



## VARIANCE REQUEST & CLOSURE REPORT

Property:

**Harroun 15 #008**

**Unit F, Section 15, Township 24S, Range 29E  
Eddy County, New Mexico  
32.321947° N, 103.97515° W  
NMOCD Incident ID: nMAP1826380135**

December 8, 2023

Ensolum Project No. 03B1417046

Prepared for:

**Oxy USA Inc.  
P.O. Box 4294  
Houston, TX 77210  
Attn: Mr. Wade Dittrich**

Prepared by:

  
Beaux Jennings  
Senior Project Manager

  
Heather Holthaus  
Senior Project Manager



## TABLE OF CONTENTS

---

1.0	INTRODUCTION.....	1
1.1	EXECUTIVE SUMMARY.....	1
1.2	SITE DESCRIPTION & BACKGROUND.....	2
1.3	PROJECT OBJECTIVE.....	2
2.0	CLOSURE CRITERIA.....	3
3.0	SOIL REMEDIATION ACTIVITIES.....	4
4.0	LABORATORY ANALYTICAL METHODS.....	5
5.0	SOIL DATA EVALUATION.....	5
6.0	GROUNDWATER DATA EVALUATION.....	6
7.0	RECLAMATION AND RE-VEGETATION.....	6
8.0	FINDINGS AND RECOMMENDATION.....	6
9.0	STANDARDS OF CARE, LIMITATIONS, AND RELIANCE.....	8
9.1	STANDARD OF CARE.....	8
9.2	LIMITATIONS.....	8
9.3	RELIANCE.....	8

### LIST OF APPENDICES

Appendix A: Figures

Appendix B: Supporting Documentation

Appendix C: Photographic Documentation

Appendix D: Tables

Appendix E: Laboratory Data Sheets & Chain-of-Custody Documentation

Appendix F: C-141



# ENSOLUM

## VARIANCE REQUEST & CLOSURE REPORT

Harroun 15 #008

Unit F, Section 15, Township 24S, Range 29E  
Eddy County, New Mexico  
32.321947° N, 103.97515° W  
NMOCD Incident ID: nMAP1826380135

Ensolum Project No. 03B1417046

### 1.0 INTRODUCTION

#### 1.1 Executive Summary

- On August 29, 2018, a release of crude oil and produced water was reported from a water transfer line due to a failure in the line at the Harroun 15 #008, hereinafter referred to as the "Site". Approximately 10 barrels (bbls) of crude oil were released onto the ground surface with approximately 5 bbls recovered. Additionally, 20 barrels bbls of produced water were released onto the ground surface with approximately 15 bbls recovered. The release impacted an area approximately 150 feet long by 150 feet wide. The line was shut down and repaired and initial response actions were conducted at the Site.
- Initial soil delineation activities were conducted between September 17 and October 10, 2018 by BBC International Incorporated (BBC) on behalf of Oxy USA Inc. (Oxy). Based on soil delineation sample results, the vertical release extent in the vicinity of sample points SP-5 and SP-6 reached the initial groundwater-bearing unit (GWBU).
- In addition, BBC installed a soil boring (SB-1) to investigate the initial GWBU. Based on the groundwater sampling results, the chloride concentration was identified at 41,000 milligrams per liter (mg/L).
- Excavation activities were conducted based on visual evidence of impairment and laboratory analytical results. Between February 22 and June 13, 2023, Ensolum arrived on-Site and collected a total of 111 composite soil samples from 55 locations on the excavation floor (FS-1 through FS-55), and 42 composite soil samples from 23 locations on the excavation sidewalls (SW-1 through SW-23). The composite floor samples were collected from depths ranging from 8 to 16 feet below ground surface (bgs), and the composite sidewall samples were collected from depths ranging from 0 to 12 feet bgs.
- Based on the laboratory analytical results of the final soil samples, additional excavation is warranted. However, due to the location of the Site, additional excavation is not feasible. The Site is situated between overhead electric lines, multiple subsurface pipelines, and multiple above-ground high-pressure fiberglass flowlines. Expansion of the excavation would require it to be properly sloped and benched, prior to additional vertical excavation activities. Due to the elevated chloride concentrations in soils left in place, a liner was placed at approximately 12 feet bgs throughout the horizontal extent of the excavation prior to backfill activities.
- On October 3, 2023, Ensolum and Envirotech Drilling & Environmental Services (Envirotech) installed two background monitoring wells (BMW-1 and BMW-2) to gather background data for the initial GWBU. Background monitoring well BMW-1 had a chloride concentration of 5,510 mg/L and a total dissolve solids (TDS) concentration of 18,700 mg/L. Background monitoring well BMW-2 had a chloride concentration of 6,160 mg/L and a TDS concentration of 16,300 mg/L.

Oxy USA Inc.  
 Variance Request & Closure Report  
 Federal 12-1H Battery  
 December 8, 2023



- The primary objective of the closure activities was to identify and reduce chemical of concern (COC) concentrations in the on-Site soils to below the applicable New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD) Closure Criteria for Soils Impacted by a Release using the New Mexico Administrative Code (NMAC) 19.15.29 *Releases* as guidance.
- Subsequent to the results of the confirmation soil sampling, the excavated soils were removed and taken off-Site for proper disposal. A liner was placed in the bottom of the excavation and the area was backfilled with clean fill material, and then contoured to the original surrounding grade.

**Based on the identified siting criteria, cleanup goals for soil remaining in place at the Site should be excluded from the NMOCD Closure Criteria. Based on the identified background TDS concentrations at the Site, the groundwater should be excluded from the NMWQCC Standards.**

Based on the Site assessment activities, laboratory analytical results and existing Site conditions, Oxy is requesting a variance to leave chloride impacted soil in place from approximately 12 feet bgs to 25 feet bgs. Although chloride impacts remain in place at the Site, the groundwater sample results for the two background monitoring wells (BMW-1 and BMW-2) show chloride and TDS concentrations above the applicable NMWQCC Standards. In addition, the background TDS concentrations exceed the 10,000 mg/L limit as defined by NMAC 20.6.2.5301(D) (“ground water of the state of New Mexico” means, consistent with 20.6.2.5001 NMAC, an aquifer that contains ground water having a TDS concentration of 10,000 mg/l or less”); therefore, the NMWQCC Standards should not apply to the Site.

### 1.2 Site Description & Background

<b>Operator:</b>	Oxy USA Inc. (Oxy)
<b>Site Name:</b>	Harroun 15 #008
<b>Location:</b>	32. 21947 N, 103.97515 W Eddy County, New Mexico
<b>Property:</b>	Oxy USA Inc. (Private)
<b>Regulatory:</b>	New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

The Topographic Map depicting the location of the Site is included as **Figure 1**, the Site Vicinity Map is included as **Figure 2**, the Site Map indicating the locations of composite soil samples is included as **Figure 3A/Figure 3B**, and the Closure Criteria Map is included as **Figure 4** in **Appendix A**.

### 1.3 Project Objective

The primary objective of the closure activities was to identify and reduce COC concentrations in the on-Site soils to below the applicable New Mexico EMNRD OCD closure criteria concentrations.

Oxy USA Inc.  
Variance Request & Closure Report  
Federal 12-1H Battery  
December 8, 2023



## 2.0 CLOSURE CRITERIA

The Site is subject to regulatory oversight by the New Mexico EMNRD OCD. In order to address activities related to exempt oil and gas releases, the New Mexico EMNRD OCD references NMAC 19.15.29 *Releases*, which establishes investigation and abatement action requirements for sites subject to reporting and/or corrective action. Ensolum utilized information provided by Oxy, the general site characteristics, and information available from the New Mexico Office of the State Engineer (OSE) and the New Mexico EMNRD OCD Imaging database to determine the appropriate closure criteria for the Site.

- The Site is not located within 300 feet of a New Mexico ENMRD OCD-defined continuously flowing watercourse or any other significant watercourse.
- The Site is not located within 200 feet of a lakebed, sinkhole, or playa lake.
- The Site is not located within 300 feet from an occupied permanent residence, school, hospital, institution, or church.
- According to the OSE WRSS database there are no private, domestic freshwater wells used by less than five (5) households for domestic or stock water purposes identified within 500 feet of the Site.
- According to the OSE WRSS database there are no freshwater wells identified within 1,000 feet of the Site as declared in the previous bullet.
- The Site is not located within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3.
- The Site is not located within 300 feet of a wetland.
- Based on information identified on the New Mexico Mining and Minerals Division's GIS, Maps and Mine Data database, the Site is not located within an area overlying a subsurface mine.
- Based on the Karst Occurrence Potential (.kmz) provided by the Bureau of Land Management (BLM), the Site is not located within an unstable area.
- The Site is noted to be located within a 100-year flood plain.
- Due to the lack of depth to groundwater information and water quality data available, two background monitoring wells (BMW-1 and BMW-2) were installed in the vicinity of the Site on October 3, 2023 by Ensolum and Envirotech. Each of the background monitoring wells were subsequently developed by Envirotech. Background monitoring well BMW-1 was installed 1,050 feet west of the Site and background monitoring well BMW-2 was installed 560 feet northwest of the Site. The depth to groundwater in the background monitoring wells was identified to be from 21.5 to 23.5 feet bgs. Ensolum returned on November 8, 2023 to conduct groundwater sampling. Background monitoring well BMW-1 had a chloride concentration of 5,510 mg/L and a TDS concentration of 18,700 mg/L. Background monitoring well BMW-2 had a chloride concentration of 6,160 mg/L and a TDS concentration of 16,300 mg/L.

Oxy USA Inc.  
 Variance Request & Closure Report  
 Federal 12-1H Battery  
 December 8, 2023



**Based on the identified siting criteria, cleanup goals for soils remaining in place at the Site should be excluded from the table below:**

Closure Criteria for Soils Impacted by a Release			
Minimum depth below any point within horizontal boundary of the release to groundwater less than 10,000 mg/l TDS	Constituent	Method	Limit
≤ 50 feet	Chloride	EPA 300.0 or SM4500 Cl B	600 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	100 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg

**Based on the Site assessment activities, laboratory analytical results and existing Site conditions, Oxy is requesting a variance to leave chloride impacted soil in place from approximately 12 feet bgs to 25 feet bgs. Although chloride impacts remain in place at the Site, the groundwater sample results for the two background monitoring wells (BMW-1 and BMW-2) show chloride and TDS concentrations above the applicable NMWQCC Standards. In addition, the background TDS concentrations exceed the 10,000 mg/L limit as defined by NMAC 20.6.2.5301(D) (“ground water of the state of New Mexico” means, consistent with 20.6.2.5001 NMAC, an aquifer that contains ground water having a TDS concentration of 10,000 mg/l or less”); therefore, the NMWQCC Standards should not apply to the Site.**

### 3.0 SOIL REMEDIATION ACTIVITIES

On August 29, 2018, a release of crude oil and produced water was reported from a water transfer line due to a failure in the line at the Harroun 15 #008. Approximately 10 bbls of crude oil were released onto the ground surface with approximately 5 bbls recovered. Additionally, 20 barrels bbls of produced water were released onto the ground surface with approximately 15 bbls recovered. The release impacted an area approximately 150 feet long by 150 feet wide. The line was shut down and repaired and initial response actions were conducted at the Site.

Initial soil delineation activities were conducted between September 17 and October 10, 2018 by BBC on behalf of Oxy. Based on soil delineation sample results, the vertical release extent in the vicinity of sample points SP-5 and SP-6 reached the initial GWBU.

In addition, BBC installed a soil boring (SB-1) to investigate the initial GWBU. Based on the groundwater sampling results, the chloride concentration was identified at 41,000 mg/L.

Excavation activities were conducted based on visual and laboratory evidence of impairment. Between February 22 and June 13, 2023, Ensolum arrived on-Site and collected a total of 111 composite soil samples from 55 locations on the excavation floor (FS-1 through FS-55), and 42 composite soil samples from 23 locations on the excavation sidewalls (SW-1 through SW-23). The composite floor samples were collected from depths ranging from 8 to 16 bgs, and the composite sidewall samples were collected from depths ranging from one to 0 to 12 feet bgs.

Oxy USA Inc.  
Variance Request & Closure Report  
Federal 12-1H Battery  
December 8, 2023



Due to the location of the Site, additional excavation is not feasible. The Site is situated between overhead electric lines, multiple subsurface pipelines, and multiple above-ground high-pressure fiberglass flowlines. Expansion of the excavation would require it to be properly sloped and benched, prior to additional vertical excavation activities. The final excavation area measured approximately 240 feet long by 130 feet wide at the maximum extent, with a depth of 12 feet bgs.

The lithology encountered during the completion of sampling activities consisted primarily of pink and yellow silty sand.

**Figure 3A** identifies approximate delineation soil sample locations and approximate dimensions of the impacted area with respect to the Site. **Figure 3B** identifies floor and sidewall soil sample locations and approximate dimensions of the impacted area with respect to the Site (**Appendix A**). Photographic documentation of the field activities is included in **Appendix C**.

#### 4.0 LABORATORY ANALYTICAL METHODS

The delineation and composite soil samples were analyzed for BTEX utilizing Environmental Protection Agency (EPA) SW-846 Method 8021B, TPH GRO/DRO/MRO utilizing EPA SW-846 Method 8015M, and chloride utilizing EPA Method 4500-Cl B.

The groundwater samples were analyzed for chloride utilizing EPA Method 4500-Cl B/300.0 and/or TDS utilizing EPA Standard Method 2540C.

The samples were collected and placed in laboratory prepared glassware, labeled/sealed using laboratory supplied labels and custody seals, and stored on ice in a cooler. The samples were relinquished to Cardinal Laboratories in Hobbs, New Mexico and/or Eurofins Midland laboratory in Midland, TX for standard laboratory analysis.

Laboratory analytical results are summarized in **Table 1** and **Table 2** in **Appendix D**. The executed chain-of-custody forms and laboratory analytical reports are provided in **Appendix E**.

#### 5.0 SOIL DATA EVALUATION

Ensolum compared the benzene, total BTEX, TPH GRO/DRO/MRO, and chloride concentrations associated with the soil samples collected from the delineation activities (SP 1 through SP 7 and SB 1), excavation floor (FS-1 through FS-55), excavation sidewalls (SW-1 through SW-23), and delineation area (NORTH, EAST, WEST and SOUTH) to the applicable New Mexico EMNRD OCD closure criteria.

