ENSOLUM

September 26, 2022

District 1
New Mexico Oil Conservation Division
1625 North French Drive
Hobbs, New Mexico 88240

Re: Closure Request
King Tut Federal 004H
Incident Number NAPP2222449592
Lea County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of COG Operating, LLC (COG), has prepared this Closure Request to document site assessment, excavation, and soil sampling activities performed at the King Tut Federal 004 (Site). The purpose of the site assessment, excavation, and soil sampling activities was to address impacts to soil resulting from a crude oil and produced water release at the Site. Based on the excavation activities and laboratory analytical results from the soil sampling events, COG is submitting this Closure Request, describing remediation that has occurred and requesting closure for Incident Number NAPP2222449592.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit B, Section 30, Township 24 South, Range 32 East, in Lea County, New Mexico (32.19417° N, 103.7114° W) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM).

On July 31, 2022, a hole in a flowline resulted in the release of approximately 0.002 barrels (bbls) of crude oil and 0.013 bbls of produced water onto the surrounding pasture area. COG reported the release to the New Mexico Oil Conservation Division (NMOCD) and submitted a Release Notification Form C-141 (Form C-141) on August 12, 2022. The release was assigned Incident Number NAPP2222449592.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized according to Table 1, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Results from the characterization desktop review are presented on page 3 of the Form C-141, Site Assessment/Characterization. Potential site receptors are identified on Figure 1.

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. On September 15, 2022, borehole BH01 (New Mexico Office of the State Engineer (NMOSE) file number C-4665) was advanced to a depth of 120 feet bgs via air rotary drill rig. The borehole was located approximately 500 feet northwest of the Site and is depicted on Figure 1. A field geologist logged and described soils continuously. The borehole lithologic/soil

sampling log is included in Appendix A. The borehole was left open for over 72 hours to allow for potential slow infill of groundwater. After the 72-hour waiting period,groundwater was not observed and it was confirmed that groundwater beneath the Site is greater than 120 feet bgs. The borehole was properly abandoned using hydrated bentonite chips. All wells used for depth to groundwater determination are depicted on Figure 1 and the associated well records are included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is a dry wash, located approximately 3.6 miles northeast of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). Site receptors are identified on Figure 1.

Based on the results of the Site Characterization, the following NMOCD Table 1 Closure Criteria (Closure Criteria) apply:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH)-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg
- TPH: 2,500 mg/kg
- Chloride: 20,000 mg/kg

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

SITE ASSESSMENT ACTIVITIES AND ANALYTICAL RESULTS

On August 17, 2022, site assessment activities were conducted to evaluate the release extent based on information provided on the Form C-141 and visual observations. Five preliminary assessment soil samples (SS01 through SS05) were collected within and around the release extent at a depth of 0.5 feet bgs, to assess the lateral extent of the release. The preliminary soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. The visible release extent and preliminary soil sample locations were mapped utilizing a handheld Global Positioning System (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 at or below 4 degrees Celsius (°C) under strict chain-of-custody procedures to Eurofins Laboratories (Eurofins) in Carlsbad, New Mexico, for analysis of the following chemicals of conern (COCs): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH- GRO, TPH- DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

Laboratory analytical results for preliminary soil sample SS01 indicated the TPH concentration exceeded the Site Closure Criteria and reclamation requirement. Laboratory analytical results for preliminary soil samples SS02 through SS05 indicated all COC concentrations were compliant with the Site Closure Criteria and compliant with the reclamation requirement. Based on visible staining in the release area

and laboratory analytical results for preliminary soil sample SS01, excavation activities appeared warranted.

EXCAVATION SOIL SAMPLING ACTIVITIES AND ANALYTICAL RESULTS

On August 23, 2022, Ensolum personnel were on site to complete excavation activities. Impacted soil was excavated from the release area as indicated by visible staining and laboratory analytical results for preliminary soil sample SS01. Excavation activities were performed using a hand shovel and contaminated soil was removed from Site. To direct excavation activities, soil was screened for VOCs and chloride. The excavation was completed to a depth of 1.5 feet bgs. Photographic documentation of the excavation activities is included in Appendix B.

Following removal of the impacted soil, 5-point composite soil samples were collected every 200 square feet from the floor of the excavation. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil sample FS01 was collected from the floor of the excavation at a depth of 1.5 feet bgs. Due to the shallow depth of the excavation, soil from the sidewalls was incorporated into the floor sample. The excavation soil sample was handled and analyzed following the same procedures as described above. The excavation extent and excavation soil sample location are presented on Figure 3.

The excavation measured approximately 40 square feet in areal extent. A total of approximately 2 cubic yards of impacted soil was removed during the excavation activities. The impacted soil was transported and properly disposed of at the R360 Facility in Hobbs, New Mexico.

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

CLOSURE REQUEST

Site assessment and excavation activities were conducted at the Site to address the July 31, 2022, crude oil and produced water release. Laboratory analytical results for the excavation soil sample, collected from the final excavation extent, indicated all COC concentrations were compliant with the Site Closure Criteria and reclamation requirement. Based on the soil sample analytical results, no further remediation appears required. COG will backfill the excavation with material purchased locally and recontour the Site to match pre-existing site conditions.

Excavation of impacted soil has mitigated impacts at this Site. COG believes the remedial actions are protective of human health, the environment, and groundwater. As such, COG respectfully requests closure for Incident Number NAPP2222449592. The Final C-141 is included in 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

Gladie Green

Kalei Jennings

Hadlie Green
Staff Geologist

Kalei Jennings
Senior Scientist

cc: Charles Beauvais, COG Operating, LLC
Bureau of Land Management

Appendices:

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

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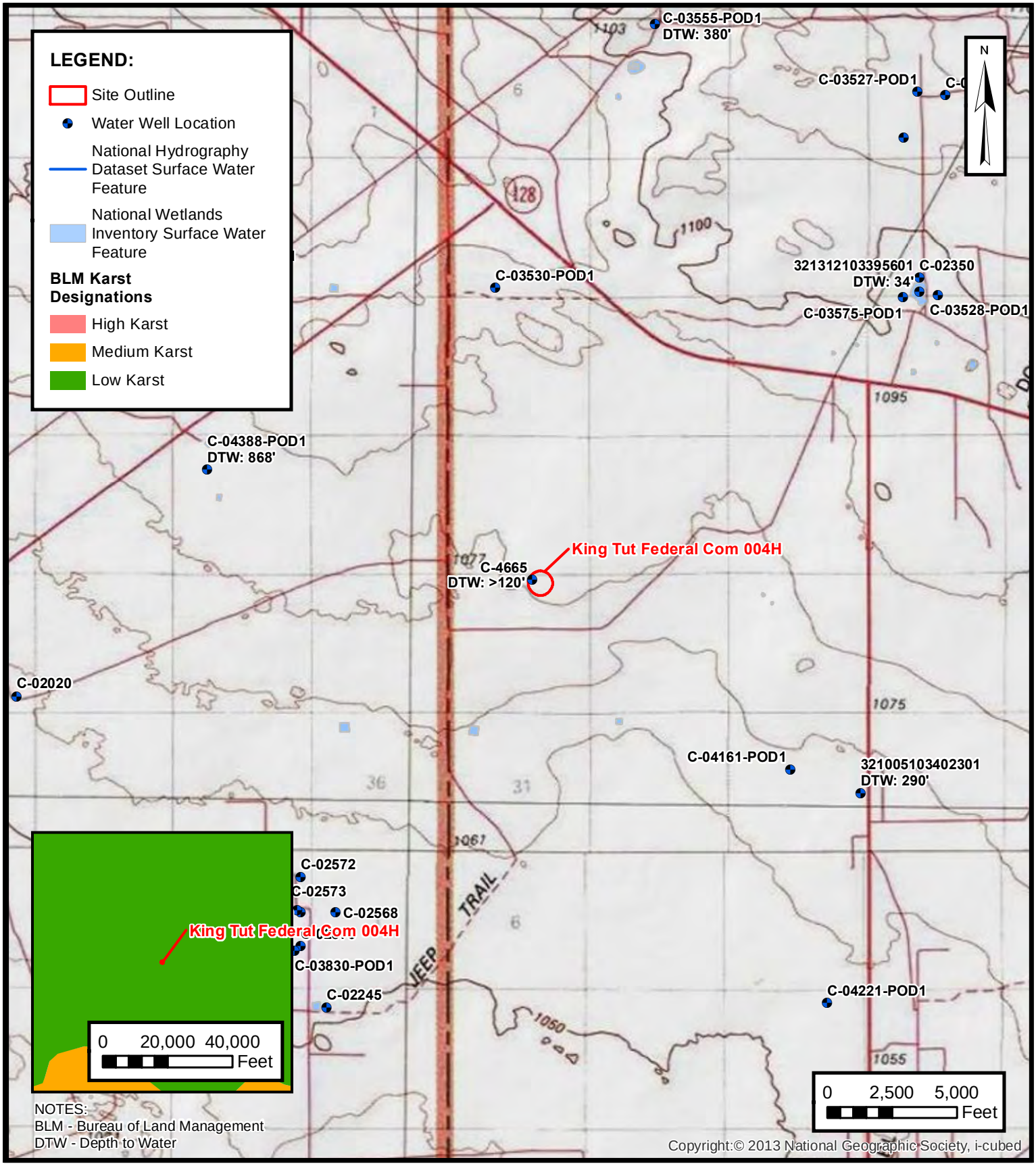
FIGURES



