848-1
SDG Number: 03D2024004

Login Number: 2848
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 08/29/22 09:19 AM

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

ENSOLUM

APPENDIX D

Final C-141

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

State of New Mexico
Energy Minerals and Natural Resources Department

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

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

Incident ID	NAPP2126444907
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	Conoco Phillips``	OGRID	
Contact Name	Kelsy Waggaman	Contact Telephone	(432) 688-9057
Contact email	Kelsy.Waggaman@ConocoPhillips.com	Incident # *(assigned by OCD)*	NAPP2126444907
Contact mailing address	600 West Illinois Avenue, Midland, Texas 79701		

Location of Release Source

Latitude 32.08518 Longitude -103.5452

(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Red Bull 35 Federal 001	Site Type	Tank Battery
Date Release Discovered	September 3, 2021	API# *(if applicable)*	30-025-34015

Unit Letter	Section	Township	Range	County
K	35	25S	33E	Lea

Surface Owner: ☐ State ☐ Federal ☐ Tribal ■ Private (*Name:* Intrepid Potash - New Mexico)

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

Cause of Release

The release was caused by a release from the flare.
No fluid was recovered due to the fire burning off and standing fluid. The release resulted in a flare fire on the pad.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2126444907
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? The release involved a fire.

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
Immediate notice was given by Kelsy Waggaman via e-mail September 3, 2021 at 6:40 pm to ocd.enviro@state.nm.us.

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: Brittany N. Esparza Title: HSE Administrative Assistant

Signature: Brittany Esparza Date: 9/17/2021

email: besparza@concho.com Telephone: (432) 221-0398

OCD Only

Received by: Ramona Marcus Date: 9/21/2021

NAPP2126444907

L48 Spill Volume Estimate Form

Facility Name and Number:	[redacted] ederal 1H
Asset Area:	DBEN
Release Discovery Date & Time:	9/3/2021 6:00AM
Release Type:	Oil
Provide any known details about the event:	Vessel swamped out causing fluid to go out flare

Spill Calculation - On Pad Surface Pool Spill

Convert Irregular shape into a series of rectangles	Length (ft.)	Width (ft.)	Deepest point in each of the areas (in.)	No. of boundaries of "shore" in each area	Estimated *Pool* Area (sq. ft.)	Estimated Average Depth (ft.)	Estimated volume of each pool area (bbl.)	Penetration allowance (ft.)	Total Estimated Volume of Spill (bbl.)	Percentage of Oil if Spilled Fluid is a Mixture	Total Estimated Volume of Spilled Oil (bbl.)	Total Estimated Volume of Spilled Liquid other than Oil (bbl.)
Rectangle A	10.0	10.0	0.10	4	100.000	0.002	0.037	0.000	0.037	[redacted]		
Rectangle B					0.000	#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!			
Rectangle F					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!			
Rectangle G					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!			
Rectangle H					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!			
Rectangle I					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!			
Rectangle J					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!			
								Total Volume Release:	0.037			

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 50656
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rmarcus	None	9/21/2021

Incident ID	NAPP2126444907
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?	>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	NAPP2126444907
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: ___Jacob Laird_____ Title: __Senior Environmental Engineer_____

Signature: Jacob Laird Date: __07/20/2023_____

email: __Jacob.Laird@conocophillips.com_____ Telephone: ___575-703-5482_____

OCD Only

Received by: __Shelly Wells_____ Date: _7/20/2023_____

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2126444907
District RP	
Facility ID	
Application ID	

Closure

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

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

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

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

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

☒ Description of remediation activities

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

Printed Name: _Jacob Laird_____ Title: _Environmental Engineer_____

Signature: _Jacob Laird_____ Date: _____07/20/2023_____

email: Jacob.Laird@conocophillips.com_____ Telephone: _575-703-5482_____

OCD Only

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

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

Closure Approved by: Nelson Velez Date: 10/13/2023

Printed Name: Nelson Velez Title: Environmental Specialist – Adv

Remediation has met 19.15.29 NMAC requirements. Soil impacts exceeding the reclamation standards have been left in place and are required to meet 19.15.29.13D (1) NMAC once the site is no longer reasonably needed for production or subsequent drilling operations.

Operator did not meet 19.15.29.12D (1a) NMAC. Forbearance previously given to 3rd party on 09/27/2023 (App ID 236326). Release resolved.

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 242570

CONDITIONS

Operator:	OGRID:
COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	229137
	Action Number: 242570
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Remediation has met 19.15.29 NMAC requirements. Soil impacts exceeding the reclamation standards have been left in place and are required to meet 19.15.29.13D (1) NMAC once the site is no longer reasonably needed for production or subsequent drilling operations. Operator did not meet 19.15.29.12D (1a) NMAC. Forbearance previously given to 3rd party on 09/27/2023 (App ID 236326). Release resolved.	10/13/2023