- Final laboratory analytical results indicate benzene concentrations for the soil samples are below the laboratory sample detection limits (SDLs), which are below the applicable New Mexico EMNRD OCD closure criteria of 10 milligrams per kilogram (mg/kg).
- Final laboratory analytical results indicate that total BTEX concentrations for the soil samples below the laboratory SDLs, which are below the applicable New Mexico EMNRD OCD closure criteria of 50 mg/kg.
- Final laboratory analytical results indicate combined TPH GRO/DRO/MRO concentrations for the soil samples are below the laboratory SDLs, which are below the applicable New Mexico EMNRD OCD closure criteria of 100 mg/kg for groundwater from  $\leq$  50 feet, with one exception. Delineation soil sample SP 6 at 18 feet had a TPH GRO/DRO/MRO concentration of 156 mg/kg, which exceeds the NMOCD Closure Criteria of 100 mg/kg.

Oxy USA Inc.  
 Variance Request & Closure Report  
 Federal 12-1H Battery  
 December 8, 2023



- Laboratory analytical results indicate chloride concentrations for the final composite soil samples are below the applicable New Mexico EMNRD OCD closure criteria of 600 mg/kg for groundwater from  $\leq 50$  feet, with exceptions. Delineation soil sample SP 5 (at 12 feet, 15 feet, and 18 feet bgs), delineation soil sample SP 6 (at 12 feet, 15 feet, and 18 feet bgs), delineation soil sample SB 1 (at 20 feet and 25 feet), sidewall (SW-4), and floor samples FS-2 through FS-13, FS-15 through FS-53 had chloride concentrations ranging from 656 mg/kg to 13,300 mg/kg, which exceed the NMOCD Closure Criteria of 600 mg/kg.

**Based on the identified siting criteria, cleanup goals for soil remaining in place at the Site should be excluded from the NMOCD Closure Criteria.**

## 6.0 GROUNDWATER DATA EVALUATION

Initial soil delineation activities were conducted between September 17 and October 10, 2018 by BBC on behalf of Oxy. Based on soil delineation sample results, the vertical release extent in the vicinity of sample points SP-5 and SP-6 reached the initial GWBU.

In addition, BBC installed a soil boring (SB-1) to investigate the initial GWBU. Based on the groundwater sampling results, the chloride concentration was identified at 41,000 mg/L.

Due to the lack of depth to groundwater information and water quality data available, two background monitoring wells (BMW-1 and BMW-2) were installed in the vicinity of the Site on October 3, 2023 by Ensolum and Envirotech. Each of the background monitoring wells were subsequently developed by Envirotech. Background monitoring well BMW-1 was installed 1,050 feet west of the Site and background monitoring well BMW-2 was installed 560 feet northwest of the Site. The depth to groundwater in the background monitoring wells was identified to be from 21.5 to 23.5 feet bgs. Ensolum returned on November 8, 2023 to conduct groundwater sampling. Background monitoring well BMW-1 had a chloride concentration of 5,510 mg/L and a TDS concentration of 18,700 mg/L. Background monitoring well BMW-2 had a chloride concentration of 6,160 mg/L and a TDS concentration of 16,300 mg/L.

Based on the Site assessment activities, laboratory analytical results and existing Site conditions, Oxy is requesting a variance to leave chloride impacted soil in place from approximately 12 feet bgs to 25 feet bgs. Although chloride impacts remain in place at the Site, the groundwater sample results for the two background monitoring wells (BMW-1 and BMW-2) show chloride and TDS concentrations above the applicable NMWQCC Standards. In addition, the background TDS concentrations exceed the 10,000 mg/L limit as defined by NMAC 20.6.2.5301(D) ("ground water of the state of New Mexico" means, consistent with 20.6.2.5001 NMAC, an aquifer that contains ground water having a TDS concentration of 10,000 mg/l or less"); therefore, the NMWQCC Standards should not apply to the Site.

## 7.0 RECLAMATION AND RE-VEGETATION

Subsequent to the results of the final confirmation soil sampling, the identified impacted soils were removed and taken off-Site for proper disposal. A liner was placed in the bottom of the excavation and the area was backfilled with clean fill material, and then contoured to the original surrounding grade.

## 8.0 FINDINGS AND RECOMMENDATION

- On August 29, 2018, a release of crude oil and produced water was reported from a water transfer line due to a failure in the line at the Harroun 15 #008. Approximately 10 bbls of crude oil were released onto the ground surface with approximately 5 bbls recovered. Additionally, 20 barrels bbls of produced water were released onto the ground surface with approximately 15 bbls recovered. The release impacted an area approximately 150 feet long by 150 feet wide. The line was shut down and repaired and initial response actions were conducted at the Site.

Oxy USA Inc.  
Variance Request & Closure Report  
Federal 12-1H Battery  
December 8, 2023



- Initial soil delineation activities were conducted between September 17 and October 10, 2018 by BBC on behalf of Oxy. Based on soil delineation sample results, the vertical release extent in the vicinity of sample points SP-5 and SP-6 reached the initial GWBU.
- In addition, BBC installed a soil boring (SB-1) to investigate the initial GWBU. Based on the groundwater sampling results, the chloride concentration was identified at 41,000 milligrams per liter (mg/L).
- Excavation activities were conducted based on visual evidence of impairment and laboratory analytical results. Between February 22 and June 13, 2023, Ensolum arrived on-Site and collected a total of 111 composite soil samples from 55 locations on the excavation floor (FS-1 through FS-55), and 42 composite soil samples from 23 locations on the excavation sidewalls (SW-1 through SW-23). The composite floor samples were collected from depths ranging from 8 to 16 feet bgs, and the composite sidewall samples were collected from depths ranging from 0 to 12 feet bgs.
- Based on the laboratory analytical results of the final soil samples, additional excavation is warranted. However, due to the location of the Site, additional excavation is not feasible. The Site is situated between overhead electric lines, multiple subsurface pipelines, and multiple above-ground high-pressure fiberglass flowlines. Expansion of the excavation would require it to be properly sloped and benched, prior to additional vertical excavation activities. Due to the elevated chloride concentrations in soils left in place, a liner was placed at approximately 12 feet bgs throughout the horizontal extent of the excavation prior to backfill activities.
- On October 3, 2023, Ensolum and Envirotech Envirotech installed two background monitoring wells (BMW-1 and BMW-2) to gather background data for the initial GWBU. Background monitoring well BMW-1 had a chloride concentration of 5,510 mg/L and a TDS concentration of 18,700 mg/L. Background monitoring well BMW-2 had a chloride concentration of 6,160 mg/L and a TDS concentration of 16,300 mg/L.
- The primary objective of the closure activities was to identify and reduce COC concentrations in the on-Site soils to below the applicable New Mexico EMNRD OCD Closure Criteria for Soils Impacted by a Release using the NMAC 19.15.29 *Releases* as guidance.
- Subsequent to the results of the confirmation soil sampling, the excavated soils were removed and taken off-Site for proper disposal. A liner was placed in the bottom of the excavation and the area was backfilled with clean fill material, and then contoured to the original surrounding grade.

**Based on the identified siting criteria, cleanup goals for soils remaining in place at the Site should be excluded from the NMOCD Closure Criteria. Based on the identified background TDS concentrations at the Site, the groundwater should be excluded from the NMWQCC Standards.**

**Based on the Site assessment activities, laboratory analytical results and existing Site conditions, Oxy is requesting a variance to leave chloride impacted soil in place from approximately 12 feet bgs to 25 feet bgs. Although chloride impacts remain in place at the Site, the groundwater sample results for the two background monitoring wells (BMW-1 and BMW-2) show chloride and TDS concentrations above the applicable NMWQCC Standards. In addition, the background TDS concentrations exceed the 10,000 mg/L limit as defined by NMAC 20.6.2.5301(D) (“ground water of the state of New Mexico” means, consistent with 20.6.2.5001 NMAC, an aquifer that contains ground water having a TDS concentration of 10,000 mg/l or less”); therefore, the NMWQCC Standards should not apply to the Site.**

Oxy USA Inc.  
Variance Request & Closure Report  
Federal 12-1H Battery  
December 8, 2023



## **9.0 STANDARDS OF CARE, LIMITATIONS, AND RELIANCE**

### **9.1 Standard of Care**

Ensolum's services were performed in accordance with standards customarily provided by a firm rendering the same or similar services in the area during the same time period. Ensolum makes no warranties, express or implied, as to the services performed hereunder. Additionally, Ensolum does not warrant the work of third parties supplying information used in the report (e.g., laboratories, regulatory agencies, or other third parties). This scope of services was performed in accordance with the scope of work agreed with the client, as detailed in our proposal.

### **9.2 Limitations**

Findings, conclusions, and recommendations resulting from these services are based upon information derived from the on-Site activities and other services performed under this scope of work and it should be noted that this information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, or not present during these services, and Ensolum cannot represent that the Site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during the investigation. Environmental conditions at other areas or portions of the Site may vary from those encountered at actual sample locations. Ensolum's findings and recommendations are based solely upon data available to Ensolum at the time of these services.

### **9.3 Reliance**

This report has been prepared for the exclusive use of Oxy USA, Inc., and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the Site) is prohibited without the express written authorization Oxy USA, Inc. and Ensolum. Any unauthorized distribution or reuse is at the client's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions and limitations stated in the Closure Report, and Ensolum's Master Services Agreement. The limitation of liability defined in the agreement is the aggregate limit of Ensolum's liability to the client.



---

## APPENDIX A

### Figures

---





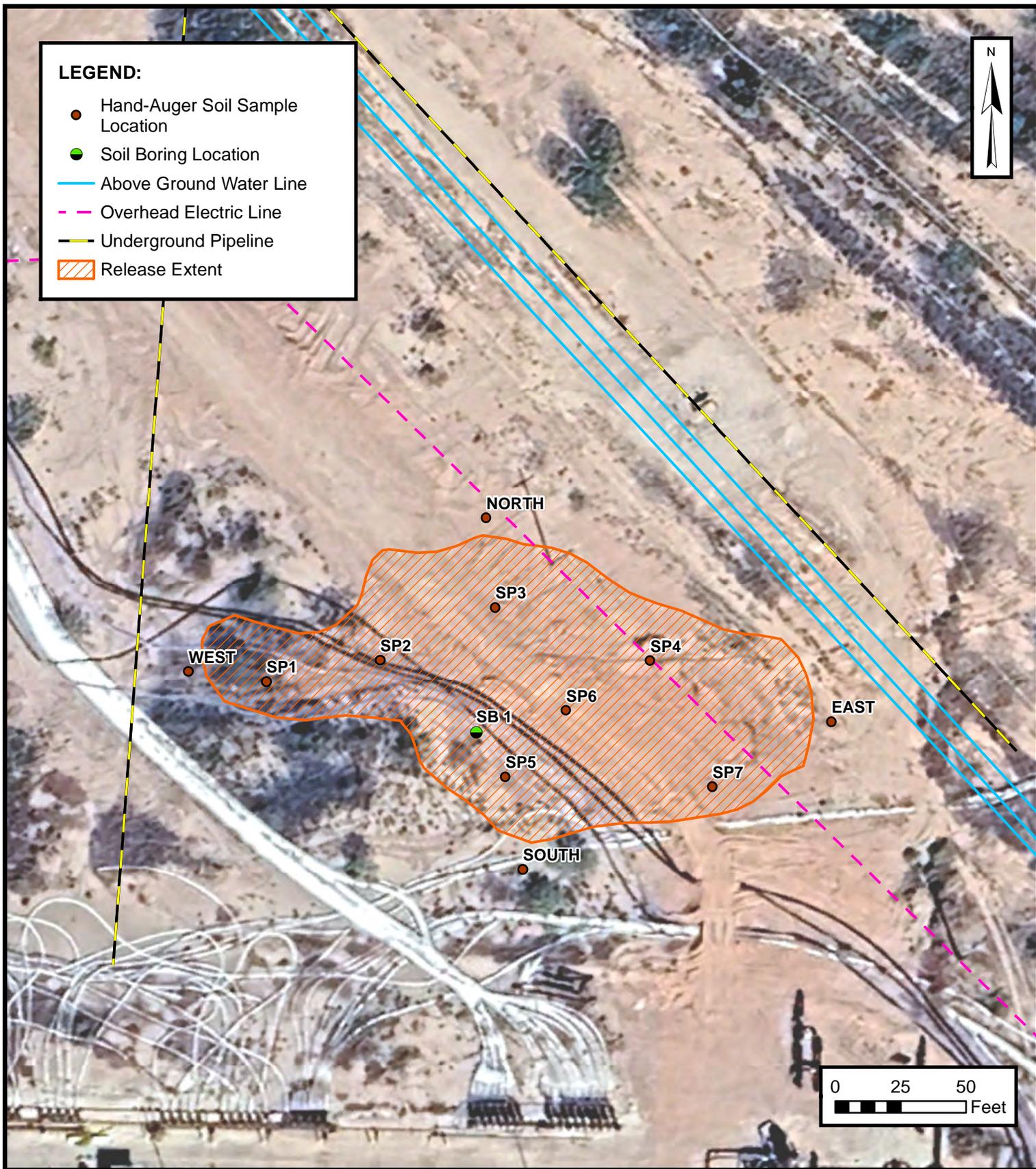
**ENSOLUM**  
Environmental, Engineering and  
Hydrogeologic Consultants

**SITE VICINITY MAP**

OXY USA INC.  
HARROUN 15 #008  
Unit F, S15, T24S, R29E, Eddy County, New Mexico  
32.21947° N, 103.97515° W