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Environmental, Engineering and Hydrogeologic Consultants

SITE RECEPTOR MAP

COG OPERATING, LLC
KING TUT FEDERAL COM 004H
NAPP2222449592
Unit B Sec 30 T24S R32E
Lea County, New Mexico

FIGURE
1

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PRELIMINARY SOIL SAMPLE LOCATIONS

COG OPERATING, LLC
KING TUT FEDERAL COM 004H
NAPP2222449592
Unit B Sec 30 T24S R32E
Lea County, New Mexico

FIGURE
2

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EXCAVATION SOIL SAMPLE LOCATIONS

COG OPERATING, LLC
KING TUT FEDERAL COM 004H
NAPP2222449592
Unit B Sec 30 T24S R32E
Lea County, New Mexico

FIGURE

3

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TABLES

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
King Tut federal 004H
COG Operating, LLC
Lea County, New Mexico

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			**10**	**50**	**NE**	**NE**	**NE**	**1,000**	**2,500**	**10,000**
Preliminary Assessment Soil Samples										
SS01	08/17/2022	0.5	<0.201	25.4	1,210	4,750	<250	**5,960**	**5,960**	**5,450**
SS02	08/17/2022	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	194
SS03	08/17/2022	0.5	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	510
SS04	08/17/2022	0.5	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	76.4
SS05	08/17/2022	0.5	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	318
Excavation Soil Samples										
FS01	08/23/2022	1.5	<0.00198	<0.00397	<49.9	<49.9	<49.9	<49.9	<49.9	15.9

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 1 Closure Criteria or reclamation standard where applicable.*

Grey *text represents samples that have been excavated*

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APPENDIX A

Referenced Well Records

ENSOLUM

Client: CONOCO PHILLIPS
Project Name: KING TUT FEDERAL 003H
Project Location: LEA COUNTY, NM
Project Manager: KALEI JENNINGS

BORING LOG NUMBER
BH01
Project No. 03D2024082

Date Sampled: 09/15/2022
Drilled by: WTWWS
Driller: RUSSELL SOUTHERLAND
Logged by: HADLIE GREEN
Sampler: HADLIE GREEN

Ground Surface Elevation: —
Top of Casing Elevation: —
North Coordinate: —
West Coordinate: —
Bench Mark Elevation: —
At Completion
At Well Stabilization

Borehole Diameter: 6"
Casing Diameter: —
Well Materials: —
Surface Completion: —
Boring Method: AIR ROTARY

DEPTH (ft)	SAMPLE INTERVAL	SAMPLE ID	RECOVERY (%)	FID/PID READING (ppm)	POTENTIOMETRIC SURFACE	GEOLOGIC LOG SYMBOL	GEOLOGIC DESCRIPTION	BORING / WELL COMPLETION (GRAPHIC DEPICTION)
							pg. 1 of 2	
0						0' CCHE	CALICHE, light tan, fine to medium grain, up to 1" limestone clasts, slightly moist, no stain/odor.	
						10' SM	SILTY SAND, pinkish red, fine grain, 1-2 cm limestone clasts, well sorted, moderate grade, slightly consolidated, no stain/odor.	
20'								
40'						SM	SAA, reddish brown, trace limestone clasts (1-2 cm).	
60'						SM	SAA, abundant subrounded mud clasts up to 1".	
80'								
						SM	90': SAA, some green mud clasts (1-3 mm), slightly consolidated.	
100'								

ENSOLUM

Client: CONOCO PHILLIPS
Project Name: KING TUT FEDERAL 003H
Project Location: LEA COUNTY, NM
Project Manager: KALEI JENNINGS

BORING LOG NUMBER
BH01
Project No. 03D2024082

Date Sampled: 09/15/2022
Drilled by: WTWWS
Driller: RUSSELL SOUTHERLAND
Logged by: HADLIE GREEN
Sampler: HADLIE GREEN

Ground Surface Elevation:
Top of Casing Elevation:
North Coordinate:
West Coordinate:
Bench Mark Elevation:
At Completion
At Well Stabilization

Borehole Diameter: 6"
Casing Diameter: -
Well Materials:
Surface Completion: -
Boring Method: AIR ROTARY

DEPTH (ft)	SAMPLE INTERVAL	SAMPLE ID	RECOVERY (%)	FID/PID READING (ppm)	POTENTIOMETRIC SURFACE	GEOLOGIC LOG SYMBOL	GEOLOGIC DESCRIPTION	BORING / WELL COMPLETION (GRAPHIC DEPICTION)
							pg. 2 of 2	
100'						SM	SILTY SAND, Reddish brown, fine grain, less mud clasts, No green mud clasts, well sorted, slightly consolidated, no stain / odor.	
120'							TD @ 120 feet bgs	

New Mexico Office of the State Engineer

Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest)						(NAD83 UTM in meters)	
Well Tag	**POD Number**	**Q64**	**Q16**	**Q4**	**Sec**	**Tws**	**Rng**	**X**	**Y**
20E37	C 04536 POD1	1	2	2	33	24S	32E	625019	3561244

Driller License: 1706 **Driller Company:** ELITE DRILLERS CORPORATION

Driller Name: BRYCE WALLACE

Drill Start Date:	06/09/2021	**Drill Finish Date:**	06/10/2021	**Plug Date:**	
Log File Date:	06/21/2021	**PCW Rcv Date:**		**Source:**	Shallow
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	4 GPM
Casing Size:	4.30	**Depth Well:**	500 feet	**Depth Water:**	314 feet

Water Bearing Stratifications:	**Top**	**Bottom**	**Description**
	235	480	Sandstone/Gravel/Conglomerate

Casing Perforations:	**Top**	**Bottom**
	300	500

USGS 321005103402301 24S.32E.33.42241

Lea County, New Mexico
Latitude 32°10'21.6", Longitude 103°40'18.9" NAD83
Land-surface elevation 3,499.00 feet above NGVD29
The depth of the well is 367 feet below land surface.
This well is completed in the Other aquifers (N9999OTHER) national aquifer.
This well is completed in the Chinle Formation (231CHNL) local aquifer.

Output formats

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

Date	Time	Water-level date-time accuracy	Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	Status	Method of measurement	Measuring agency	Source of measurement	Water-level approval status
1959-02-18		D	62610		3185.60	NGVD29	1	Z			A
1959-02-18		D	62611		3187.32	NAVD88	1	Z			A
1959-02-18		D	72019	313.40			1	Z			A
1981-06-12		D	62610		3194.60	NGVD29	1	Z			A
1981-06-12		D	62611		3196.32	NAVD88	1	Z			A
1981-06-12		D	72019	304.40			1	Z			A
1986-03-11		D	62610		3193.79	NGVD29	1	Z			A
1986-03-11		D	62611		3195.51	NAVD88	1	Z			A
1986-03-11		D	72019	305.21			1	Z			A
1991-05-29		D	62610		3211.55	NGVD29	1	Z			A
1991-05-29		D	62611		3213.27	NAVD88	1	Z			A
1991-05-29		D	72019	287.45			1	Z			A
1996-03-14		D	62610		3213.60	NGVD29	1	S			A
1996-03-14		D	62611		3215.32	NAVD88	1	S			A
1996-03-14		D	72019	285.40			1	S			A
2001-02-27		D	62610		3210.32	NGVD29	1	S			A
2001-02-27		D	62611		3212.04	NAVD88	1	S			A
2001-02-27		D	72019	288.68			1	S			A
2013-01-17	16:30 UTC	m	62610		3209.31	NGVD29	1	S			A
2013-01-17	16:30 UTC	m	62611		3211.03	NAVD88	1	S			A
2013-01-17	16:30 UTC	m	72019	289.69			1	S			A

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APPENDIX B

Photographic Log

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Photographic Log
COG Operating, LLC
King Tut Federal 004H
Incident Number NAPP2222449592

Photograph 1 Date: August 17, 2022

Description: Photo of release extent taken during initial site assessment activities.

Photograph 2 Date: August 23, 2022

Description: Photo of scrape completed at the initial release extent.

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APPENDIX C

Laboratory Analytical Reports & Chain of Custody Documentation

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-2786-1
Laboratory Sample Delivery Group: 03D2024084
Client Project/Site: King Tut Fed 004H

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

Attn: Kalei Jennings

JKramer

Authorized for release by:
8/31/2022 2:18:37 PM

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

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

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

Client: Ensolum
Project/Site: King Tut Fed 004H

Laboratory Job ID: 890-2786-1
SDG: 03D2024084

Table of Contents

Eurofins Carlsbad
8/31/2022

Definitions/Glossary

Client: Ensolum Job ID: 890-2786-1
Project/Site: King Tut Fed 004H SDG: 03D2024084

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
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: King Tut Fed 004H

Job ID: 890-2786-1
SDG: 03D2024084

Job ID: 890-2786-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2786-1

Receipt
The samples were received on 8/19/2022 9:18 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.6°C

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-33164 and analytical batch 880-33341 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (LCSD 880-33191/2-A). Evidence of matrix interferences is not obvious.