PROJECT NUMBER: 03B1417046

**FIGURE**  
**2**



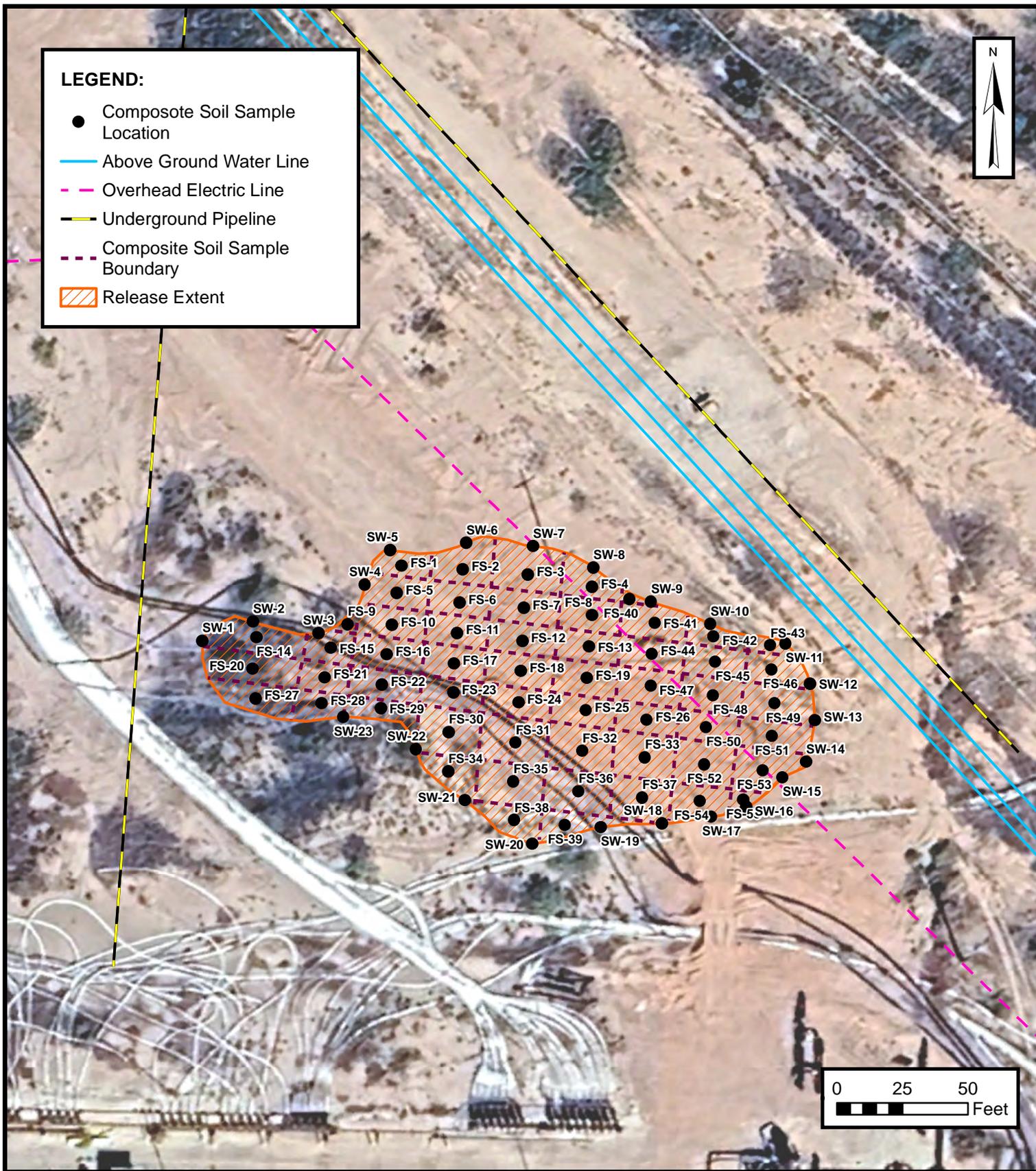
**ENSOLUM**  
Environmental, Engineering and  
Hydrogeologic Consultants

**DELINEATION MAP**

OXY USA INC.  
HARROUN 15 #008  
Unit F, S15, T24S, R29E, Eddy County, New Mexico  
32.21947° N, 103.97515° W

PROJECT NUMBER: 03B1417046

**FIGURE**  
**3A**

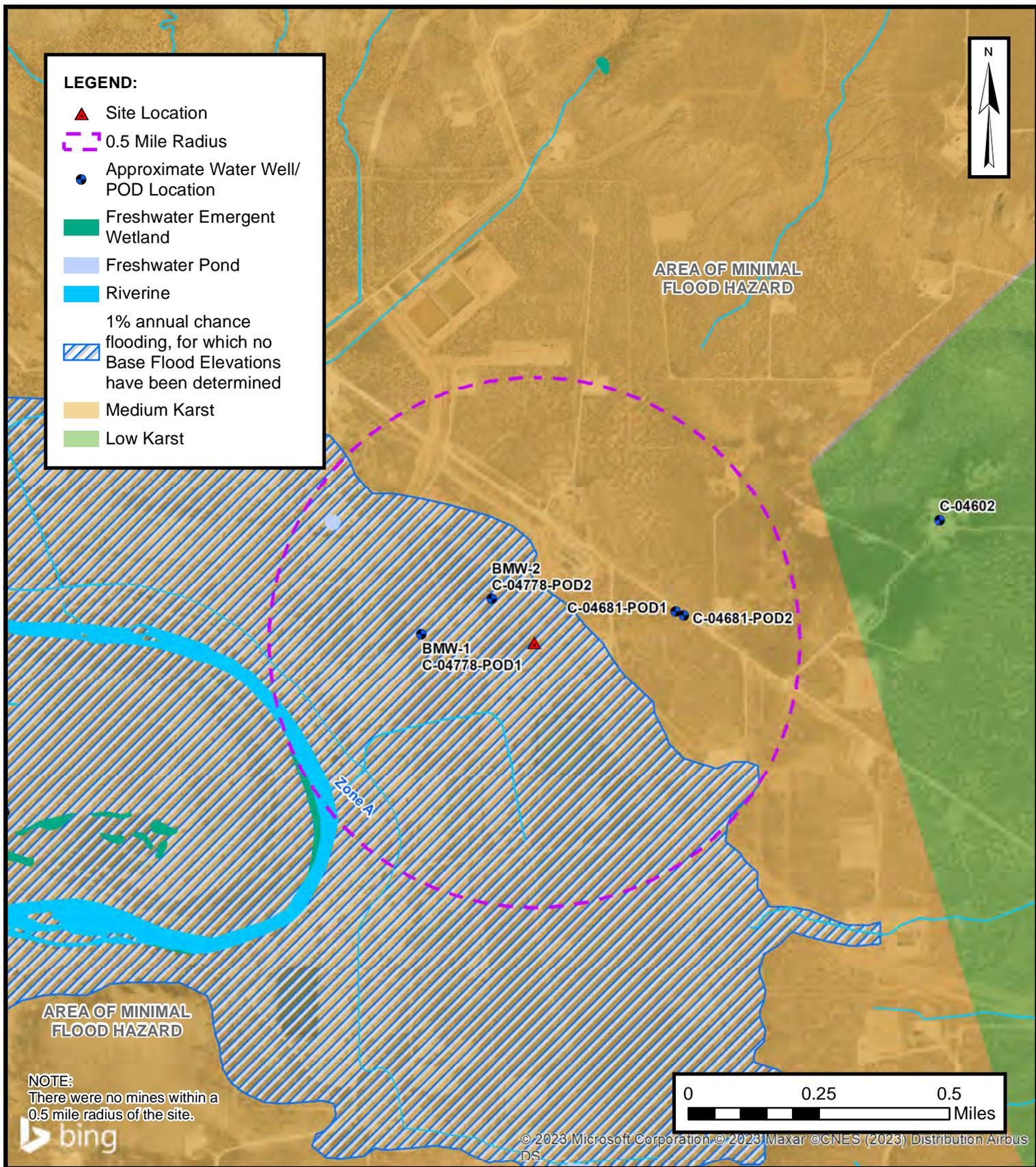


**SITE MAP**

OXY USA INC.  
 HARROUN 15 #008  
 Unit F, S15, T24S, R29E, Eddy County, New Mexico  
 32.21947° N, 103.97515° W

PROJECT NUMBER: 03B1417046

**FIGURE**  
**3B**



**CLOSURE CRITERIA MAP**

OXY USA INC.  
 HARROUN 15 #008  
 Unit F, S15, T24S, R29E, Eddy County, New Mexico  
 32.21947° N, 103.97515° W

PROJECT NUMBER: 03B1417046

**FIGURE**  
**4**



---

## APPENDIX B

### Supporting Documentation

---

**From:** Dittrich, John W  
**To:** [Bratcher, Mike, EMNRD](#); [Pruett, Maria, EMNRD](#)  
**Cc:** "[Cliff Brunson](#)"; [kswinney@bbcinternational.com](mailto:kswinney@bbcinternational.com); [Kathy Purvis](#); [Jennifer Gilkey](#); [Moore, Rebecca A](#)  
**Subject:** Harroun 15 0008  
**Date:** Tuesday, September 4, 2018 6:59:40 AM

---

All,

This is to inform you that Oxy Permian had a **Reportable** release in **Eddy County** at the **Harroun 15 0008** on 8/29/2018.

- **Release Location:** Legal -15-24S-29E, API: 30-015-30253
- **Release Volume:** 10 bbls of Oil and 20 bbls of Produced Water.
- **Recovered:** 20 bbls recovered
- **Cause of Release:** 3 inch poly flow line
- **Approximate Area impacted by release:** 150ft x 150ft (measurements are subject to change with GPS tracking)
- **GPS Coordinates and Driving Direction: 32.2195, -103.9753-(Leak GPS)** CB NM ON 285 SOUTH GO TO MALAGA, TURN LEFT DUARTE ROAD GO 2 MILES, TURN RIGHT ON MCDONALD ROAD GO 3 MILES TO PECOS RIVER, CROSS RIVER, GO 1 MILE , AT 2ND CG GO LEFT AT Y, GO .25 MILE, SOUTH OF COMPRESSOR STA 350 FT SOUTH OF WELLHEAD  
Please let me know if you have any questions.

Wade Dittrich

Environmental Specialist

**Oxy Permian-New Mexico**

575-390-2828 cell

575-397-8214 office

**Wade\_Dittrich@Oxy.com**

**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	NMAP1826380135
District RP	2RP-4974
Facility ID	
Application ID	pMAP1826379886

## Release Notification

### Responsible Party

Responsible Party	Oxy USA Inc.	OGRID	16696
Contact Name	Wade Dittrich	Contact Telephone	(575) 390-2828
Contact email	Wade_Dittrich@oxy.com	Incident # (assigned by OCD)	
Contact mailing address	PO Box 4294; Houston, TX 77210		

### Location of Release Source

Latitude N 32.21947 Longitude W-103.97515  
*(NAD 83 in decimal degrees to 5 decimal places)*

Site Name	HARROUN 15 #008	Site Type	FLOW LINE LEAK
Date Release Discovered	8/29/2018	API# (if applicable)	30-015-30253

Unit Letter	Section	Township	Range	County
F	15	24S	29E	EDDY COUNTY, NM

Surface Owner:  State  Federal  Tribal  Private (Name: MCDONALD/BRANTLEY)

### Nature and Volume of Release

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

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) 10 BBLS	Volume Recovered (bbls) 5 BBLS
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 20 BBLS	Volume Recovered (bbls) 15 BBLS
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release  
**COMPROMISED 3 INCH POLY FLOW LINE**

Form C-141

State of New Mexico  
Oil Conservation Division

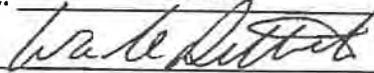
Page 2

Incident ID	NMAP1826380135
District RP	2RP-4974
Facility ID	
Application ID	pMAP1826379886

Was this a major release as defined by 19.15.29.7(A) NMAC?  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? <b>RELEASE IS GREATER THAN 25 BBLs</b>
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? <b>YES, BY WADE DITTRICH OF OXY VIA EMAIL ON 9/4/18 @ 7:00 AM TO MIKE BRATCHER, MARIA PRUETT-NMOCD</b>	

### Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.
If all the actions described above have <u>not</u> 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: <u>Wade Dittrich</u> Title: <u>Environmental Specialist</u> Signature: <u></u> Date: <u>9-17-18</u> email: <u>wade__dittrich@oxy.com</u> Telephone: <u>(575) 390-2828</u>
<b>OCD Only</b> Received by: <u></u> Date: <u>09/20/18</u>

## Beaux Jennings

---

**From:** Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>  
**Sent:** Monday, March 27, 2023 5:36 PM  
**To:** Beaux Jennings  
**Cc:** Bratcher, Michael, EMNRD; Hamlet, Robert, EMNRD  
**Subject:** RE: [EXTERNAL] Harroun 15 #008 (Incident ID: NMAP1826380135)

[ \*\*EXTERNAL EMAIL\*\* ]

Beaux,

Please be aware that notification requirements are **two business days**, per rule. You may proceed on your schedule. This, and all correspondence, should be included in the closure report to insure inclusion in the project file.

JH

**Jocelyn Harimon** • Environmental Specialist  
Environmental Bureau  
EMNRD - Oil Conservation Division  
1220 South St. Francis Drive | Santa Fe, NM 87505  
(505)469-2821 | [Jocelyn.Harimon@emnrd.nm.gov](mailto:Jocelyn.Harimon@emnrd.nm.gov)  
<http://www.emnrd.nm.gov>



---

**From:** Beaux Jennings <bjennings@ensolum.com>  
**Sent:** Monday, March 27, 2023 2:04 PM  
**To:** Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>  
**Subject:** [EXTERNAL] Harroun 15 #008 (Incident ID: NMAP1826380135)

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Good Afternoon,

On behalf of Oxy USA Inc, Ensolum, LLC would like to provide notification for sampling activities that will be conducted at the Harroun 15 #008 (Incident ID: NMAP1826380135) on Wednesday, March 29<sup>th</sup>. The samples may be used for closure, provided that they meet applicable closure limits.