Method 8021B: Surrogate recovery for the following sample was outside control limits: SS01 (890-2786-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (LCSD 880-33321/2-A). Evidence of matrix interferences is not obvious.

Method 8021B: Surrogate recovery for the following samples were outside control limits: (890-2781-A-1-G MS) and (890-2781-A-1-H MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (890-2781-A-1-I). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: SS05 (890-2786-5). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-33321 and analytical batch 880-33339 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: SS01 (890-2786-1). 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 RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-32713 and analytical batch 880-32730 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
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-32585 and analytical batch 880-33170 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

Case Narrative

Client: Ensolum
Project/Site: King Tut Fed 004H

Job ID: 890-2786-1
SDG: 03D2024084

Job ID: 890-2786-1 (Continued)

Laboratory: Eurofins Carlsbad (Continued)

Client Sample Results

Client: Ensolum
Project/Site: King Tut Fed 004H

Job ID: 890-2786-1
SDG: 03D2024084

Client Sample ID: SS01

Date Collected: 08/17/22 10:35
Date Received: 08/19/22 09:18

Lab Sample ID: 890-2786-1
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.201	U	0.201		mg/Kg		08/29/22 10:39	08/31/22 00:39	100
Toluene	<0.201	U	0.201		mg/Kg		08/29/22 10:39	08/31/22 00:39	100
Ethylbenzene	**2.77**		0.201		mg/Kg		08/29/22 10:39	08/31/22 00:39	100
m-Xylene & p-Xylene	**13.2**		0.202		mg/Kg		08/29/22 10:54	08/31/22 12:46	50
o-Xylene	**9.40**		0.101		mg/Kg		08/29/22 10:54	08/31/22 12:46	50
Xylenes, Total	**14.4**		0.402		mg/Kg		08/29/22 10:39	08/31/22 00:39	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*208*	*S1+*	*70 - 130*	*08/29/22 10:39*	*08/31/22 00:39*	*100*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*	*08/29/22 10:39*	*08/31/22 00:39*	*100*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**25.4**		0.202		mg/Kg			08/31/22 11:26	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**5960**		250		mg/Kg			08/24/22 11:38	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	**1210**	***1**	250		mg/Kg		08/22/22 16:29	08/23/22 21:46	5
Diesel Range Organics (Over C10-C28)	**4750**		250		mg/Kg		08/22/22 16:29	08/23/22 21:46	5
Oil Range Organics (Over C28-C36)	<250	U	250		mg/Kg		08/22/22 16:29	08/23/22 21:46	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*126*		*70 - 130*	*08/22/22 16:29*	*08/23/22 21:46*	*5*
o-Terphenyl	*150*	*S1+*	*70 - 130*	*08/22/22 16:29*	*08/23/22 21:46*	*5*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5450**		50.2		mg/Kg			08/29/22 11:06	10

Client Sample ID: SS02

Date Collected: 08/17/22 10:40
Date Received: 08/19/22 09:18

Lab Sample ID: 890-2786-2
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		08/29/22 10:39	08/31/22 04:05	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/29/22 10:39	08/31/22 04:05	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/29/22 10:39	08/31/22 04:05	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/29/22 10:39	08/31/22 04:05	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/29/22 10:39	08/31/22 04:05	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/29/22 10:39	08/31/22 04:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*08/29/22 10:39*	*08/31/22 04:05*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*08/29/22 10:39*	*08/31/22 04:05*	*1*

Client Sample Results

Client: Ensolum
Project/Site: King Tut Fed 004H

Job ID: 890-2786-1
SDG: 03D2024084

Client Sample ID: SS02

Date Collected: 08/17/22 10:40
Date Received: 08/19/22 09:18

Lab Sample ID: 890-2786-2
Matrix: Solid

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			08/31/22 11:26	1

Method: 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			08/24/22 11:38	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		08/22/22 16:29	08/23/22 17:11	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/22/22 16:29	08/23/22 17:11	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/22/22 16:29	08/23/22 17:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*08/22/22 16:29*	*08/23/22 17:11*	*1*
o-Terphenyl	*97*		*70 - 130*	*08/22/22 16:29*	*08/23/22 17:11*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**194**		4.99		mg/Kg			08/29/22 11:15	1

Client Sample ID: SS03

Date Collected: 08/17/22 10:45
Date Received: 08/19/22 09:18

Lab Sample ID: 890-2786-3
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		08/29/22 09:09	08/31/22 00:13	1
Toluene	<0.00198	U	0.00198		mg/Kg		08/29/22 09:09	08/31/22 00:13	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		08/29/22 09:09	08/31/22 00:13	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		08/29/22 09:09	08/31/22 00:13	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		08/29/22 09:09	08/31/22 00:13	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		08/29/22 09:09	08/31/22 00:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*08/29/22 09:09*	*08/31/22 00:13*	*1*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*	*08/29/22 09:09*	*08/31/22 00:13*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			08/31/22 11:26	1

Method: 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			08/24/22 11:38	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		08/22/22 16:29	08/23/22 18:15	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/22/22 16:29	08/23/22 18:15	1

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Client Sample Results

Client: Ensolum
Project/Site: King Tut Fed 004H

Job ID: 890-2786-1
SDG: 03D2024084

Client Sample ID: SS03

Date Collected: 08/17/22 10:45
Date Received: 08/19/22 09:18

Lab Sample ID: 890-2786-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 16:29	08/23/22 18:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*08/22/22 16:29*	*08/23/22 18:15*	*1*
o-Terphenyl	*90*		*70 - 130*	*08/22/22 16:29*	*08/23/22 18:15*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**510**	**F1**	5.01		mg/Kg			08/29/22 11:24	1

Client Sample ID: SS04

Date Collected: 08/17/22 10:50
Date Received: 08/19/22 09:18

Lab Sample ID: 890-2786-4

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		08/29/22 09:09	08/31/22 00:34	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/29/22 09:09	08/31/22 00:34	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/29/22 09:09	08/31/22 00:34	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		08/29/22 09:09	08/31/22 00:34	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/29/22 09:09	08/31/22 00:34	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		08/29/22 09:09	08/31/22 00:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*08/29/22 09:09*	*08/31/22 00:34*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*08/29/22 09:09*	*08/31/22 00:34*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			08/31/22 11:26	1

Method: 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			08/24/22 11:38	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		08/22/22 16:29	08/23/22 18:36	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/22/22 16:29	08/23/22 18:36	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/22/22 16:29	08/23/22 18:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*08/22/22 16:29*	*08/23/22 18:36*	*1*
o-Terphenyl	*94*		*70 - 130*	*08/22/22 16:29*	*08/23/22 18:36*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**76.4**		5.04		mg/Kg			08/29/22 11:52	1

Client Sample Results

Client: Ensolum
Project/Site: King Tut Fed 004H

Job ID: 890-2786-1
SDG: 03D2024084

Client Sample ID: SS05

Date Collected: 08/17/22 10:55
Date Received: 08/19/22 09:18

Lab Sample ID: 890-2786-5

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		08/30/22 09:35	08/31/22 02:32	1
Toluene	<0.00201	U	0.00201		mg/Kg		08/30/22 09:35	08/31/22 02:32	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		08/30/22 09:35	08/31/22 02:32	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		08/30/22 09:35	08/31/22 02:32	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		08/30/22 09:35	08/31/22 02:32	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		08/30/22 09:35	08/31/22 02:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*168*	*S1+*	*70 - 130*	*08/30/22 09:35*	*08/31/22 02:32*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*08/30/22 09:35*	*08/31/22 02:32*	*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			08/31/22 11:26	1

Method: 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			08/24/22 11:38	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		08/22/22 16:29	08/23/22 18:57	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/22/22 16:29	08/23/22 18:57	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 16:29	08/23/22 18:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*08/22/22 16:29*	*08/23/22 18:57*	*1*
o-Terphenyl	*95*		*70 - 130*	*08/22/22 16:29*	*08/23/22 18:57*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**318**		5.05		mg/Kg			08/29/22 12:01	1

Surrogate Summary

Client: Ensolum
Project/Site: King Tut Fed 004H

Job ID: 890-2786-1
SDG: 03D2024084

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)
820-5453-A-1-B MS	Matrix Spike	95	107
820-5453-A-1-C MSD	Matrix Spike Duplicate	91	105
880-18562-A-5-H MS	Matrix Spike	97	105
880-18562-A-5-I MSD	Matrix Spike Duplicate	100	104
890-2764-A-11-I MS	Matrix Spike	114	110
890-2764-A-11-J MSD	Matrix Spike Duplicate	127	98
890-2781-A-1-G MS	Matrix Spike	145 S1+	107
890-2781-A-1-H MSD	Matrix Spike Duplicate	150 S1+	100
890-2786-1	SS01	208 S1+	88
890-2786-2	SS02	115	100
890-2786-3	SS03	92	106
890-2786-4	SS04	95	107
890-2786-5	SS05	168 S1+	104
LCS 880-33164/1-A	Lab Control Sample	97	102
LCS 880-33191/1-A	Lab Control Sample	112	105
LCS 880-33192/1-A	Lab Control Sample	94	102
LCS 880-33321/1-A	Lab Control Sample	112	96
LCSD 880-33164/2-A	Lab Control Sample Dup	96	101
LCSD 880-33191/2-A	Lab Control Sample Dup	141 S1+	106
LCSD 880-33192/2-A	Lab Control Sample Dup	96	99
LCSD 880-33321/2-A	Lab Control Sample Dup	142 S1+	105
MB 880-33164/5-A	Method Blank	80	114
MB 880-33191/5-A	Method Blank	99	90
MB 880-33192/5-A	Method Blank	79	119
MB 880-33298/8	Method Blank	105	92
MB 880-33321/5-A	Method Blank	99	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)
890-2786-1	SS01	126	150 S1+
890-2786-2	SS02	109	97
890-2786-2 MS	SS02	96	74
890-2786-2 MSD	SS02	89	74
890-2786-3	SS03	98	90
890-2786-4	SS04	105	94
890-2786-5	SS05	103	95
LCS 880-32713/2-A	Lab Control Sample	516 S1+	484 S1+
LCSD 880-32713/3-A	Lab Control Sample Dup	548 S1+	524 S1+
MB 880-32713/1-A	Method Blank	98	94