Thank you,



**Beaux Jennings**  
Senior Project Manager  
210-219-8858  
Ensolum, LLC  
in f



# New Mexico Office of the State Engineer

## Transaction Summary

**EXPL Permit To Explore**

**Transaction Number:** 751694      **Transaction Desc:** C 04778 POD1-2      **File Date:** 09/13/2023

**Primary Status:** PMT Permit  
**Secondary Status:** APR Approved  
**Person Assigned:** \*\*\*\*\*  
**Applicant:** OXY USA INC.  
**Contact:** WADE DITTRICH  
**Applicant:** ENSOLUM, LLC  
**Contact:** BEAUX JENNINGS

**Events**

Date	Type	Description	Comment	Processed By
09/13/2023	APP	Application Received	*	*****
09/13/2023	TEC	Technical Report	*PLG PLN OPS C-	*****
10/03/2023	FTN	Finalize non-published Trans.		*****

**Water Right Information**

WR File Nbr	Acres	Diversion	Consumptive	Purpose of Use
C 04778	0	0		MON MONITORING WELL
<b>**Point of Diversion</b>				
C 04778 POD1		596200	3565246	
C 04778 POD2		596415	3565355	

**Conditions**

- 1A Depth of the well shall not exceed the thickness of the valley fill.
- 4 No water shall be appropriated and beneficially used under this permit.
- B The well shall be drilled by a driller licensed in the State of New Mexico in accordance with 72-12-12 NMSA 1978. A licensed driller shall not be required for the construction of a well driven without the use of a drill rig, provided that the casing shall not exceed two and three-eighths (2 3/8) inches outside diameter.
- C The well driller must file the well record with the State Engineer and the applicant within 30 days after the well is drilled or driven. It is the well owner's responsibility to ensure that the well driller files the well record. The well driller may obtain the well record form from any District Office or the Office of the State Engineer website.
- 6 The well authorized by this permit shall be plugged completely using the following method per Rules and Regulations Governing Well Driller Licensing, Construction, Repair and Plugging of Wells; Subsection C of 19.27.4.30 NMAC unless an alternative plugging method is proposed by the well owner and approved by the State Engineer upon completion of the permitted use. All pumping appurtenance shall be removed from the well prior to plugging. To plug a well, the entire well shall be filled from the bottom upwards to ground surface using a tremie pipe. The bottom of the tremie shall remain submerged in the sealant throughout the entire sealing process; other placement methods may be acceptable

Client: Oxy USA, Inc.  
 Project Name: Harroun 15 #008  
 Project Location: Eddy County, New Mexico  
 Project Manager: Beaux Jennings

# SOIL BORING / WELL LOG

## DRILLING & SAMPLING INFORMATION

Date Started: 10/03/2023  
 Date Completed: 10/03/2023  
 Drilling Company: Envirotech Drilling & Environmental Services  
 Driller: Pete Perez

Soil Boring / Well Number: BMW-1  
 Project #: 03B1417046  
 Drawn By: Beaux Jennings  
 Approved By: Kelly Lowery

Geologist: Shane Diller Sampler: Shane Diller  
 Boring Method: Auger Logged By: Shane Diller  
 Sampler Type: Auger  
 Bore Hole Diameter: 6" Screen: 15' - 40'  
 Casing Diameter: 2" Total Depth: 40'  
 Well Materials: PVC  
 Surface Completion: Above Ground Vault

**BORING METHOD**                      **SAMPLER TYPE**                      **GROUNDWATER DEPTH**  
 HSA - HOLLOW STEM AUGERS      CB - FIVE FOOT CORE BARREL      ∇ AT COMPLETION  
 CFA - CONTINUOUS FLIGHT AUGERS      SS - DRIVEN SPLIT SPOON      ∇ AT WELL STABILIZATION  
 GP - GEOPROBE                      ST - PRESSED SHELBY TUBE  
 AR - AIR ROTARY

## BORING AND SAMPLING NOTES

Soil Description	Soil Classification	Stratum Depth	Depth Scale	Sample No.	Sample Interval	% Recovery	Groundwater Depth	FID/PID Readings (ppm)	Notes
Above Ground Vault									
Bentonite	5' - Silty sand, fine-grained, brown, dry, no odor		5						
	10' - Silty sandy clay, brown, slightly moist, no odor.		10						
	12.5' - Silty clay, dark brown, slightly moist, no odor.		12.5						
Sand	18' - Silty clay, brown, wet, no odor.		18				∇		
	20' - Silty sandy clay, light brown, very wet, no odor.		20						
			25				∇		
Sand	30' - Sandy silty clay, light brown, very wet, no odor.		30						
			35						

NA - Not Available



Client: Oxy USA, Inc.  
 Project Name: Harroun 15 #008  
 Project Location: Eddy County, New Mexico  
 Project Manager: Beaux Jennings

# SOIL BORING / WELL LOG

## DRILLING & SAMPLING INFORMATION

Date Started: 10/03/2023  
 Date Completed: 10/03/2023  
 Drilling Company: Envirotech Drilling & Environmental Services  
 Driller: Pete Perez

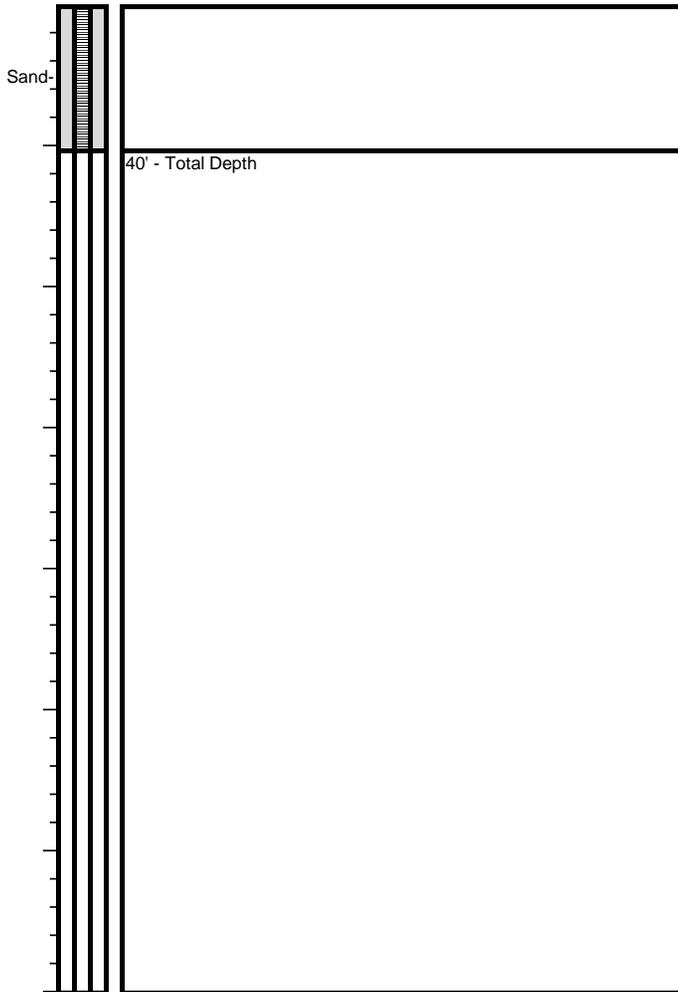
Soil Boring / Well Number: BMW-1  
 Project #: 03B1417046  
 Drawn By: Beaux Jennings  
 Approved By: Kelly Lowery

Geologist: Shane Diller Sampler: Shane Diller  
 Boring Method: Auger Logged By: Shane Diller  
 Sampler Type: Auger  
 Bore Hole Diameter: 6" Screen: 15' - 40'  
 Casing Diameter: 2" Total Depth: 40'  
 Well Materials: PVC  
 Surface Completion: Above Ground Vault

<b>BORING METHOD</b>	<b>SAMPLER TYPE</b>	<b>GROUNDWATER DEPTH</b>
HSA - HOLLOW STEM AUGERS	CB - FIVE FOOT CORE BARREL	▽ AT COMPLETION
CFA - CONTINUOUS FLIGHT AUGERS	SS - DRIVEN SPLIT SPOON	▽▽ AT WELL STABILIZATION
GP - GEOPROBE	ST - PRESSED SHELBY TUBE	
AR - AIR ROTARY		

BORING AND SAMPLING NOTES						
Stratum Depth	Depth Scale	Sample No.	Sample Interval	% Recovery	Groundwater Depth	FID/PID Readings (ppm)

Well Detail	SOIL CLASSIFICATION



Stratum Depth	Depth Scale	Sample No.	Sample Interval	% Recovery	Groundwater Depth	FID/PID Readings (ppm)

NA - Not Available





Client: Oxy USA, Inc.  
 Project Name: Harroun 15 #008  
 Project Location: Eddy County, New Mexico  
 Project Manager: Beaux Jennings

# SOIL BORING / WELL LOG

## DRILLING & SAMPLING INFORMATION

Date Started: 10/03/2023  
 Date Completed: 10/03/2023  
 Drilling Company: Envirotech Drilling & Environmental Services  
 Driller: Pete Perez  
 Geologist: Shane Diller  
 Boring Method: Auger  
 Sampler Type: Auger  
 Bore Hole Diameter: 6"  
 Casing Diameter: 2"  
 Well Materials: PVC  
 Surface Completion: Above Ground Vault

Soil Boring / Well Number: BMW-2  
 Project #: 03B1417046  
 Drawn By: Beaux Jennings  
 Approved By: Kelly Lowery

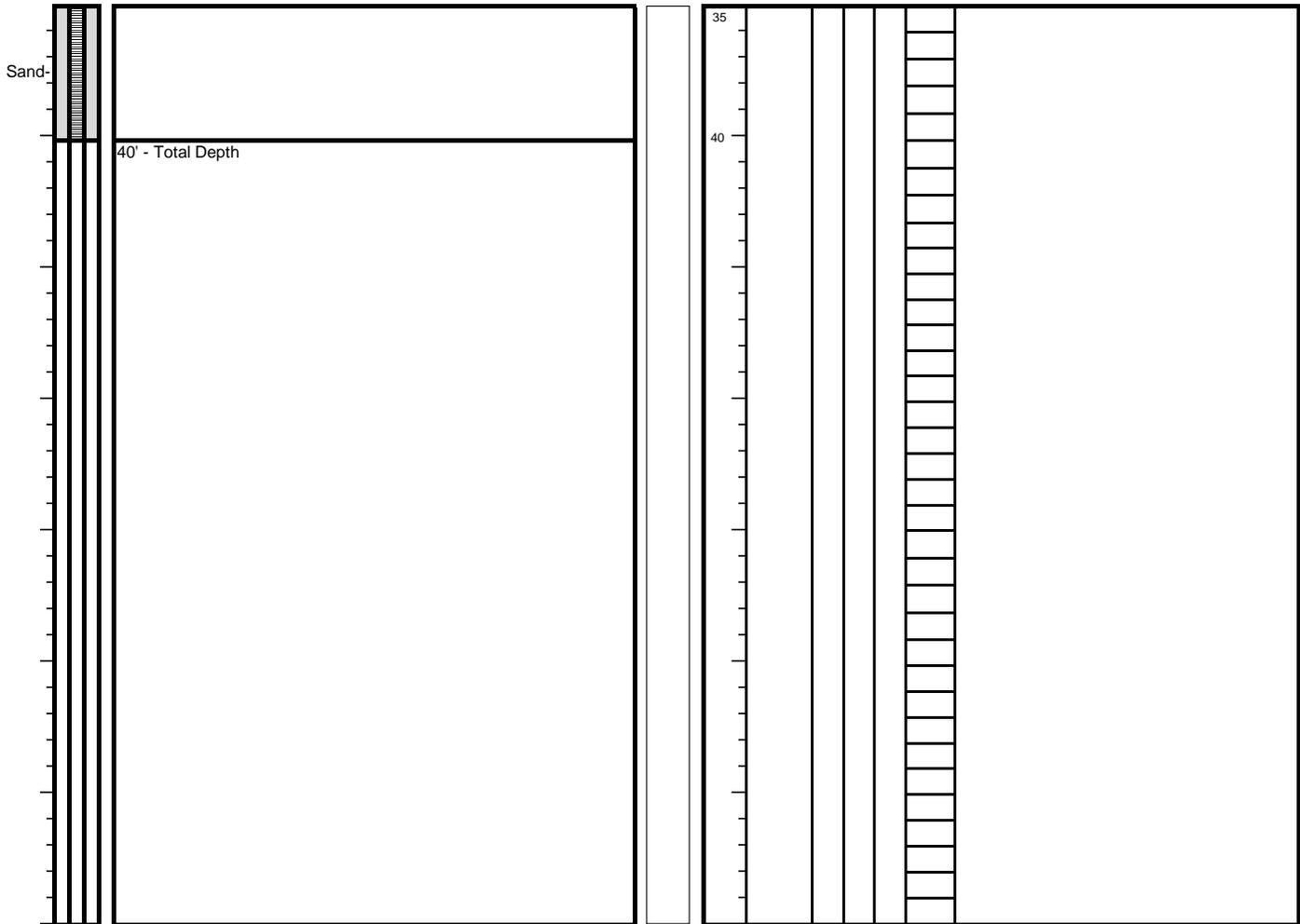
**BORING METHOD**  
 HSA - HOLLOW STEM AUGERS  
 CFA - CONTINUOUS FLIGHT AUGERS  
 GP - GEOPROBE  
 AR - AIR ROTARY

**SAMPLER TYPE**  
 CB - FIVE FOOT CORE BARREL  
 SS - DRIVEN SPLIT SPOON  
 ST - PRESSED SHELBY TUBE

**GROUNDWATER DEPTH**  
 ∇ AT COMPLETION  
 ∇ AT WELL STABILIZATION

BORING AND SAMPLING NOTES						
Stratum Depth	Depth Scale	Sample No.	Sample Interval	% Recovery	Groundwater Depth	FID/PID Readings (ppm)

SOIL CLASSIFICATION	
Well Detail	



NA - Not Available





---

## APPENDIX C

### Photographic Documentation

---



View of excavation area, facing southwest.



View of excavation area, facing southeast.



View of excavation area, facing southeast.



View of excavation area, facing southwest.



View of liner placed in excavation area prior to backfill, facing southeast.



View of excavation area subsequent to backfill, facing south.



## APPENDIX D

### Tables



**TABLE 1**  
**SOIL SAMPLE ANALYTICAL RESULTS**

Harroun 15 #008

Oxy USA, Inc.

Eddy County, New Mexico

Ensolum Project No. 03B1417046

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total TPH (GRO+DRO+MRO) (mg/kg)	Chloride (mg/kg)	
New Mexico Oil Conservation Division Closure Criteria for Soils Impacted by a Release (≤ 50 feet)			10	NE	NE	NE	50	NE	NE	NE	100	600	
Delineation Sample Analytical Results													
SP 1	9/17/2018	Surface	<0.100	1.36	0.423	1.47	3.26	204	19,200	4,910	24,314	7,200	
	9/18/2018	1	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	8,660	
		2	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	2,440	
		4	NS					NS					32,800
		6	NS					NS					22,400
		8	NS					NS					6,260
		9	NS					NS					384
10	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	416		
SP 2	9/18/2018	Surface	<0.050	0.288	0.218	0.768	1.27	<100	20,400	5,240	25,640	12,400	
		1	<0.050	<0.050	0.074	0.252	0.326	<100	5,800	1,680	7,480	18,800	
		2	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	4,400	
		4	NS					NS					1,120
		6	NS					NS					800
		8	NS					NS					976
		9	NS					NS					208
SP 3	9/18/2018	Surface	<0.050	0.159	0.218	0.675	1.05	<100	14,100	3,530	17,630	21,600	
		1	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	125	42.2	167	41,200	
		2	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	5,680	
		4	NS					NS					3,600
		6	NS					NS					176
		9/19/2018	7	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	224
SP 4	9/19/2018	Surface	<0.050	<0.050	<0.050	<0.150	<0.300	<50.0	3,190	1,790	4,980	5,360	
		1	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	46.1	14.3	60.4	3,320	
		2	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	7,840	
		4	NS					NS					2,080
		6	NS					NS					288
		7	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	320

## TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS

Harroun 15 #008  
Oxy USA, Inc.  
Eddy County, New Mexico  
Ensolum Project No. 03B1417046

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total TPH (GRO+DRO+MRO) (mg/kg)	Chloride (mg/kg)
New Mexico Oil Conservation Division Closure Criteria for Soils Impacted by a Release (≤ 50 feet)			10	NE	NE	NE	50	NE	NE	NE	100	600
SP 5	9/19/2018	Surface	0.053	1.21	1.68	5.72	8.66	577	28,000	6,520	35,097	3,400
		1	<0.050	0.067	0.213	0.505	0.785	51.2	2,720	626	3,397	49,200
		2	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	34,000
		3	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	30,800
		4	NS						NS			24,000
		7	NS						NS			41,200
		9	NS						NS			38,400
		12	NS						NS			7,200
		15	NS						NS			5,440
SP 6	9/19/2018	Surface	<0.050	0.203	0.408	2.09	2.70	<100	13,900	4,290	18,190	48,000
		1	<0.050	<0.050	<0.050	0.171	<0.300	<10.0	1,090	240	1,330	18,400
	9/20/2018	2	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	40.5	11.0	51.5	11,100
		3	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	24.3	<10.0	24.3	13,300
		4	NS						NS			14,400
		7	NS						NS			20,400
		9	NS						NS			1,760
		12	NS						NS			8,800
		15	NS						NS			5,760
18	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	142	14.4	156	6,960		
SP 7	9/20/2018	Surface	<0.050	<0.050	<0.050	0.177	<0.300	<100	6,550	1,930	8,480	3,920
		1	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	1,110	232	1,342	16,500
		2	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	20.7	10.2	30.9	6,130
		3	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	11,600
		5	NS						NS			12,400
		8	NS						NS			1,810
		11	NS						NS			48.0
		12	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	69.6	29.1	98.7	32.0
NORTH	9/20/2018	NA	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	160
EAST	9/20/2018	NA	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	112
WEST	9/20/2018	NA	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	112
SOUTH	9/20/2018	NA	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	112
SB 1	10/10/2018	20	NS						NS			6,000
		25	NS						NS			13,300

## TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS

Harroun 15 #008  
Oxy USA, Inc.  
Eddy County, New Mexico  
Ensolum Project No. 03B1417046

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total TPH (GRO+DRO+MRO) (mg/kg)	Chloride (mg/kg)
New Mexico Oil Conservation Division Closure Criteria for Soils Impacted by a Release (≤ 50 feet)			10	NE	NE	NE	50	NE	NE	NE	100	600
<b>Floor Sample Analytical Results</b>												
FS-1	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	240
FS-2	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	2,200
	4/27/2023	12	NS									5,760
FS-3	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	20,400
	4/27/2023	12	NS									9,200
FS-4	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	3,480
	4/27/2023	12	NS									10,600
FS-5	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	31.2	<10.0	31.2	3,680
	4/27/2023	12	NS									7,520
FS-6	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	21.1	<10.0	21.1	7,680
	4/27/2023	12	NS									11,200
FS-7	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	39.8	<10.0	39.8	13,300
	4/27/2023	12	NS									10,400
FS-8	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	8,000
	4/27/2023	12	NS									736
FS-9	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	4,800
	4/27/2023	12	NS									2,800
FS-10	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	11,100
	4/27/2023	12	NS									4,040
FS-11	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	27.2	<10.0	27.2	11,200
	4/27/2023	12	NS									3,680
FS-12	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	42.5	<10.0	42.5	23,800
	4/27/2023	12	NS									10,600
FS-13	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	4,920
	4/27/2023	12	NS									6,480
FS-14	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	592
FS-15	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	10,000
	4/27/2023	12	NS									4,400

## TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS

Harroun 15 #008

Oxy USA, Inc.

Eddy County, New Mexico

Ensolum Project No. 03B1417046

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total TPH (GRO+DRO+MRO) (mg/kg)	Chloride (mg/kg)
New Mexico Oil Conservation Division Closure Criteria for Soils Impacted by a Release (≤ 50 feet)			10	NE	NE	NE	50	NE	NE	NE	100	600
FS-16	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	605	186	791	11,900
	4/27/2023	12	NS					<10.0	<10.0	<10.0	<10.0	976
FS-17	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	44.6	<10.0	44.6	9,200
	4/27/2023	12	NS					<10.0	<10.0	<10.0	<10.0	7,680
FS-18	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	153	46.1	199	20,200
	4/27/2023	12	NS					<50.0	2,970	571	3,541	9,800
	5/23/2023	12	NS					<10.0	671	182	853	3,680
	6/13/2023	16	NS					<10.0	<10.0	<10.0	<10.0	1,920
FS-19	3/31/2023	8	<0.050	0.092	0.323	1.63	2.04	70.6	4,200	1,070	5,341	8,400
	4/27/2023	12	NS					<10.0	51.2	<10.0	51.2	8,200
FS-20	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	960
	4/27/2023	12	NS					<10.0	<10.0	<10.0	<10.0	4,560
FS-21	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	960
	4/27/2023	12	NS					<10.0	<10.0	<10.0	<10.0	6,320
FS-22	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	155	37.6	193	17,400
	4/27/2023	12	NS					<10.0	<10.0	<10.0	<10.0	960
FS-23	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	225	75.9	301	47,200
	4/27/2023	12	NS					<10.0	691	127	818	6,480
	5/23/2023	12	NS					<10.0	<10.0	<10.0	<10.0	46,400
	6/13/2023	16	NS					<10.0	<10.0	<10.0	<10.0	3,520
FS-24	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	1,130	320	1,450	23,600
	4/27/2023	12	NS					<10.0	<10.0	<10.0	<10.0	8,400
FS-25	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	308	94.1	402	19,200
	4/27/2023	12	NS					<10.0	<10.0	<10.0	<10.0	7,680
FS-26	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	291	110	401	22,000
	4/27/2023	12	NS					<10.0	<10.0	<10.0	<10.0	11,600
FS-27	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	3,360
	4/27/2023	12	NS					<10.0	<10.0	<10.0	<10.0	6,880
FS-28	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	4,160
	4/27/2023	12	NS					<10.0	<10.0	<10.0	<10.0	976
FS-29	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	6,800
	4/27/2023	12	NS					<10.0	<10.0	<10.0	<10.0	1,020
FS-30	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	17,800
	4/27/2023	12	NS					<10.0	<10.0	<10.0	<10.0	2,120

**TABLE 1**  
**SOIL SAMPLE ANALYTICAL RESULTS**

Harroun 15 #008  
Oxy USA, Inc.  
Eddy County, New Mexico  
Ensolum Project No. 03B1417046

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total TPH (GRO+DRO+MRO) (mg/kg)	Chloride (mg/kg)
New Mexico Oil Conservation Division Closure Criteria for Soils Impacted by a Release (≤ 50 feet)			10	NE	NE	NE	50	NE	NE	NE	100	600
FS-31	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	7,600
	4/27/2023	12	NS									6,000
FS-32	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	276	110	386	7,460
	4/27/2023	12	NS									5,200
FS-33	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	107	36.6	144	4,640
	4/27/2023	12	NS									1,360
FS-34	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	6,880
	4/27/2023	12	NS									1,470
FS-35	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	14,900
	4/27/2023	12	NS									4,560
FS-36	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	403	148	551	3,760
	4/27/2023	12	NS									3,360
FS-37	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	85.0	30.0	115	6,480
	4/27/2023	12	NS									832
FS-38	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	1,250
	4/27/2023	12	NS									1,070
FS-39	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	2,560
	4/27/2023	12	NS									656
FS-40	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	119	28.1	147	10,300
	4/27/2023	12	NS									9,000
FS-41	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	34.6	<10.0	34.6	7,600
	4/27/2023	12	NS									6,240
FS-42	3/31/2023	8	<0.050	<0.050	<0.050	0.237	<0.300	35.7	6,820	1,600	8,456	6,130
	4/27/2023	12	NS									2,760
FS-43	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	12.8	2,590	820	3,423	3,800
	4/27/2023	12	NS									3,360
FS-44	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	184	60.0	244	8,800
	4/27/2023	12	NS									2,720
FS-45	3/31/2023	8	<0.050	0.066	0.157	0.969	1.19	79.8	8,640	2,030	10,750	14,600
	4/27/2023	12	NS									5,280
	5/23/2023	12	NS									1,070

**TABLE 1**  
**SOIL SAMPLE ANALYTICAL RESULTS**

Harroun 15 #008  
Oxy USA, Inc.  
Eddy County, New Mexico  
Ensolum Project No. 03B1417046

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total TPH (GRO+DRO+MRO) (mg/kg)	Chloride (mg/kg)
New Mexico Oil Conservation Division Closure Criteria for Soils Impacted by a Release (≤ 50 feet)			10	NE	NE	NE	50	NE	NE	NE	100	600
FS-46	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	15.5	1,440	400	1,856	4,960
	4/27/2023	12	NS					<10.0	<10.0	<10.0	<10.0	5,200
FS-47	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	77.1	29.8	107	9,460
	4/27/2023	12	NS					<10.0	<10.0	<10.0	<10.0	3,680
FS-48	3/31/2023	8	<0.050	<0.050	<0.050	0.327	0.327	56.5	5,880	1,370	7,307	5,760
	4/27/2023	12	NS					<10.0	41.7	<10.0	41.7	9,000
FS-49	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	20.3	<10.0	20.3	2,200
	4/27/2023	12	NS					<10.0	<10.0	<10.0	<10.0	2,520
FS-50	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	110	39.4	149	7,600
	4/27/2023	12	NS					<10.0	21.5	<10.0	21.5	11,000
FS-51	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	974	239	1,213	4,480
	4/27/2023	12	NS					<10.0	<10.0	<10.0	<10.0	4,800
FS-52	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	136	56.8	193	4,800
	4/27/2023	12	NS					<10.0	<10.0	<10.0	<10.0	4,640
FS-53	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	239	67.8	307	3,240
	4/27/2023	12	NS					<10.0	<10.0	<10.0	<10.0	3,520
	5/23/2023	12	NS					<10.0	<10.0	<10.0	<10.0	848
FS-54	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	352
FS-55	3/31/2023	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	64.0

**TABLE 1**  
**SOIL SAMPLE ANALYTICAL RESULTS**

Harroun 15 #008

Oxy USA, Inc.

Eddy County, New Mexico

Ensolum Project No. 03B1417046

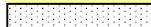
Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total TPH (GRO+DRO+MRO) (mg/kg)	Chloride (mg/kg)
New Mexico Oil Conservation Division Closure Criteria for Soils Impacted by a Release (≤ 50 feet)			10	NE	NE	NE	50	NE	NE	NE	100	600
Sidewall Sample Analytical Results												
SW-1	3/31/2023	0 - 8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	896
	4/27/2023	0 - 12	NS									5,120
	5/23/2023	0 - 12	NS									304
SW-2	3/31/2023	0 - 8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	864
	4/27/2023	0 - 12	NS									6,720
	5/23/2023	0 - 12	NS									288
SW-3	3/31/2023	0 - 8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	448
SW-4	3/31/2023	0 - 8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	6,600
	4/27/2023	0 - 12	NS									9,330
	5/23/2023	0 - 12	NS									4,640
	6/13/2023	0 - 12	NS									752
SW-5	3/31/2023	0 - 8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	544
SW-6	3/31/2023	0 - 8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	4,720
	4/27/2023	0 - 12	NS									26,000
	5/23/2023	0 - 12	NS									192
SW-7	3/31/2023	0 - 8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	3,360
	4/27/2023	0 - 12	NS									24,000
	5/23/2023	0 - 12	NS									144
SW-8	3/31/2023	0 - 8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	1,310
	4/27/2023	0 - 12	NS									19,600
	5/23/2023	0 - 12	NS									128
SW-9	3/31/2023	0 - 8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	396	148	544	9,730
	4/27/2023	0 - 12	NS									8,000
	5/23/2023	0 - 12	NS									144
SW-10	3/31/2023	0 - 8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	47.4	11.9	59.3	1,230
	4/27/2023	0 - 12	NS									3,520
	5/23/2023	0 - 12	NS									208
SW-11	3/31/2023	0 - 8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	14.8	<10.0	14.8	3,600
	4/27/2023	0 - 12	NS									336
SW-12	3/31/2023	0 - 8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	876	246	1,122	5,600
	4/27/2023	0 - 12	NS									1,200
	5/23/2023	0 - 12	NS									32.0

## TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS

Harroun 15 #008  
Oxy USA, Inc.  
Eddy County, New Mexico  
Ensolum Project No. 03B1417046

Sample Designation	Date	Depth (feet bgs)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH MRO (mg/kg)	Total TPH (GRO+DRO+MRO) (mg/kg)	Chloride (mg/kg)
New Mexico Oil Conservation Division Closure Criteria for Soils Impacted by a Release (≤ 50 feet)			10	NE	NE	NE	50	NE	NE	NE	100	600
SW-13	3/31/2023	0 - 8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<b>64.0</b>
SW-14	3/31/2023	0 - 8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<b>96.0</b>
SW-15	3/31/2023	0 - 8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<b>144</b>
SW-16	3/31/2023	0 - 8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<b>64.0</b>
SW-17	3/31/2023	0 - 8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<b>80.0</b>
SW-18	3/31/2023	0 - 8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<b>16.0</b>
SW-19	3/31/2023	0 - 8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<b>384</b>
SW-20	3/31/2023	0 - 8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<b>576</b>
SW-21	3/31/2023	0 - 8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<b>256</b>
SW-22	3/31/2023	0 - 8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<b>112</b>
SW-23	3/31/2023	0 - 8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	<b>272</b>

Concentrations in **bold** and yellow exceed the New Mexico Oil Conservation Division Closure Criteria for Soils Impacted by a Release (≤ 50 feet)

 Additional Excavation and/or Re-Sample

bgs: below ground surface

mg/kg: milligrams per kilogram

NA: Not Applicable

NE: Not Established

NS: Not Sampled

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

MRO: Motor Oil/Lube Oil Range Organics

TPH: Total Petroleum Hydrocarbon



**TABLE 2**  
**GROUNDWATER SAMPLE ANALYTICAL RESULTS**

Harroun 15 #008  
Oxy USA, Inc.  
Eddy County, New Mexico  
Ensolum Project No. 03B1417046

Sample Designation	Date	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Total BTEX (mg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)	TPH MRO (mg/L)	Total TPH (GRO+DRO+MRO) (mg/L)	Chloride (mg/L)	TDS (mg/L)
New Mexico Water Quality Control Commission Groundwater Quality Standards		0.005	1	0.7	0.62		NE	NE	NE	NE	250.0	10,000
<b>Grab Water Sample Analytical Results</b>												
*Water 1	11/8/2023			NS					NS		<b>41,000</b>	NS
<b>Background Water Sample Analytical Results</b>												
BMW-1	11/8/2023			NS					NS		<b>5,510</b>	<b>18,700</b>
BMW-2	11/8/2023			NS					NS		<b>6,160</b>	<b>16,300</b>

Concentrations in **bold** and yellow exceed the applicable New Mexico Water Quality Control Commission Groundwater Quality Standards