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: King Tut Fed 004H

Job ID: 890-2786-1
SDG: 03D2024084

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-33164/5-A
Matrix: Solid
Analysis Batch: 33341

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 33164

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/29/22 09:09	08/30/22 16:07	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/29/22 09:09	08/30/22 16:07	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/29/22 09:09	08/30/22 16:07	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/29/22 09:09	08/30/22 16:07	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/29/22 09:09	08/30/22 16:07	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/29/22 09:09	08/30/22 16:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*80*		*70 - 130*	*08/29/22 09:09*	*08/30/22 16:07*	*1*
1,4-Difluorobenzene (Surr)	*114*		*70 - 130*	*08/29/22 09:09*	*08/30/22 16:07*	*1*

Lab Sample ID: LCS 880-33164/1-A
Matrix: Solid
Analysis Batch: 33341

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 33164

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1090		mg/Kg		109	70 - 130		
Toluene			0.100	0.1054		mg/Kg		105	70 - 130		
Ethylbenzene			0.100	0.1039		mg/Kg		104	70 - 130		
m-Xylene & p-Xylene			0.200	0.1896		mg/Kg		95	70 - 130		
o-Xylene			0.100	0.1013		mg/Kg		101	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: LCSD 880-33164/2-A
Matrix: Solid
Analysis Batch: 33341

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 33164

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1074		mg/Kg		107	70 - 130	2	35
Toluene			0.100	0.1076		mg/Kg		108	70 - 130	2	35
Ethylbenzene			0.100	0.1062		mg/Kg		106	70 - 130	2	35
m-Xylene & p-Xylene			0.200	0.1966		mg/Kg		98	70 - 130	4	35
o-Xylene			0.100	0.1034		mg/Kg		103	70 - 130	2	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: 820-5453-A-1-B MS
Matrix: Solid
Analysis Batch: 33341

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 33164

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00201	U F1	0.0998	0.07713		mg/Kg		77	70 - 130		
Toluene	<0.00201	U F1	0.0998	0.06748	F1	mg/Kg		68	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: King Tut Fed 004H

Job ID: 890-2786-1
SDG: 03D2024084

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

Lab Sample ID: 820-5453-A-1-B MS | **Client Sample ID: Matrix Spike**
Matrix: Solid | **Prep Type: Total/NA**
Analysis Batch: 33341 | **Prep Batch: 33164**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U F1	0.0998	0.06034	F1	mg/Kg		60	70 - 130
m-Xylene & p-Xylene	<0.00402	U F1	0.200	0.1040	F1	mg/Kg		52	70 - 130
o-Xylene	<0.00201	U F1	0.0998	0.05150	F1	mg/Kg		52	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*

Lab Sample ID: 820-5453-A-1-C MSD | **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid | **Prep Type: Total/NA**
Analysis Batch: 33341 | **Prep Batch: 33164**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U F1	0.0994	0.06411	F1	mg/Kg		64	70 - 130	18	35
Toluene	<0.00201	U F1	0.0994	0.05516	F1	mg/Kg		55	70 - 130	20	35
Ethylbenzene	<0.00201	U F1	0.0994	0.04758	F1	mg/Kg		48	70 - 130	24	35
m-Xylene & p-Xylene	<0.00402	U F1	0.199	0.07968	F1	mg/Kg		40	70 - 130	26	35
o-Xylene	<0.00201	U F1	0.0994	0.03957	F1	mg/Kg		40	70 - 130	26	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: MB 880-33191/5-A | **Client Sample ID: Method Blank**
Matrix: Solid | **Prep Type: Total/NA**
Analysis Batch: 33298 | **Prep Batch: 33191**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		08/29/22 10:39	08/30/22 21:13	1
Toluene	<0.00200	U	0.00200	mg/Kg		08/29/22 10:39	08/30/22 21:13	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		08/29/22 10:39	08/30/22 21:13	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		08/29/22 10:39	08/30/22 21:13	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		08/29/22 10:39	08/30/22 21:13	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		08/29/22 10:39	08/30/22 21:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*08/29/22 10:39*	*08/30/22 21:13*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*08/29/22 10:39*	*08/30/22 21:13*	*1*

Lab Sample ID: LCS 880-33191/1-A | **Client Sample ID: Lab Control Sample**
Matrix: Solid | **Prep Type: Total/NA**
Analysis Batch: 33298 | **Prep Batch: 33191**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09002		mg/Kg		90	70 - 130
Toluene	0.100	0.08504		mg/Kg		85	70 - 130
Ethylbenzene	0.100	0.08647		mg/Kg		86	70 - 130
m-Xylene & p-Xylene	0.200	0.1779		mg/Kg		89	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: King Tut Fed 004H

Job ID: 890-2786-1
SDG: 03D2024084

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

Lab Sample ID: LCS 880-33191/1-A
Matrix: Solid
Analysis Batch: 33298

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 33191

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
o-Xylene			0.100	0.1038		mg/Kg		104	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: LCSD 880-33191/2-A
Matrix: Solid
Analysis Batch: 33298

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 33191

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.08989		mg/Kg		90	70 - 130	0	35
Toluene			0.100	0.08602		mg/Kg		86	70 - 130	1	35
Ethylbenzene			0.100	0.1034		mg/Kg		103	70 - 130	18	35
m-Xylene & p-Xylene			0.200	0.2174		mg/Kg		109	70 - 130	20	35
o-Xylene			0.100	0.1265		mg/Kg		127	70 - 130	20	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*141*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

Lab Sample ID: 890-2764-A-11-I MS
Matrix: Solid
Analysis Batch: 33298

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 33191

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U	0.0998	0.09925		mg/Kg		99	70 - 130		
Toluene	<0.00199	U	0.0998	0.09013		mg/Kg		90	70 - 130		
Ethylbenzene	<0.00199	U	0.0998	0.09094		mg/Kg		91	70 - 130		
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1848		mg/Kg		93	70 - 130		
o-Xylene	<0.00199	U	0.0998	0.1067		mg/Kg		107	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*

Lab Sample ID: 890-2764-A-11-J MSD
Matrix: Solid
Analysis Batch: 33298

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 33191

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	0.08689		mg/Kg		87	70 - 130	13	35
Toluene	<0.00199	U	0.100	0.08830		mg/Kg		88	70 - 130	2	35
Ethylbenzene	<0.00199	U	0.100	0.09731		mg/Kg		97	70 - 130	7	35
m-Xylene & p-Xylene	<0.00398	U	0.201	0.2040		mg/Kg		102	70 - 130	10	35
o-Xylene	<0.00199	U	0.100	0.1185		mg/Kg		118	70 - 130	11	35

QC Sample Results

Client: Ensolum
Project/Site: King Tut Fed 004H

Job ID: 890-2786-1
SDG: 03D2024084

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

Lab Sample ID: 890-2764-A-11-J MSD
Matrix: Solid
Analysis Batch: 33298

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 33191

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	127		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: MB 880-33192/5-A
Matrix: Solid
Analysis Batch: 33341

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 33192

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/29/22 10:54	08/31/22 03:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/29/22 10:54	08/31/22 03:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/29/22 10:54	08/31/22 03:43	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/29/22 10:54	08/31/22 03:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/29/22 10:54	08/31/22 03:43	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/29/22 10:54	08/31/22 03:43	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	79		70 - 130	08/29/22 10:54	08/31/22 03:43	1
1,4-Difluorobenzene (Surr)	119		70 - 130	08/29/22 10:54	08/31/22 03:43	1

Lab Sample ID: LCS 880-33192/1-A
Matrix: Solid
Analysis Batch: 33341

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 33192

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1103		mg/Kg		110	70 - 130		
Toluene			0.100	0.1041		mg/Kg		104	70 - 130		
Ethylbenzene			0.100	0.1013		mg/Kg		101	70 - 130		
m-Xylene & p-Xylene			0.200	0.1859		mg/Kg		93	70 - 130		
o-Xylene			0.100	0.09868		mg/Kg		99	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: LCSD 880-33192/2-A
Matrix: Solid
Analysis Batch: 33341

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 33192

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09862		mg/Kg		99	70 - 130	11	35
Toluene			0.100	0.09930		mg/Kg		99	70 - 130	5	35
Ethylbenzene			0.100	0.09893		mg/Kg		99	70 - 130	2	35
m-Xylene & p-Xylene			0.200	0.1830		mg/Kg		92	70 - 130	2	35
o-Xylene			0.100	0.09822		mg/Kg		98	70 - 130	0	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: King Tut Fed 004H

Job ID: 890-2786-1
SDG: 03D2024084

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

Lab Sample ID: LCSD 880-33192/2-A
Matrix: Solid
Analysis Batch: 33341

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 33192

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

Lab Sample ID: 880-18562-A-5-H MS
Matrix: Solid
Analysis Batch: 33341

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 33192

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.100	0.1031		mg/Kg		103	70 - 130
Toluene	0.00375		0.100	0.1018		mg/Kg		98	70 - 130
Ethylbenzene	<0.00200	U	0.100	0.09357		mg/Kg		93	70 - 130
m-Xylene & p-Xylene	<0.00401	U	0.201	0.1703		mg/Kg		85	70 - 130
o-Xylene	<0.00200	U	0.100	0.09096		mg/Kg		91	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: 880-18562-A-5-I MSD
Matrix: Solid
Analysis Batch: 33341

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 33192

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.0994	0.09438		mg/Kg		95	70 - 130	9	35
Toluene	0.00375		0.0994	0.1001		mg/Kg		97	70 - 130	2	35
Ethylbenzene	<0.00200	U	0.0994	0.09390		mg/Kg		94	70 - 130	0	35
m-Xylene & p-Xylene	<0.00401	U	0.199	0.1716		mg/Kg		86	70 - 130	1	35
o-Xylene	<0.00200	U	0.0994	0.09181		mg/Kg		92	70 - 130	1	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: MB 880-33298/8
Matrix: Solid
Analysis Batch: 33298

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg			08/30/22 10:37	1
Toluene	<0.00200	U	0.00200	mg/Kg			08/30/22 10:37	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg			08/30/22 10:37	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg			08/30/22 10:37	1
o-Xylene	<0.00200	U	0.00200	mg/Kg			08/30/22 10:37	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg			08/30/22 10:37	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130		08/30/22 10:37	1
1,4-Difluorobenzene (Surr)	92		70 - 130		08/30/22 10:37	1

QC Sample Results

Client: Ensolum
Project/Site: King Tut Fed 004H

Job ID: 890-2786-1
SDG: 03D2024084

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

Lab Sample ID: MB 880-33321/5-A
Matrix: Solid
Analysis Batch: 33339

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 33321

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/30/22 09:35	08/30/22 16:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/30/22 09:35	08/30/22 16:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/30/22 09:35	08/30/22 16:41	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/30/22 09:35	08/30/22 16:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/30/22 09:35	08/30/22 16:41	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/30/22 09:35	08/30/22 16:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*08/30/22 09:35*	*08/30/22 16:41*	*1*
1,4-Difluorobenzene (Surr)	*80*		*70 - 130*	*08/30/22 09:35*	*08/30/22 16:41*	*1*

Lab Sample ID: LCS 880-33321/1-A
Matrix: Solid
Analysis Batch: 33339

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 33321

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1010		mg/Kg		101	70 - 130		
Toluene			0.100	0.1112		mg/Kg		111	70 - 130		
Ethylbenzene			0.100	0.1124		mg/Kg		112	70 - 130		
m-Xylene & p-Xylene			0.200	0.2285		mg/Kg		114	70 - 130		
o-Xylene			0.100	0.1224		mg/Kg		122	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*

Lab Sample ID: LCSD 880-33321/2-A
Matrix: Solid
Analysis Batch: 33339

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 33321

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1030		mg/Kg		103	70 - 130	2	35
Toluene			0.100	0.1091		mg/Kg		109	70 - 130	2	35
Ethylbenzene			0.100	0.1054		mg/Kg		105	70 - 130	6	35
m-Xylene & p-Xylene			0.200	0.2167		mg/Kg		108	70 - 130	5	35
o-Xylene			0.100	0.1185		mg/Kg		119	70 - 130	3	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*142*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: 890-2781-A-1-G MS
Matrix: Solid
Analysis Batch: 33339

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 33321

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00201	U F1	0.100	0.1314	F1	mg/Kg		131	70 - 130		
Toluene	<0.00201	U F1	0.100	0.1414	F1	mg/Kg		141	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: King Tut Fed 004H

Job ID: 890-2786-1
SDG: 03D2024084

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

Lab Sample ID: 890-2781-A-1-G MS
Matrix: Solid
Analysis Batch: 33339

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 33321

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U F1	0.100	0.1380	F1	mg/Kg		138	70 - 130
m-Xylene & p-Xylene	<0.00402	U F1	0.200	0.2880	F1	mg/Kg		144	70 - 130
o-Xylene	<0.00201	U F1	0.100	0.1569	F1	mg/Kg		157	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*145*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*

Lab Sample ID: 890-2781-A-1-H MSD
Matrix: Solid
Analysis Batch: 33339

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 33321

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U F1	0.0994	0.1110		mg/Kg		112	70 - 130	17	35
Toluene	<0.00201	U F1	0.0994	0.1191		mg/Kg		120	70 - 130	17	35
Ethylbenzene	<0.00201	U F1	0.0994	0.1184		mg/Kg		119	70 - 130	15	35
m-Xylene & p-Xylene	<0.00402	U F1	0.199	0.2433		mg/Kg		122	70 - 130	17	35
o-Xylene	<0.00201	U F1	0.0994	0.1340	F1	mg/Kg		135	70 - 130	16	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*150*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

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

Lab Sample ID: MB 880-32713/1-A
Matrix: Solid
Analysis Batch: 32730

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 32713

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		08/22/22 16:29	08/23/22 15:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/22/22 16:29	08/23/22 15:45	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/22/22 16:29	08/23/22 15:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*08/22/22 16:29*	*08/23/22 15:45*	*1*
o-Terphenyl	*94*		*70 - 130*	*08/22/22 16:29*	*08/23/22 15:45*	*1*

Lab Sample ID: LCS 880-32713/2-A
Matrix: Solid
Analysis Batch: 32730

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 32713

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10			1000	819.0		mg/Kg		82	70 - 130
Diesel Range Organics (Over C10-C28)			1000	925.9		mg/Kg		93	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: King Tut Fed 004H

Job ID: 890-2786-1
SDG: 03D2024084

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

Lab Sample ID: LCS 880-32713/2-A
Matrix: Solid
Analysis Batch: 32730

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 32713

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	516	S1+	70 - 130
o-Terphenyl	484	S1+	70 - 130

Lab Sample ID: LCSD 880-32713/3-A
Matrix: Solid
Analysis Batch: 32730

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 32713

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1054	*1	mg/Kg		105	70 - 130	25	20
Diesel Range Organics (Over C10-C28)			1000	1016		mg/Kg		102	70 - 130	9	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	548	S1+	70 - 130
o-Terphenyl	524	S1+	70 - 130

Lab Sample ID: 890-2786-2 MS
Matrix: Solid
Analysis Batch: 32730

Client Sample ID: SS02
Prep Type: Total/NA
Prep Batch: 32713

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	770.6		mg/Kg		76	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	999	934.1		mg/Kg		91	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	96		70 - 130
o-Terphenyl	74		70 - 130

Lab Sample ID: 890-2786-2 MSD
Matrix: Solid
Analysis Batch: 32730

Client Sample ID: SS02
Prep Type: Total/NA
Prep Batch: 32713

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	789.4		mg/Kg		78	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.9	U	998	953.1		mg/Kg		93	70 - 130	2	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	89		70 - 130
o-Terphenyl	74		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: King Tut Fed 004H

Job ID: 890-2786-1
SDG: 03D2024084

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-32585/1-A
Matrix: Solid
Analysis Batch: 33170

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 08:44	1

Lab Sample ID: LCS 880-32585/2-A
Matrix: Solid
Analysis Batch: 33170

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	250.5		mg/Kg		100	90 - 110		

Lab Sample ID: LCSD 880-32585/3-A
Matrix: Solid
Analysis Batch: 33170

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	248.0		mg/Kg		99	90 - 110	1	20

Lab Sample ID: 890-2786-3 MS
Matrix: Solid
Analysis Batch: 33170

Client Sample ID: SS03
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	610	F1	251	262.9	F1	mg/Kg		-139	90 - 110		

Lab Sample ID: 890-2786-3 MSD
Matrix: Solid
Analysis Batch: 33170

Client Sample ID: SS03
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	610	F1	251	254.8	F1	mg/Kg		-142	90 - 110	3	20

QC Association Summary

Client: Ensolum
Project/Site: King Tut Fed 004H

Job ID: 890-2786-1
SDG: 03D2024084

GC VOA

Prep Batch: 33164

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2786-3	SS03	Total/NA	Solid	5035	
890-2786-4	SS04	Total/NA	Solid	5035	
MB 880-33164/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-33164/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-33164/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
820-5453-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
820-5453-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 33191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2786-1	SS01	Total/NA	Solid	5035	
890-2786-2	SS02	Total/NA	Solid	5035	
MB 880-33191/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-33191/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-33191/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2764-A-11-I MS	Matrix Spike	Total/NA	Solid	5035	
890-2764-A-11-J MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 33192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2786-1	SS01	Total/NA	Solid	5035	
MB 880-33192/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-33192/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-33192/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-18562-A-5-H MS	Matrix Spike	Total/NA	Solid	5035	
880-18562-A-5-I MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 33298