\* Grab sample taken from soil boring SB 1

mg/L: milligrams per Liter

NA: Not Applicable

NE: Not Established

NS: Not Sampled

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

MRO: Motor Oil/Lube Oil Range Organics

TPH: Total Petroleum Hydrocarbon

TDS: Total Dissolve Solids



---

## APPENDIX E

### Laboratory Data Sheets and Chain-of-Custody Documentation

---



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

---

October 04, 2018

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: HARROUN 15-8

Enclosed are the results of analyses for samples received by the laboratory on 09/28/18 11:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/17/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: SP 1 @ SURFACE (H802759-01)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.100	0.100	09/29/2018	ND	2.04	102	2.00	0.0515	
<b>Toluene*</b>	<b>1.36</b>	0.100	09/29/2018	ND	2.21	110	2.00	0.00298	
<b>Ethylbenzene*</b>	<b>0.423</b>	0.100	09/29/2018	ND	2.33	117	2.00	0.0137	
<b>Total Xylenes*</b>	<b>1.47</b>	0.300	09/29/2018	ND	6.90	115	6.00	0.0534	
<b>Total BTEX</b>	<b>3.26</b>	0.600	09/29/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.7 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>7200</b>	16.0	09/29/2018	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10*</b>	<b>204</b>	100	09/29/2018	ND	198	98.8	200	1.98		
<b>DRO &gt;C10-C28*</b>	<b>19200</b>	100	09/29/2018	ND	189	94.5	200	17.9		
<b>EXT DRO &gt;C28-C36</b>	<b>4910</b>	100	09/29/2018	ND						

Surrogate: 1-Chlorooctane 102 % 41-142

Surrogate: 1-Chlorooctadecane 741 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/18/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: SP 1 @ 1' (H802759-02)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/02/2018	ND	1.74	87.2	2.00	1.91	
Toluene*	<0.050	0.050	10/02/2018	ND	1.92	95.9	2.00	1.57	
Ethylbenzene*	<0.050	0.050	10/02/2018	ND	2.04	102	2.00	1.75	
Total Xylenes*	<0.150	0.150	10/02/2018	ND	5.89	98.2	6.00	1.84	
Total BTEX	<0.300	0.300	10/02/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8660	16.0	10/02/2018	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/01/2018	ND	195	97.6	200	2.68	
DRO >C10-C28*	<10.0	10.0	10/01/2018	ND	179	89.7	200	7.09	
EXT DRO >C28-C36	<10.0	10.0	10/01/2018	ND					

Surrogate: 1-Chlorooctane 92.0 % 41-142

Surrogate: 1-Chlorooctadecane 89.4 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/18/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: SP 1 @ 2' (H802759-03)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/02/2018	ND	1.74	87.2	2.00	1.91	
Toluene*	<0.050	0.050	10/02/2018	ND	1.92	95.9	2.00	1.57	
Ethylbenzene*	<0.050	0.050	10/02/2018	ND	2.04	102	2.00	1.75	
Total Xylenes*	<0.150	0.150	10/02/2018	ND	5.89	98.2	6.00	1.84	
Total BTEX	<0.300	0.300	10/02/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>2440</b>	16.0	10/02/2018	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/01/2018	ND	195	97.6	200	2.68	
DRO >C10-C28*	<10.0	10.0	10/01/2018	ND	179	89.7	200	7.09	
EXT DRO >C28-C36	<10.0	10.0	10/01/2018	ND					

Surrogate: 1-Chlorooctane 93.6 % 41-142

Surrogate: 1-Chlorooctadecane 92.1 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/18/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: SP 1 @ 4' (H802759-04)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32800	16.0	10/02/2018	ND	416	104	400	3.77	

**Sample ID: SP 1 @ 6' (H802759-05)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	22400	16.0	10/02/2018	ND	416	104	400	3.77	

**Sample ID: SP 1 @ 8' (H802759-06)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6260	16.0	10/02/2018	ND	416	104	400	3.77	

**Sample ID: SP 1 @ 9' (H802759-07)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	384	16.0	10/02/2018	ND	416	104	400	3.77	

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/18/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: SP 1 @ 10' (H802759-08)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/02/2018	ND	1.74	87.2	2.00	1.91	
Toluene*	<0.050	0.050	10/02/2018	ND	1.92	95.9	2.00	1.57	
Ethylbenzene*	<0.050	0.050	10/02/2018	ND	2.04	102	2.00	1.75	
Total Xylenes*	<0.150	0.150	10/02/2018	ND	5.89	98.2	6.00	1.84	
Total BTEX	<0.300	0.300	10/02/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	416	16.0	10/02/2018	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/01/2018	ND	195	97.6	200	2.68	
DRO >C10-C28*	<10.0	10.0	10/01/2018	ND	179	89.7	200	7.09	
EXT DRO >C28-C36	<10.0	10.0	10/01/2018	ND					

Surrogate: 1-Chlorooctane 95.5 % 41-142

Surrogate: 1-Chlorooctadecane 95.8 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/18/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: SP 2 @ SURFACE (H802759-09)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/02/2018	ND	1.74	87.2	2.00	1.91	
<b>Toluene*</b>	<b>0.288</b>	0.050	10/02/2018	ND	1.92	95.9	2.00	1.57	
<b>Ethylbenzene*</b>	<b>0.218</b>	0.050	10/02/2018	ND	2.04	102	2.00	1.75	
<b>Total Xylenes*</b>	<b>0.768</b>	0.150	10/02/2018	ND	5.89	98.2	6.00	1.84	
<b>Total BTEX</b>	<b>1.27</b>	0.300	10/02/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 124 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>12400</b>	16.0	10/02/2018	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<100	100	10/02/2018	ND	195	97.6	200	2.68		
<b>DRO &gt;C10-C28*</b>	<b>20400</b>	100	10/02/2018	ND	179	89.7	200	7.09		
<b>EXT DRO &gt;C28-C36</b>	<b>5240</b>	100	10/02/2018	ND						

Surrogate: 1-Chlorooctane 108 % 41-142

Surrogate: 1-Chlorooctadecane 844 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/18/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: SP 2 @ 1' (H802759-10)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/02/2018	ND	1.74	87.2	2.00	1.91	
Toluene*	<0.050	0.050	10/02/2018	ND	1.92	95.9	2.00	1.57	
<b>Ethylbenzene*</b>	<b>0.074</b>	0.050	10/02/2018	ND	2.04	102	2.00	1.75	
<b>Total Xylenes*</b>	<b>0.252</b>	0.150	10/02/2018	ND	5.89	98.2	6.00	1.84	
<b>Total BTEX</b>	<b>0.326</b>	0.300	10/02/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>18800</b>	16.0	10/02/2018	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<100	100	10/02/2018	ND	195	97.6	200	2.68		
<b>DRO &gt;C10-C28*</b>	<b>5800</b>	100	10/02/2018	ND	179	89.7	200	7.09		
<b>EXT DRO &gt;C28-C36</b>	<b>1680</b>	100	10/02/2018	ND						

Surrogate: 1-Chlorooctane 105 % 41-142

Surrogate: 1-Chlorooctadecane 328 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/18/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: SP 2 @ 2' (H802759-11)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/02/2018	ND	1.74	87.2	2.00	1.91	
Toluene*	<0.050	0.050	10/02/2018	ND	1.92	95.9	2.00	1.57	
Ethylbenzene*	<0.050	0.050	10/02/2018	ND	2.04	102	2.00	1.75	
Total Xylenes*	<0.150	0.150	10/02/2018	ND	5.89	98.2	6.00	1.84	
Total BTEX	<0.300	0.300	10/02/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4400	16.0	10/02/2018	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/02/2018	ND	195	97.6	200	2.68	
DRO >C10-C28*	<10.0	10.0	10/02/2018	ND	179	89.7	200	7.09	
EXT DRO >C28-C36	<10.0	10.0	10/02/2018	ND					

Surrogate: 1-Chlorooctane 96.1 % 41-142

Surrogate: 1-Chlorooctadecane 97.1 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/18/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: SP 2 @ 4' (H802759-12)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1120	16.0	10/02/2018	ND	416	104	400	3.77	

**Sample ID: SP 2 @ 6' (H802759-13)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	800	16.0	10/02/2018	ND	416	104	400	3.77	

**Sample ID: SP 2 @ 8' (H802759-14)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	976	16.0	10/02/2018	ND	416	104	400	3.77	

**Sample ID: SP 2 @ 9' (H802759-15)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	10/02/2018	ND	416	104	400	3.77	

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/18/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: SP 2 @ 10' (H802759-16)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/02/2018	ND	1.74	87.2	2.00	1.91	
Toluene*	<0.050	0.050	10/02/2018	ND	1.92	95.9	2.00	1.57	
Ethylbenzene*	<0.050	0.050	10/02/2018	ND	2.04	102	2.00	1.75	
Total Xylenes*	<0.150	0.150	10/02/2018	ND	5.89	98.2	6.00	1.84	
Total BTEX	<0.300	0.300	10/02/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	272	16.0	10/02/2018	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/02/2018	ND	195	97.6	200	2.68	
DRO >C10-C28*	<10.0	10.0	10/02/2018	ND	179	89.7	200	7.09	
EXT DRO >C28-C36	<10.0	10.0	10/02/2018	ND					

Surrogate: 1-Chlorooctane 95.7 % 41-142

Surrogate: 1-Chlorooctadecane 94.4 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/18/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: SP 3 @ SURFACE (H802759-17)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/02/2018	ND	1.74	87.2	2.00	1.91	
<b>Toluene*</b>	<b>0.159</b>	0.050	10/02/2018	ND	1.92	95.9	2.00	1.57	
<b>Ethylbenzene*</b>	<b>0.218</b>	0.050	10/02/2018	ND	2.04	102	2.00	1.75	
<b>Total Xylenes*</b>	<b>0.675</b>	0.150	10/02/2018	ND	5.89	98.2	6.00	1.84	
<b>Total BTEX</b>	<b>1.05</b>	0.300	10/02/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 122 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>21600</b>	16.0	10/02/2018	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<100	100	10/02/2018	ND	195	97.6	200	2.68		
<b>DRO &gt;C10-C28*</b>	<b>14100</b>	100	10/02/2018	ND	179	89.7	200	7.09		
<b>EXT DRO &gt;C28-C36</b>	<b>3530</b>	100	10/02/2018	ND						

Surrogate: 1-Chlorooctane 104 % 41-142

Surrogate: 1-Chlorooctadecane 569 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/18/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: SP 3 @ 1' (H802759-18)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/02/2018	ND	1.74	87.2	2.00	1.91	
Toluene*	<0.050	0.050	10/02/2018	ND	1.92	95.9	2.00	1.57	
Ethylbenzene*	<0.050	0.050	10/02/2018	ND	2.04	102	2.00	1.75	
Total Xylenes*	<0.150	0.150	10/02/2018	ND	5.89	98.2	6.00	1.84	
Total BTEX	<0.300	0.300	10/02/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>41200</b>	16.0	10/02/2018	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/02/2018	ND	195	97.6	200	2.68	
<b>DRO &gt;C10-C28*</b>	<b>125</b>	10.0	10/02/2018	ND	179	89.7	200	7.09	
<b>EXT DRO &gt;C28-C36</b>	<b>42.2</b>	10.0	10/02/2018	ND					

Surrogate: 1-Chlorooctane 96.5 % 41-142

Surrogate: 1-Chlorooctadecane 103 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/18/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: SP 3 @ 2' (H802759-19)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/02/2018	ND	1.74	87.2	2.00	1.91	
Toluene*	<0.050	0.050	10/02/2018	ND	1.92	95.9	2.00	1.57	
Ethylbenzene*	<0.050	0.050	10/02/2018	ND	2.04	102	2.00	1.75	
Total Xylenes*	<0.150	0.150	10/02/2018	ND	5.89	98.2	6.00	1.84	
Total BTEX	<0.300	0.300	10/02/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5680	16.0	10/02/2018	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/02/2018	ND	195	97.6	200	2.68	
DRO >C10-C28*	<10.0	10.0	10/02/2018	ND	179	89.7	200	7.09	
EXT DRO >C28-C36	<10.0	10.0	10/02/2018	ND					

Surrogate: 1-Chlorooctane 98.2 % 41-142

Surrogate: 1-Chlorooctadecane 99.8 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/18/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: SP 3 @ 4' (H802759-20)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>3600</b>	16.0	10/02/2018	ND	432	108	400	0.00	

**Sample ID: SP 3 @ 6' (H802759-21)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>176</b>	16.0	10/02/2018	ND	432	108	400	0.00	

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/19/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: SP 3 @ 7' (H802759-22)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/02/2018	ND	1.74	87.2	2.00	1.91	
Toluene*	<0.050	0.050	10/02/2018	ND	1.92	95.9	2.00	1.57	
Ethylbenzene*	<0.050	0.050	10/02/2018	ND	2.04	102	2.00	1.75	
Total Xylenes*	<0.150	0.150	10/02/2018	ND	5.89	98.2	6.00	1.84	
Total BTEX	<0.300	0.300	10/02/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	224	16.0	10/02/2018	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/02/2018	ND	195	97.6	200	2.68	
DRO >C10-C28*	<10.0	10.0	10/02/2018	ND	179	89.7	200	7.09	
EXT DRO >C28-C36	<10.0	10.0	10/02/2018	ND					

Surrogate: 1-Chlorooctane 92.9 % 41-142

Surrogate: 1-Chlorooctadecane 92.9 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/19/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: SP 4 @ SURFACE (H802759-23)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/02/2018	ND	1.74	87.2	2.00	1.91	
Toluene*	<0.050	0.050	10/02/2018	ND	1.92	95.9	2.00	1.57	
Ethylbenzene*	<0.050	0.050	10/02/2018	ND	2.04	102	2.00	1.75	
Total Xylenes*	<0.150	0.150	10/02/2018	ND	5.89	98.2	6.00	1.84	
Total BTEX	<0.300	0.300	10/02/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>5360</b>	16.0	10/02/2018	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<50.0	50.0	10/02/2018	ND	195	97.6	200	2.68		
<b>DRO &gt;C10-C28*</b>	<b>3190</b>	50.0	10/02/2018	ND	179	89.7	200	7.09		
<b>EXT DRO &gt;C28-C36</b>	<b>1790</b>	50.0	10/02/2018	ND						