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2786-1	SS01	Total/NA	Solid	8021B	33191
890-2786-2	SS02	Total/NA	Solid	8021B	33191
MB 880-33191/5-A	Method Blank	Total/NA	Solid	8021B	33191
MB 880-33298/8	Method Blank	Total/NA	Solid	8021B	
LCS 880-33191/1-A	Lab Control Sample	Total/NA	Solid	8021B	33191
LCSD 880-33191/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	33191
890-2764-A-11-I MS	Matrix Spike	Total/NA	Solid	8021B	33191
890-2764-A-11-J MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	33191

Prep Batch: 33321

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2786-5	SS05	Total/NA	Solid	5035	
MB 880-33321/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-33321/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-33321/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2781-A-1-G MS	Matrix Spike	Total/NA	Solid	5035	
890-2781-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 33339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2786-5	SS05	Total/NA	Solid	8021B	33321
MB 880-33321/5-A	Method Blank	Total/NA	Solid	8021B	33321

QC Association Summary

Client: Ensolum
Project/Site: King Tut Fed 004H

Job ID: 890-2786-1
SDG: 03D2024084

GC VOA (Continued)

Analysis Batch: 33339 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-33321/1-A	Lab Control Sample	Total/NA	Solid	8021B	33321
LCSD 880-33321/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	33321
890-2781-A-1-G MS	Matrix Spike	Total/NA	Solid	8021B	33321
890-2781-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	33321

Analysis Batch: 33341

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2786-1	SS01	Total/NA	Solid	8021B	33192
890-2786-3	SS03	Total/NA	Solid	8021B	33164
890-2786-4	SS04	Total/NA	Solid	8021B	33164
MB 880-33164/5-A	Method Blank	Total/NA	Solid	8021B	33164
MB 880-33192/5-A	Method Blank	Total/NA	Solid	8021B	33192
LCS 880-33164/1-A	Lab Control Sample	Total/NA	Solid	8021B	33164
LCS 880-33192/1-A	Lab Control Sample	Total/NA	Solid	8021B	33192
LCSD 880-33164/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	33164
LCSD 880-33192/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	33192
820-5453-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	33164
820-5453-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	33164
880-18562-A-5-H MS	Matrix Spike	Total/NA	Solid	8021B	33192
880-18562-A-5-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	33192

Analysis Batch: 33443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2786-1	SS01	Total/NA	Solid	Total BTEX	
890-2786-2	SS02	Total/NA	Solid	Total BTEX	
890-2786-3	SS03	Total/NA	Solid	Total BTEX	
890-2786-4	SS04	Total/NA	Solid	Total BTEX	
890-2786-5	SS05	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 32713

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2786-1	SS01	Total/NA	Solid	8015NM Prep	
890-2786-2	SS02	Total/NA	Solid	8015NM Prep	
890-2786-3	SS03	Total/NA	Solid	8015NM Prep	
890-2786-4	SS04	Total/NA	Solid	8015NM Prep	
890-2786-5	SS05	Total/NA	Solid	8015NM Prep	
MB 880-32713/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-32713/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-32713/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2786-2 MS	SS02	Total/NA	Solid	8015NM Prep	
890-2786-2 MSD	SS02	Total/NA	Solid	8015NM Prep	

Analysis Batch: 32730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2786-1	SS01	Total/NA	Solid	8015B NM	32713
890-2786-2	SS02	Total/NA	Solid	8015B NM	32713
890-2786-3	SS03	Total/NA	Solid	8015B NM	32713
890-2786-4	SS04	Total/NA	Solid	8015B NM	32713
890-2786-5	SS05	Total/NA	Solid	8015B NM	32713

QC Association Summary

Client: Ensolum
Project/Site: King Tut Fed 004H

Job ID: 890-2786-1
SDG: 03D2024084

GC Semi VOA (Continued)

Analysis Batch: 32730 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-32713/1-A	Method Blank	Total/NA	Solid	8015B NM	32713
LCS 880-32713/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	32713
LCSD 880-32713/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	32713
890-2786-2 MS	SS02	Total/NA	Solid	8015B NM	32713
890-2786-2 MSD	SS02	Total/NA	Solid	8015B NM	32713

Analysis Batch: 32852

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2786-1	SS01	Total/NA	Solid	8015 NM	
890-2786-2	SS02	Total/NA	Solid	8015 NM	
890-2786-3	SS03	Total/NA	Solid	8015 NM	
890-2786-4	SS04	Total/NA	Solid	8015 NM	
890-2786-5	SS05	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 32585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2786-1	SS01	Soluble	Solid	DI Leach	
890-2786-2	SS02	Soluble	Solid	DI Leach	
890-2786-3	SS03	Soluble	Solid	DI Leach	
890-2786-4	SS04	Soluble	Solid	DI Leach	
890-2786-5	SS05	Soluble	Solid	DI Leach	
MB 880-32585/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-32585/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-32585/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2786-3 MS	SS03	Soluble	Solid	DI Leach	
890-2786-3 MSD	SS03	Soluble	Solid	DI Leach	

Analysis Batch: 33170

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2786-1	SS01	Soluble	Solid	300.0	32585
890-2786-2	SS02	Soluble	Solid	300.0	32585
890-2786-3	SS03	Soluble	Solid	300.0	32585
890-2786-4	SS04	Soluble	Solid	300.0	32585
890-2786-5	SS05	Soluble	Solid	300.0	32585
MB 880-32585/1-A	Method Blank	Soluble	Solid	300.0	32585
LCS 880-32585/2-A	Lab Control Sample	Soluble	Solid	300.0	32585
LCSD 880-32585/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	32585
890-2786-3 MS	SS03	Soluble	Solid	300.0	32585
890-2786-3 MSD	SS03	Soluble	Solid	300.0	32585

Lab Chronicle

Client: Ensolum
Project/Site: King Tut Fed 004H

Job ID: 890-2786-1
SDG: 03D2024084

Client Sample ID: SS01

Date Collected: 08/17/22 10:35
Date Received: 08/19/22 09:18

Lab Sample ID: 890-2786-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	33192	08/29/22 10:54	EL	EET MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	33341	08/31/22 12:46	MR	EET MID
Total/NA	Prep	5035			4.97 g	5 mL	33191	08/29/22 10:39	MR	EET MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	33298	08/31/22 00:39	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33443	08/31/22 11:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			32852	08/24/22 11:38	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	32713	08/22/22 16:29	DM	EET MID
Total/NA	Analysis	8015B NM		5			32730	08/23/22 21:46	AJ	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	32585	08/21/22 19:42	SMC	EET MID
Soluble	Analysis	300.0		10	0 mL	0 mL	33170	08/29/22 11:06	CH	EET MID

Client Sample ID: SS02

Date Collected: 08/17/22 10:40
Date Received: 08/19/22 09:18

Lab Sample ID: 890-2786-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	33191	08/29/22 10:39	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33298	08/31/22 04:05	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33443	08/31/22 11:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			32852	08/24/22 11:38	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	32713	08/22/22 16:29	DM	EET MID
Total/NA	Analysis	8015B NM		1			32730	08/23/22 17:11	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	32585	08/21/22 19:42	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33170	08/29/22 11:15	CH	EET MID

Client Sample ID: SS03

Date Collected: 08/17/22 10:45
Date Received: 08/19/22 09:18

Lab Sample ID: 890-2786-3

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	33164	08/29/22 09:09	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33341	08/31/22 00:13	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33443	08/31/22 11:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			32852	08/24/22 11:38	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	32713	08/22/22 16:29	DM	EET MID
Total/NA	Analysis	8015B NM		1			32730	08/23/22 18:15	AJ	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	32585	08/21/22 19:42	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33170	08/29/22 11:24	CH	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: King Tut Fed 004H

Job ID: 890-2786-1
SDG: 03D2024084

Client Sample ID: SS04

Date Collected: 08/17/22 10:50
Date Received: 08/19/22 09:18

Lab Sample ID: 890-2786-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	33164	08/29/22 09:09	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33341	08/31/22 00:34	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33443	08/31/22 11:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			32852	08/24/22 11:38	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	32713	08/22/22 16:29	DM	EET MID
Total/NA	Analysis	8015B NM		1			32730	08/23/22 18:36	AJ	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	32585	08/21/22 19:42	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33170	08/29/22 11:52	CH	EET MID

Client Sample ID: SS05

Date Collected: 08/17/22 10:55
Date Received: 08/19/22 09:18

Lab Sample ID: 890-2786-5

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	33321	08/30/22 09:35	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33339	08/31/22 02:32	MR	EET MID
Total/NA	Analysis	Total BTEX		1			33443	08/31/22 11:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			32852	08/24/22 11:38	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	32713	08/22/22 16:29	DM	EET MID
Total/NA	Analysis	8015B NM		1			32730	08/23/22 18:57	AJ	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	32585	08/21/22 19:42	SMC	EET MID
Soluble	Analysis	300.0		1	0 mL	0 mL	33170	08/29/22 12:01	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: King Tut Fed 004H

Job ID: 890-2786-1
SDG: 03D2024084

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: King Tut Fed 004H

Job ID: 890-2786-1
SDG: 03D2024084

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: King Tut Fed 004H

Job ID: 890-2786-1
SDG: 03D2024084

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-2786-1	SS01	Solid	08/17/22 10:35	08/19/22 09:18
890-2786-2	SS02	Solid	08/17/22 10:40	08/19/22 09:18
890-2786-3	SS03	Solid	08/17/22 10:45	08/19/22 09:18
890-2786-4	SS04	Solid	08/17/22 10:50	08/19/22 09:18
890-2786-5	SS05	Solid	08/17/22 10:55	08/19/22 09:18

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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 _____ of _____

Project Manager:	KALEI JENNINGS	Bill to: (if different)	
Company Name:	ENSOLUM LLC	Company Name:	
Address:	3122 NATL PARKS HWY	Address:	
City, State ZIP:	CARLSBAD NM, 88220	City, State ZIP:	
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:~~	~~KINGS PIT~~	Turn Around	
Project Number:	03D2024084	☒ Routine ☐ Rush	
Project Location:		Due Date:	
Sampler's Name:	Conner Shore	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:	TAM-007	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No N/A	Temperature Reading:	5.8	
Total Containers:		Corrected Temperature:	5.6	

ANALYSIS REQUEST

Pres. Code

Parameters: Chlorides, BTEX, TPH

890-2786 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	Chlorides	BTEX	TPH	Sample Comments
SS01	S	08.17.22	1035	0.5'	G	1	X	X	X	
SS02			1040	0.5'						
SS03			1045	0.5'						
SS04			1050	0.5'						
SS05			1055	0.5'						

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 CS	Amanda Stuff	8/19/22 915			
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2786-1
SDG Number: 03D2024084

Login Number: 2786
List Number: 1
Creator: Stutzman, Amanda

List Source: Eurofins Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	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: 890-2786-1
SDG Number: 03D2024084

Login Number: 2786
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 08/22/22 08:49 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: 890-2831-1
Laboratory Sample Delivery Group: Lea County NM
Client Project/Site: King Tut Federal 004H

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

Attn: Kalei Jennings

JKramer

Authorized for release by:
9/6/2022 7:39:08 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: King Tut Federal 004H

Laboratory Job ID: 890-2831-1
SDG: Lea County NM

Table of Contents

Definitions/Glossary

Client: Ensolum Job ID: 890-2831-1
Project/Site: King Tut Federal 004H SDG: Lea County NM

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
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: King Tut Federal 004H

Job ID: 890-2831-1
SDG: Lea County NM

Job ID: 890-2831-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2831-1

Receipt
The sample was received on 8/24/2022 10:07 AM. 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 1.0°C

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

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

HPLC/IC
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-33075 and analytical batch 880-33438 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Client Sample Results

Client: Ensolum
Project/Site: King Tut Federal 004H

Job ID: 890-2831-1
SDG: Lea County NM

Client Sample ID: FS01

Date Collected: 08/23/22 13:10
Date Received: 08/24/22 10:07
Sample Depth: 1.5

Lab Sample ID: 890-2831-1

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		09/02/22 16:00	09/05/22 21:52	1
Toluene	<0.00198	U	0.00198		mg/Kg		09/02/22 16:00	09/05/22 21:52	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		09/02/22 16:00	09/05/22 21:52	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		09/02/22 16:00	09/05/22 21:52	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		09/02/22 16:00	09/05/22 21:52	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		09/02/22 16:00	09/05/22 21:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*	*09/02/22 16:00*	*09/05/22 21:52*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*09/02/22 16:00*	*09/05/22 21:52*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			09/06/22 08:15	1

Method: 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			08/29/22 10:16	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	49.9		mg/Kg		08/26/22 15:42	08/29/22 00:12	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/26/22 15:42	08/29/22 00:12	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/26/22 15:42	08/29/22 00:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*08/26/22 15:42*	*08/29/22 00:12*	*1*
o-Terphenyl	*90*		*70 - 130*	*08/26/22 15:42*	*08/29/22 00:12*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**15.9**		5.03		mg/Kg			09/01/22 12:14	1

Surrogate Summary

Client: Ensolum
Project/Site: King Tut Federal 004H

Job ID: 890-2831-1
SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-2815-A-1-C MS	Matrix Spike	82	111
890-2815-A-1-D MSD	Matrix Spike Duplicate	85	111
890-2831-1	FS01	89	110
LCS 880-33663/1-A	Lab Control Sample	83	109
LCSD 880-33663/2-A	Lab Control Sample Dup	86	102
MB 880-33663/5-A	Method Blank	78	123

Surrogate Legend

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

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-2812-A-1-C MS	Matrix Spike	90	84
890-2812-A-1-D MSD	Matrix Spike Duplicate	93	85
890-2831-1	FS01	89	90
LCS 880-33084/2-A	Lab Control Sample	105	114
LCSD 880-33084/3-A	Lab Control Sample Dup	108	119
MB 880-33084/1-A	Method Blank	73	79

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: King Tut Federal 004H

Job ID: 890-2831-1
SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-33663/5-A
Matrix: Solid
Analysis Batch: 33742

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 33663

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/02/22 16:00	09/05/22 16:08	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/02/22 16:00	09/05/22 16:08	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/02/22 16:00	09/05/22 16:08	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/02/22 16:00	09/05/22 16:08	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/02/22 16:00	09/05/22 16:08	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/02/22 16:00	09/05/22 16:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*78*		*70 - 130*	*09/02/22 16:00*	*09/05/22 16:08*	*1*
1,4-Difluorobenzene (Surr)	*123*		*70 - 130*	*09/02/22 16:00*	*09/05/22 16:08*	*1*

Lab Sample ID: LCS 880-33663/1-A
Matrix: Solid
Analysis Batch: 33742

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 33663

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1199		mg/Kg		120	70 - 130		
Toluene			0.100	0.1036		mg/Kg		104	70 - 130		
Ethylbenzene			0.100	0.09765		mg/Kg		98	70 - 130		
m-Xylene & p-Xylene			0.200	0.1754		mg/Kg		88	70 - 130		
o-Xylene			0.100	0.09026		mg/Kg		90	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*83*		*70 - 130*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*

Lab Sample ID: LCSD 880-33663/2-A
Matrix: Solid
Analysis Batch: 33742

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 33663

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1127		mg/Kg		113	70 - 130	6	35
Toluene			0.100	0.1093		mg/Kg		109	70 - 130	5	35
Ethylbenzene			0.100	0.1041		mg/Kg		104	70 - 130	6	35
m-Xylene & p-Xylene			0.200	0.1890		mg/Kg		95	70 - 130	7	35
o-Xylene			0.100	0.09734		mg/Kg		97	70 - 130	8	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*86*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 890-2815-A-1-C MS
Matrix: Solid
Analysis Batch: 33742

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 33663

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U	0.0998	0.09208		mg/Kg		92	70 - 130		
Toluene	<0.00199	U F1	0.0998	0.06842	F1	mg/Kg		69	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: King Tut Federal 004H

Job ID: 890-2831-1
SDG: Lea County NM

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

Lab Sample ID: 890-2815-A-1-C MS
Matrix: Solid
Analysis Batch: 33742

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 33663

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U F1	0.0998	0.05156	F1	mg/Kg		52	70 - 130
m-Xylene & p-Xylene	<0.00398	U F1	0.200	0.09022	F1	mg/Kg		45	70 - 130
o-Xylene	<0.00199	U F1	0.0998	0.04710	F1	mg/Kg		47	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*82*		*70 - 130*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*

Lab Sample ID: 890-2815-A-1-D MSD
Matrix: Solid
Analysis Batch: 33742

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 33663

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	0.09004		mg/Kg		90	70 - 130	2	35
Toluene	<0.00199	U F1	0.100	0.06341	F1	mg/Kg		63	70 - 130	8	35
Ethylbenzene	<0.00199	U F1	0.100	0.04691	F1	mg/Kg		47	70 - 130	9	35
m-Xylene & p-Xylene	<0.00398	U F1	0.201	0.08178	F1	mg/Kg		41	70 - 130	10	35
o-Xylene	<0.00199	U F1	0.100	0.04246	F1	mg/Kg		42	70 - 130	10	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*85*		*70 - 130*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*

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

Lab Sample ID: MB 880-33084/1-A
Matrix: Solid
Analysis Batch: 33127

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 33084

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		08/26/22 15:42	08/28/22 17:32	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/26/22 15:42	08/28/22 17:32	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/26/22 15:42	08/28/22 17:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*73*		*70 - 130*	*08/26/22 15:42*	*08/28/22 17:32*	*1*
o-Terphenyl	*79*		*70 - 130*	*08/26/22 15:42*	*08/28/22 17:32*	*1*

Lab Sample ID: LCS 880-33084/2-A
Matrix: Solid
Analysis Batch: 33127

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 33084

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10			1000	882.1		mg/Kg		88	70 - 130
Diesel Range Organics (Over C10-C28)			1000	963.8		mg/Kg		96	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: King Tut Federal 004H

Job ID: 890-2831-1
SDG: Lea County NM

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

Lab Sample ID: LCS 880-33084/2-A
Matrix: Solid
Analysis Batch: 33127

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 33084

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	105		70 - 130
o-Terphenyl	114		70 - 130