Surrogate: 1-Chlorooctane 99.0 % 41-142

Surrogate: 1-Chlorooctadecane 227 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
Cliff Brunson  
P.O. Box 805  
Hobbs NM, 88241  
Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/19/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: SP 4 @ 1' (H802759-24)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/02/2018	ND	1.74	87.2	2.00	1.91	
Toluene*	<0.050	0.050	10/02/2018	ND	1.92	95.9	2.00	1.57	
Ethylbenzene*	<0.050	0.050	10/02/2018	ND	2.04	102	2.00	1.75	
Total Xylenes*	<0.150	0.150	10/02/2018	ND	5.89	98.2	6.00	1.84	
Total BTEX	<0.300	0.300	10/02/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>3320</b>	16.0	10/02/2018	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/02/2018	ND	195	97.6	200	2.68	
<b>DRO &gt;C10-C28*</b>	<b>46.1</b>	10.0	10/02/2018	ND	179	89.7	200	7.09	
<b>EXT DRO &gt;C28-C36</b>	<b>14.3</b>	10.0	10/02/2018	ND					

Surrogate: 1-Chlorooctane 76.9 % 41-142

Surrogate: 1-Chlorooctadecane 79.3 % 37.6-147

Cardinal Laboratories

\* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/19/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: SP 4 @ 2' (H802759-25)**

BTEX 8021B		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/02/2018	ND	1.74	87.2	2.00	1.91		
Toluene*	<0.050	0.050	10/02/2018	ND	1.92	95.9	2.00	1.57		
Ethylbenzene*	<0.050	0.050	10/02/2018	ND	2.04	102	2.00	1.75		
Total Xylenes*	<0.150	0.150	10/02/2018	ND	5.89	98.2	6.00	1.84		
Total BTEX	<0.300	0.300	10/02/2018	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	7840	16.0	10/02/2018	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	10/02/2018	ND	195	97.6	200	2.68		
DRO >C10-C28*	<10.0	10.0	10/02/2018	ND	179	89.7	200	7.09		
EXT DRO >C28-C36	<10.0	10.0	10/02/2018	ND						

Surrogate: 1-Chlorooctane 92.0 % 41-142

Surrogate: 1-Chlorooctadecane 90.5 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/19/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: SP 4 @ 4' (H802759-26)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>2080</b>	16.0	10/02/2018	ND	432	108	400	0.00	

**Sample ID: SP 4 @ 6' (H802759-27)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>288</b>	16.0	10/02/2018	ND	432	108	400	0.00	

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/19/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: SP 4 @ 7' (H802759-28)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/02/2018	ND	1.74	87.2	2.00	1.91	
Toluene*	<0.050	0.050	10/02/2018	ND	1.92	95.9	2.00	1.57	
Ethylbenzene*	<0.050	0.050	10/02/2018	ND	2.04	102	2.00	1.75	
Total Xylenes*	<0.150	0.150	10/02/2018	ND	5.89	98.2	6.00	1.84	
Total BTEX	<0.300	0.300	10/02/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>320</b>	16.0	10/02/2018	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/02/2018	ND	195	97.6	200	2.68	
DRO >C10-C28*	<10.0	10.0	10/02/2018	ND	179	89.7	200	7.09	
EXT DRO >C28-C36	<10.0	10.0	10/02/2018	ND					

Surrogate: 1-Chlorooctane 97.4 % 41-142

Surrogate: 1-Chlorooctadecane 96.7 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/19/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: SP 5 @ SURFACE (H802759-29)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>0.053</b>	0.050	10/02/2018	ND	1.74	87.2	2.00	1.91	
<b>Toluene*</b>	<b>1.21</b>	0.050	10/02/2018	ND	1.92	95.9	2.00	1.57	
<b>Ethylbenzene*</b>	<b>1.68</b>	0.050	10/02/2018	ND	2.04	102	2.00	1.75	
<b>Total Xylenes*</b>	<b>5.72</b>	0.150	10/02/2018	ND	5.89	98.2	6.00	1.84	
<b>Total BTEX</b>	<b>8.66</b>	0.300	10/02/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.9 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>3400</b>	16.0	10/02/2018	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10*</b>	<b>577</b>	100	10/02/2018	ND	195	97.6	200	2.68		
<b>DRO &gt;C10-C28*</b>	<b>28000</b>	100	10/02/2018	ND	179	89.7	200	7.09		
<b>EXT DRO &gt;C28-C36</b>	<b>6520</b>	100	10/02/2018	ND						

Surrogate: 1-Chlorooctane 161 % 41-142

Surrogate: 1-Chlorooctadecane 1070 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/19/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: SP 5 @ 1' (H802759-30)**

BTEX 8021B		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/02/2018	ND	1.74	87.2	2.00	1.91	
<b>Toluene*</b>	<b>0.067</b>	0.050	10/02/2018	ND	1.92	95.9	2.00	1.57	
<b>Ethylbenzene*</b>	<b>0.213</b>	0.050	10/02/2018	ND	2.04	102	2.00	1.75	
<b>Total Xylenes*</b>	<b>0.505</b>	0.150	10/02/2018	ND	5.89	98.2	6.00	1.84	
<b>Total BTEX</b>	<b>0.785</b>	0.300	10/02/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 131 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>49200</b>	16.0	10/02/2018	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10*</b>	<b>51.2</b>	50.0	10/02/2018	ND	195	97.6	200	2.68		
<b>DRO &gt;C10-C28*</b>	<b>2720</b>	50.0	10/02/2018	ND	179	89.7	200	7.09		
<b>EXT DRO &gt;C28-C36</b>	<b>626</b>	50.0	10/02/2018	ND						

Surrogate: 1-Chlorooctane 112 % 41-142

Surrogate: 1-Chlorooctadecane 193 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/19/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: SP 5 @ 2' (H802759-31)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/02/2018	ND	1.67	83.3	2.00	0.804	
Toluene*	<0.050	0.050	10/02/2018	ND	1.82	90.9	2.00	0.690	
Ethylbenzene*	<0.050	0.050	10/02/2018	ND	1.91	95.3	2.00	0.826	
Total Xylenes*	<0.150	0.150	10/02/2018	ND	5.75	95.9	6.00	0.810	
Total BTEX	<0.300	0.300	10/02/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 84.6 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	34000	16.0	10/02/2018	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/02/2018	ND	193	96.7	200	0.990	
DRO >C10-C28*	<10.0	10.0	10/02/2018	ND	183	91.5	200	0.673	
EXT DRO >C28-C36	<10.0	10.0	10/02/2018	ND					

Surrogate: 1-Chlorooctane 75.5 % 41-142

Surrogate: 1-Chlorooctadecane 76.2 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/19/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: SP 5 @ 3' (H802759-32)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/02/2018	ND	1.67	83.3	2.00	0.804	
Toluene*	<0.050	0.050	10/02/2018	ND	1.82	90.9	2.00	0.690	
Ethylbenzene*	<0.050	0.050	10/02/2018	ND	1.91	95.3	2.00	0.826	
Total Xylenes*	<0.150	0.150	10/02/2018	ND	5.75	95.9	6.00	0.810	
Total BTEX	<0.300	0.300	10/02/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 82.4 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	30800	16.0	10/02/2018	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/02/2018	ND	193	96.7	200	0.990	
DRO >C10-C28*	<10.0	10.0	10/02/2018	ND	183	91.5	200	0.673	
EXT DRO >C28-C36	<10.0	10.0	10/02/2018	ND					

Surrogate: 1-Chlorooctane 85.5 % 41-142

Surrogate: 1-Chlorooctadecane 84.9 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/19/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: SP 5 @ 4' (H802759-33)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	24000	16.0	10/02/2018	ND	432	108	400	0.00	

**Sample ID: SP 5 @ 7' (H802759-34)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	41200	16.0	10/02/2018	ND	432	108	400	0.00	

**Sample ID: SP 5 @ 9' (H802759-35)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	38400	16.0	10/02/2018	ND	432	108	400	0.00	

**Sample ID: SP 5 @ 12' (H802759-36)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7200	16.0	10/02/2018	ND	432	108	400	0.00	

**Sample ID: SP 5 @ 15' (H802759-37)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5440	16.0	10/02/2018	ND	432	108	400	0.00	

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/19/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: SP 5 @ 18' (H802759-38)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/02/2018	ND	1.67	83.3	2.00	0.804	
Toluene*	<0.050	0.050	10/02/2018	ND	1.82	90.9	2.00	0.690	
Ethylbenzene*	<0.050	0.050	10/02/2018	ND	1.91	95.3	2.00	0.826	
Total Xylenes*	<0.150	0.150	10/02/2018	ND	5.75	95.9	6.00	0.810	
Total BTEX	<0.300	0.300	10/02/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 83.5 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3400	16.0	10/02/2018	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/02/2018	ND	193	96.7	200	0.990	
DRO >C10-C28*	<10.0	10.0	10/02/2018	ND	183	91.5	200	0.673	
EXT DRO >C28-C36	<10.0	10.0	10/02/2018	ND					

Surrogate: 1-Chlorooctane 89.6 % 41-142

Surrogate: 1-Chlorooctadecane 88.8 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/19/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: SP 6 @ SURFACE (H802759-39)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/02/2018	ND	1.67	83.3	2.00	0.804	
<b>Toluene*</b>	<b>0.203</b>	0.050	10/02/2018	ND	1.82	90.9	2.00	0.690	
<b>Ethylbenzene*</b>	<b>0.408</b>	0.050	10/02/2018	ND	1.91	95.3	2.00	0.826	
<b>Total Xylenes*</b>	<b>2.09</b>	0.150	10/02/2018	ND	5.75	95.9	6.00	0.810	
<b>Total BTEX</b>	<b>2.70</b>	0.300	10/02/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 90.2 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>48000</b>	16.0	10/02/2018	ND	432	108	400	0.00	QM-07

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<100	100	10/02/2018	ND	193	96.7	200	0.990		
<b>DRO &gt;C10-C28*</b>	<b>13900</b>	100	10/02/2018	ND	183	91.5	200	0.673		
<b>EXT DRO &gt;C28-C36</b>	<b>4290</b>	100	10/02/2018	ND						

Surrogate: 1-Chlorooctane 101 % 41-142

Surrogate: 1-Chlorooctadecane 729 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/19/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: SP 6 @ 1' (H802759-40)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/02/2018	ND	1.67	83.3	2.00	0.804	
Toluene*	<0.050	0.050	10/02/2018	ND	1.82	90.9	2.00	0.690	
Ethylbenzene*	<0.050	0.050	10/02/2018	ND	1.91	95.3	2.00	0.826	
<b>Total Xylenes*</b>	<b>0.171</b>	0.150	10/02/2018	ND	5.75	95.9	6.00	0.810	
Total BTEX	<0.300	0.300	10/02/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 84.8 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>18400</b>	16.0	10/02/2018	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/02/2018	ND	193	96.7	200	0.990	
<b>DRO &gt;C10-C28*</b>	<b>1090</b>	10.0	10/02/2018	ND	183	91.5	200	0.673	
<b>EXT DRO &gt;C28-C36</b>	<b>240</b>	10.0	10/02/2018	ND					

Surrogate: 1-Chlorooctane 83.2 % 41-142

Surrogate: 1-Chlorooctadecane 118 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/20/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: SP 6 @ 2' (H802759-41)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/02/2018	ND	1.67	83.3	2.00	0.804	
Toluene*	<0.050	0.050	10/02/2018	ND	1.82	90.9	2.00	0.690	
Ethylbenzene*	<0.050	0.050	10/02/2018	ND	1.91	95.3	2.00	0.826	
Total Xylenes*	<0.150	0.150	10/02/2018	ND	5.75	95.9	6.00	0.810	
Total BTEX	<0.300	0.300	10/02/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 79.7 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>11100</b>	16.0	10/02/2018	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/02/2018	ND	193	96.7	200	0.990	
<b>DRO &gt;C10-C28*</b>	<b>40.5</b>	10.0	10/02/2018	ND	183	91.5	200	0.673	
<b>EXT DRO &gt;C28-C36</b>	<b>11.0</b>	10.0	10/02/2018	ND					

Surrogate: 1-Chlorooctane 81.3 % 41-142

Surrogate: 1-Chlorooctadecane 83.2 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/20/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: SP 6 @ 3' (H802759-42)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/02/2018	ND	1.67	83.3	2.00	0.804	
Toluene*	<0.050	0.050	10/02/2018	ND	1.82	90.9	2.00	0.690	
Ethylbenzene*	<0.050	0.050	10/02/2018	ND	1.91	95.3	2.00	0.826	
Total Xylenes*	<0.150	0.150	10/02/2018	ND	5.75	95.9	6.00	0.810	
Total BTEX	<0.300	0.300	10/02/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 80.8 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>13300</b>	16.0	10/02/2018	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/02/2018	ND	193	96.7	200	0.990	
<b>DRO &gt;C10-C28*</b>	<b>24.3</b>	10.0	10/02/2018	ND	183	91.5	200	0.673	
EXT DRO >C28-C36	<10.0	10.0	10/02/2018	ND					

Surrogate: 1-Chlorooctane 90.8 % 41-142

Surrogate: 1-Chlorooctadecane 91.8 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/20/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: SP 6 @ 4' (H802759-43)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	14400	16.0	10/02/2018	ND	432	108	400	0.00	

**Sample ID: SP 6 @ 7' (H802759-44)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	20400	16.0	10/02/2018	ND	432	108	400	0.00	

**Sample ID: SP 6 @ 9' (H802759-45)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1760	16.0	10/02/2018	ND	432	108	400	0.00	

**Sample ID: SP 6 @ 12' (H802759-46)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8800	16.0	10/02/2018	ND	432	108	400	0.00	

**Sample ID: SP 6 @ 15' (H802759-47)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5760	16.0	10/02/2018	ND	432	108	400	0.00	

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/20/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: SP 6 @ 18' (H802759-48)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/02/2018	ND	1.67	83.3	2.00	0.804	
Toluene*	<0.050	0.050	10/02/2018	ND	1.82	90.9	2.00	0.690	
Ethylbenzene*	<0.050	0.050	10/02/2018	ND	1.91	95.3	2.00	0.826	
Total Xylenes*	<0.150	0.150	10/02/2018	ND	5.75	95.9	6.00	0.810	
Total BTEX	<0.300	0.300	10/02/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 82.8 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>6960</b>	16.0	10/02/2018	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/02/2018	ND	193	96.7	200	0.990	
<b>DRO &gt;C10-C28*</b>	<b>142</b>	10.0	10/02/2018	ND	183	91.5	200	0.673	
<b>EXT DRO &gt;C28-C36</b>	<b>14.4</b>	10.0	10/02/2018	ND					

Surrogate: 1-Chlorooctane 88.1 % 41-142

Surrogate: 1-Chlorooctadecane 95.3 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/20/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: SP 7 @ SURFACE (H802759-49)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/02/2018	ND	1.67	83.3	2.00	0.804	
Toluene*	<0.050	0.050	10/02/2018	ND	1.82	90.9	2.00	0.690	
Ethylbenzene*	<0.050	0.050	10/02/2018	ND	1.91	95.3	2.00	0.826	
<b>Total Xylenes*</b>	<b>0.177</b>	0.150	10/02/2018	ND	5.75	95.9	6.00	0.810	
Total BTEX	<0.300	0.300	10/02/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 78.4 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>3920</b>	16.0	10/02/2018	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<100	100	10/02/2018	ND	193	96.7	200	0.990		
<b>DRO &gt;C10-C28*</b>	<b>6550</b>	100	10/02/2018	ND	183	91.5	200	0.673		
<b>EXT DRO &gt;C28-C36</b>	<b>1930</b>	100	10/02/2018	ND						