Lab Sample ID: LCSD 880-33084/3-A
Matrix: Solid
Analysis Batch: 33127

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 33084

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	914.9		mg/Kg		91	70 - 130	4	20
Diesel Range Organics (Over C10-C28)			1000	1028		mg/Kg		103	70 - 130	6	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	108		70 - 130
o-Terphenyl	119		70 - 130

Lab Sample ID: 890-2812-A-1-C MS
Matrix: Solid
Analysis Batch: 33127

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 33084

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	999	906.5		mg/Kg		88	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	999	728.3		mg/Kg		73	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	90		70 - 130
o-Terphenyl	84		70 - 130

Lab Sample ID: 890-2812-A-1-D MSD
Matrix: Solid
Analysis Batch: 33127

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 33084

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	998	955.4		mg/Kg		93	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	<49.9	U	998	749.7		mg/Kg		75	70 - 130	3	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	93		70 - 130
o-Terphenyl	85		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: King Tut Federal 004H

Job ID: 890-2831-1
SDG: Lea County NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-33075/1-A
Matrix: Solid
Analysis Batch: 33438

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			09/01/22 09:56	1

Lab Sample ID: LCS 880-33075/2-A
Matrix: Solid
Analysis Batch: 33438

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	247.9		mg/Kg		99	90 - 110		

Lab Sample ID: LCSD 880-33075/3-A
Matrix: Solid
Analysis Batch: 33438

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	249.0		mg/Kg		100	90 - 110	0	20

Lab Sample ID: 890-2830-A-1-C MS
Matrix: Solid
Analysis Batch: 33438

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	29.5	F1	250	305.8	F1	mg/Kg		111	90 - 110		

Lab Sample ID: 890-2830-A-1-D MSD
Matrix: Solid
Analysis Batch: 33438

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	29.5	F1	250	303.7		mg/Kg		110	90 - 110	1	20

QC Association Summary

Client: Ensolum
Project/Site: King Tut Federal 004H

Job ID: 890-2831-1
SDG: Lea County NM

GC VOA

Prep Batch: 33663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2831-1	FS01	Total/NA	Solid	5035	
MB 880-33663/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-33663/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-33663/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2815-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-2815-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 33742

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2831-1	FS01	Total/NA	Solid	8021B	33663
MB 880-33663/5-A	Method Blank	Total/NA	Solid	8021B	33663
LCS 880-33663/1-A	Lab Control Sample	Total/NA	Solid	8021B	33663
LCSD 880-33663/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	33663
890-2815-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	33663
890-2815-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	33663

Analysis Batch: 33794

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2831-1	FS01	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 33084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2831-1	FS01	Total/NA	Solid	8015NM Prep	
MB 880-33084/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-33084/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-33084/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2812-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2812-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 33127

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2831-1	FS01	Total/NA	Solid	8015B NM	33084
MB 880-33084/1-A	Method Blank	Total/NA	Solid	8015B NM	33084
LCS 880-33084/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	33084
LCSD 880-33084/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	33084
890-2812-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	33084
890-2812-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	33084

Analysis Batch: 33188

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2831-1	FS01	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 33075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2831-1	FS01	Soluble	Solid	DI Leach	
MB 880-33075/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-33075/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-33075/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: Ensolum
Project/Site: King Tut Federal 004H

Job ID: 890-2831-1
SDG: Lea County NM

HPLC/IC (Continued)

Leach Batch: 33075 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2830-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2830-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 33438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2831-1	FS01	Soluble	Solid	300.0	33075
MB 880-33075/1-A	Method Blank	Soluble	Solid	300.0	33075
LCS 880-33075/2-A	Lab Control Sample	Soluble	Solid	300.0	33075
LCSD 880-33075/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	33075
890-2830-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	33075
890-2830-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	33075

Lab Chronicle

Client: Ensolum
Project/Site: King Tut Federal 004H

Job ID: 890-2831-1
SDG: Lea County NM

Client Sample ID: FS01

Date Collected: 08/23/22 13:10
Date Received: 08/24/22 10:07

Lab Sample ID: 890-2831-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	33663	09/02/22 16:00	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	33742	09/05/22 21:52	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			33794	09/06/22 08:15	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33188	08/29/22 10:16	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	33084	08/26/22 15:42	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33127	08/29/22 00:12	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	33075	08/26/22 14:54	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33438	09/01/22 12:14	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: King Tut Federal 004H

Job ID: 890-2831-1
SDG: Lea County NM

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	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: King Tut Federal 004H

Job ID: 890-2831-1
SDG: Lea County NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	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: King Tut Federal 004H

Job ID: 890-2831-1
SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2831-1	FS01	Solid	08/23/22 13:10	08/24/22 10:07	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 Jennings
Company Name:	Ensolum, LLC	Company Name:	
Address:	601 N. Marienfeld Street, Suite 400	Address:	
City, State ZIP:	Midland, TX 79701	City, State ZIP:	
Phone:	817-683-2503	Email:	Kjennings@ensolum.com ; Hgreen@ensolum.com

Work Order Comments

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

Project Name:	King Tut Federal 004H	Turn Around	
Project Number:	03D2024084	☑ Routine ☐ Rush	
Project Location:	Lea County, NM	Due Date:	5 DAY TAT
Sampler's Name:	Chris Brown	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:		TNM-007	
Cooler Custody Seals:	Yes No N/A	Correction Factor:		-0.2	
Sample Custody Seals:	Yes No N/A	Temperature Reading:		1.8	
Total Containers:		Corrected Temperature:		1.0	

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: CHL	BTX	TPH	ANALYSIS REQUEST
FS01	SL	8/23/2022	1310	0.5	Comp	1		X	X	X	

890-2831 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

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	Amanda Stuff	8/24/22 1007	2		
3			4		
5			6		

Revised Date 08/25/2020 Rev 2020 2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2831-1
SDG Number: Lea County NM

Login Number: 2831
List Number: 1
Creator: Stutzman, Amanda

List Source: Eurofins Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	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: 890-2831-1
SDG Number: Lea County NM

Login Number: 2831
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 08/25/22 10:42 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	NAPP2222449592
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party COG Operating, LLC	OGRID 229137
Contact Name Charles Beauvais	Contact Telephone 575-988-2043
Contact email Charles.Beauvais@conocophillips.com	Incident # *(assigned by OCD)*
Contact mailing address 600 West Illinois Avenue, Midland TX 79701	

Location of Release Source

Latitude 32.19417 Longitude -103.7114
(NAD 83 in decimal degrees to 5 decimal places)

Site Name King Tut Federal 004H	Site Type Flow Line
Date Release Discovered July 31, 2022	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
B	30	24S	32E	Lea

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private (*Name:* _____)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

☒ Crude Oil	Volume Released (bbls) 0.002	Volume Recovered (bbls) 0
☒ Produced Water	Volume Released (bbls) 0.013	Volume Recovered (bbls) 0
	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 hole in the flowline resulting in a non-reportable release. The release was located off pad. The C141 is being used to document and close out the remediation process with the BLM. An evaluation will be conducted at the Site to determine if we may commence remediation immediately or delineate any possible impact from the release.

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2222449592
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

Initial Response

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

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

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

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

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

Printed Name: Charles Beauvais Title: Senior Environmental Engineer

Signature: Charles R. Beauvais II Date: 08/12/2022

email: Charles.Beauvais@conocophillips.com Telephone: 575-988-2043

OCD Only

Received by: Jocelyn Harimon Date: 08/12/2022

L48 Spill Volume Estimate Form

NAPP2222449592

Facility Name & Number:	KING TUT 4H FLOWLINE
Asset Area:	DBEN
Release Discovery Date & Time:	7/30/2022 7:30am
Release Type:	Oil Mixture
Provide any known details about the event:	PINHOLE IN FLOWLINE

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	20.0	2.0	0.10	4	40.000	0.002	0.015	0.000	0.015	10.00%	0.001	0.013
Rectangle B					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
Rectangle C					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
Rectangle D					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
Rectangle E					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
Rectangle F					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
Rectangle G					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
Rectangle H					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
Rectangle I					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
Rectangle J					0.000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		#DIV/0!	#DIV/0!
								Total Volume Release:	0.015		0.001	0.013

District I
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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: 133629
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	None	8/12/2022

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2222449592
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	NAPP2222449592
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: ___Charles Beauvais_____ Title: _Senior Environmental Engineer_____

Signature:___Charles R. Beauvais II_____ Date: __09/26/2022_____

email: _Charles.R.Beauvais@conocophillips.com _____ Telephone: ___575-988-2043_____

OCD Only

Received by: ___Jocelyn Harimon_____ Date: ___09/28/2022___

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2222449592
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: ___Charles Beauvais_____ Title: ___Senior Environmental Engineer_____

Signature: Charles R. Beauvais II Date: ___09/26/2022_____

email: ___Charles.R.Beauvais@conocophillips.com_____ Telephone: ___575-988-2043_____

OCD Only

Received by: Jocelyn Harimon Date: 09/28/2022

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

Closure Approved by: Jennifer Nobui Date: 09/30/2022

Printed Name: Jennifer Nobui Title: Environmental Specialist A

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
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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 146994

CONDITIONS

Operator: COG OPERATING LLC 600 W Illinois Ave Midland, TX 79701	OGRID: 229137
	Action Number: 146994
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Report Approved.	9/30/2022