Surrogate: 1-Chlorooctane 66.4 % 41-142

Surrogate: 1-Chlorooctadecane 362 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/20/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: SP 7 @ 1' (H802759-50)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/02/2018	ND	1.67	83.3	2.00	0.804	
Toluene*	<0.050	0.050	10/02/2018	ND	1.82	90.9	2.00	0.690	
Ethylbenzene*	<0.050	0.050	10/02/2018	ND	1.91	95.3	2.00	0.826	
Total Xylenes*	<0.150	0.150	10/02/2018	ND	5.75	95.9	6.00	0.810	
Total BTEX	<0.300	0.300	10/02/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 80.9 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>16500</b>	16.0	10/02/2018	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/02/2018	ND	193	96.7	200	0.990	
<b>DRO &gt;C10-C28*</b>	<b>1110</b>	10.0	10/02/2018	ND	183	91.5	200	0.673	
<b>EXT DRO &gt;C28-C36</b>	<b>232</b>	10.0	10/02/2018	ND					

Surrogate: 1-Chlorooctane 93.0 % 41-142

Surrogate: 1-Chlorooctadecane 129 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/20/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: SP 7 @ 2' (H802759-51)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/02/2018	ND	1.67	83.3	2.00	0.804	
Toluene*	<0.050	0.050	10/02/2018	ND	1.82	90.9	2.00	0.690	
Ethylbenzene*	<0.050	0.050	10/02/2018	ND	1.91	95.3	2.00	0.826	
Total Xylenes*	<0.150	0.150	10/02/2018	ND	5.75	95.9	6.00	0.810	
Total BTEX	<0.300	0.300	10/02/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 80.0 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>6130</b>	16.0	10/02/2018	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/02/2018	ND	193	96.7	200	0.990	
<b>DRO &gt;C10-C28*</b>	<b>20.7</b>	10.0	10/02/2018	ND	183	91.5	200	0.673	
<b>EXT DRO &gt;C28-C36</b>	<b>10.2</b>	10.0	10/02/2018	ND					

Surrogate: 1-Chlorooctane 88.1 % 41-142

Surrogate: 1-Chlorooctadecane 91.8 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/20/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: SP 7 @ 3' (H802759-52)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/02/2018	ND	1.67	83.3	2.00	0.804	
Toluene*	<0.050	0.050	10/02/2018	ND	1.82	90.9	2.00	0.690	
Ethylbenzene*	<0.050	0.050	10/02/2018	ND	1.91	95.3	2.00	0.826	
Total Xylenes*	<0.150	0.150	10/02/2018	ND	5.75	95.9	6.00	0.810	
Total BTEX	<0.300	0.300	10/02/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 80.4 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	11600	16.0	10/02/2018	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/02/2018	ND	193	96.7	200	0.990	
DRO >C10-C28*	<10.0	10.0	10/02/2018	ND	183	91.5	200	0.673	
EXT DRO >C28-C36	<10.0	10.0	10/02/2018	ND					

Surrogate: 1-Chlorooctane 87.0 % 41-142

Surrogate: 1-Chlorooctadecane 87.5 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/20/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: SP 7 @ 5' (H802759-53)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>12400</b>	16.0	10/02/2018	ND	432	108	400	0.00	

**Sample ID: SP 7 @ 8' (H802759-54)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>1810</b>	16.0	10/02/2018	ND	432	108	400	0.00	

**Sample ID: SP 7 @ 11' (H802759-55)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>48.0</b>	16.0	10/02/2018	ND	432	108	400	0.00	

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/20/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: SP 7 @ 12' (H802759-56)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/02/2018	ND	1.67	83.3	2.00	0.804	
Toluene*	<0.050	0.050	10/02/2018	ND	1.82	90.9	2.00	0.690	
Ethylbenzene*	<0.050	0.050	10/02/2018	ND	1.91	95.3	2.00	0.826	
Total Xylenes*	<0.150	0.150	10/02/2018	ND	5.75	95.9	6.00	0.810	
Total BTEX	<0.300	0.300	10/02/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 79.6 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>32.0</b>	16.0	10/02/2018	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/02/2018	ND	193	96.7	200	0.990	
<b>DRO &gt;C10-C28*</b>	<b>69.6</b>	10.0	10/02/2018	ND	183	91.5	200	0.673	
<b>EXT DRO &gt;C28-C36</b>	<b>29.1</b>	10.0	10/02/2018	ND					

Surrogate: 1-Chlorooctane 92.6 % 41-142

Surrogate: 1-Chlorooctadecane 98.1 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/20/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: NORTH (H802759-57)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/02/2018	ND	1.67	83.3	2.00	0.804	
Toluene*	<0.050	0.050	10/02/2018	ND	1.82	90.9	2.00	0.690	
Ethylbenzene*	<0.050	0.050	10/02/2018	ND	1.91	95.3	2.00	0.826	
Total Xylenes*	<0.150	0.150	10/02/2018	ND	5.75	95.9	6.00	0.810	
Total BTEX	<0.300	0.300	10/02/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 80.3 % 69.8-142

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	10/02/2018	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/02/2018	ND	193	96.7	200	0.990	
DRO >C10-C28*	<10.0	10.0	10/02/2018	ND	183	91.5	200	0.673	
EXT DRO >C28-C36	<10.0	10.0	10/02/2018	ND					

Surrogate: 1-Chlorooctane 88.5 % 41-142

Surrogate: 1-Chlorooctadecane 88.3 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/20/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: EAST (H802759-58)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/02/2018	ND	1.74	86.8	2.00	0.736	
Toluene*	<0.050	0.050	10/02/2018	ND	1.86	93.2	2.00	0.845	
Ethylbenzene*	<0.050	0.050	10/02/2018	ND	1.97	98.5	2.00	1.41	
Total Xylenes*	<0.150	0.150	10/02/2018	ND	5.87	97.8	6.00	0.609	
Total BTEX	<0.300	0.300	10/02/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 83.6 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	10/02/2018	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/02/2018	ND	193	96.7	200	0.990	
DRO >C10-C28*	<10.0	10.0	10/02/2018	ND	183	91.5	200	0.673	
EXT DRO >C28-C36	<10.0	10.0	10/02/2018	ND					

Surrogate: 1-Chlorooctane 88.6 % 41-142

Surrogate: 1-Chlorooctadecane 89.5 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/20/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: WEST (H802759-59)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/02/2018	ND	1.74	86.8	2.00	0.736	
Toluene*	<0.050	0.050	10/02/2018	ND	1.86	93.2	2.00	0.845	
Ethylbenzene*	<0.050	0.050	10/02/2018	ND	1.97	98.5	2.00	1.41	
Total Xylenes*	<0.150	0.150	10/02/2018	ND	5.87	97.8	6.00	0.609	
Total BTEX	<0.300	0.300	10/02/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 83.8 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	10/02/2018	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/02/2018	ND	193	96.7	200	0.990	
DRO >C10-C28*	<10.0	10.0	10/02/2018	ND	183	91.5	200	0.673	
EXT DRO >C28-C36	<10.0	10.0	10/02/2018	ND					

Surrogate: 1-Chlorooctane 87.3 % 41-142

Surrogate: 1-Chlorooctadecane 87.7 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	09/28/2018	Sampling Date:	09/20/2018
Reported:	10/04/2018	Sampling Type:	Soil
Project Name:	HARROUN 15-8	Sampling Condition:	Cool & Intact
Project Number:	8-29-18	Sample Received By:	Tamara Oldaker
Project Location:	MALAGA, NM		

**Sample ID: SOUTH (H802759-60)**

BTEX 8021B		mg/kg		Analyzed By: ms					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/02/2018	ND	1.74	86.8	2.00	0.736	
Toluene*	<0.050	0.050	10/02/2018	ND	1.86	93.2	2.00	0.845	
Ethylbenzene*	<0.050	0.050	10/02/2018	ND	1.97	98.5	2.00	1.41	
Total Xylenes*	<0.150	0.150	10/02/2018	ND	5.87	97.8	6.00	0.609	
Total BTEX	<0.300	0.300	10/02/2018	ND					

Surrogate: 4-Bromofluorobenzene (PID) 84.8 % 69.8-142

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	10/02/2018	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/02/2018	ND	193	96.7	200	0.990	
DRO >C10-C28*	<10.0	10.0	10/02/2018	ND	183	91.5	200	0.673	
EXT DRO >C28-C36	<10.0	10.0	10/02/2018	ND					

Surrogate: 1-Chlorooctane 89.8 % 41-142

Surrogate: 1-Chlorooctadecane 91.6 % 37.6-147

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

- S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND Analyte NOT DETECTED at or above the reporting limit
RPD Relative Percent Difference
\*\* Samples not received at proper temperature of 6°C or below.
\*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service.

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



**ARDINAL LABORATORIES**  
 101 East Marland, Hobbs, NM 88240  
 (505) 393-2326 FAX (505) 393-2476

**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

Company Name: BBC International, Inc. Project Manager: Cliff Brunson Address: P.O. Box 805 City: Hobbs Phone #: 575-397-6388 Project #: _____ Project Name: <i>Harmon 15-8</i> Project Location: <i>Mz 292</i> Sampler Name: <i>✓</i>		P.O. #: _____ Company: _____ Attn: _____ Address: _____ City: _____ State: _____ Zip: _____ Fax #: _____	
State: NM Zip: 88241 Fax #: 575-397-0397 Project Owner: <i>OKY</i> City: _____ State: _____ Zip: _____		<b>BILL TO</b>	
(G)RAB OR (C)OMP. # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER : ACID/BASE: ICE / COOL OTHER :		<b>ANALYSIS REQUEST</b>	
Lab I.D. <i>H802759</i> Sample I.D. <i>SP10SCE</i>		DATE TIME DATE TIME	
1 <i>SP10SCE</i> 2 3 4 5 6 7 8 9 10 11 12		9-17 3:00 9-18 9:49 10-15 10:15 10-26 10:39 10-31 10:51 11-11 11:11 11-22 11:22 11-33 11:33 11-23 11:23	
Relinquished By: <i>[Signature]</i> Date: <i>11-30</i> Time: _____		Received By: <i>[Signature]</i> Date: _____ Time: _____	
Delivered By: (Circle One) Sampler - UPS - Bus - Other: <i>-SCE #99</i>		Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No	
Relinquished By: <i>[Signature]</i> Date: _____ Time: _____		CHECKED BY: _____ (Initials)	
Relinquished By: <i>[Signature]</i> Date: _____ Time: _____		REMARKS:	
Relinquished By: <i>[Signature]</i> Date: _____ Time: _____		Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #: _____ Add'l Fax #: _____	

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476



**CARDINAL LABORATORIES**  
 101 East Marland, Hobbs, NM 88240  
 (505) 393-2326 FAX (505) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: BBC International, Inc. Project Manager: Cliff Brunson Address: P.O. Box 805 City: Hobbs Phone #: 575-397-6388 Project #: _____ Project Name: <i>Hudson 15-0</i> Project Location: <i>Mz 1292</i> Sampler Name: <i>10</i>		State: NM Zip: 88241 Fax #: 575-397-0397 Project Owner: <i>OKY</i> City: _____ State: _____ Zip: _____ Phone #: _____ Fax #: _____		<b>BILL TO</b>		<b>ANALYSIS REQUEST</b>	
P.O. #: Company: Attn: Address: City: State: Zip:							
(G)RAB OR (C)OMP. # CONTAINERS MATRIX GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER : ACID/BASE: ICE / COOL OTHER : PRESERVY SAMPLING							
Lab I.D.	Sample I.D.	DATE	TIME				
11	SP202	9-18	1259	X	X	X	
12	SP204		122	X	X	X	
13	SP206		145	X	X	X	
14	SP208		212	X	X	X	
15	SP210		225	X	X	X	
16	SP30502		240	X	X	X	
17	SP30502		245	X	X	X	
18	SP30502		251	X	X	X	
19	SP30502		301	X	X	X	
20	SP30502		330	X	X	X	

PLEASE NOTE: Laboratory and Damages: Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analysis. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: *[Signature]* Date: *4-28-18* Time: *11:30*  
 Received By: *[Signature]* Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Relinquished By: *[Signature]* Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Received By: *[Signature]* Date: \_\_\_\_\_ Time: \_\_\_\_\_

Delivered By: (Circle One)  UPS  Bus  Other: *-5:40 AM*  
 Sample Condition:  Cool  Intact  
 Checked By: *[Signature]* (Initials) *TD.*

Phone Result:  Yes  No Add'l Phone #: \_\_\_\_\_  
 Fax Result:  Yes  No Add'l Fax #: \_\_\_\_\_  
 REMARKS:

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476



**ARDINAL LABORATORIES**  
 101 East Marland, Hobbs, NM 88240  
 (505) 393-2326 FAX (505) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: BBC International, Inc.		<b>BILL TO</b>		P.O. #:		ANALYSIS REQUEST															
Project Manager: Cliff Brunson		Address: P.O. Box 805		Company:																	
City: Hobbs		State: NM Zip: 88241		Attn:																	
Phone #: 575-397-6388		Fax #: 575-397-0397		Address:																	
Project #:		Project Owner: OKY		City:																	
Project Name: H21100N / S-8		State: NM		Zip:																	
Project Location: Muley		Phone #:		Fax #:																	
Sampler Name: Muley		FOR LAB USE ONLY																			
Lab I.D.		Sample I.D.		MATRIX		PRESERV		SAMPLING		DATE		TIME		TPH Extended		BTET		cl-			
																				(G)RAB OR (C)OMP.	
H802759		SP306		G		1		X		X		9-19		952		X		X		X	
		SP307		G		1		X		X		1015		1020		X		X		X	
		SP405W		G		1		X		X		1027		1040		X		X		X	
				G		1		X		X		1105		1122		X		X		X	
				G		1		X		X		1133		1139		X		X		X	
				G		1		X		X		1199		1199		X		X		X	

PLEASE NOTE: Liability and Damages: Cardinal's liability and clients exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: *[Signature]* Date: 9-28-18 Time: 11:30  
 Received By: *[Signature]*

Delivered By: (Circle One)  UPS  Bus  Other: *5.46 #77*

Sample Condition:  Cool  Intact  Pres  Yes  No  Yes  No

CHECKED BY: *[Signature]* (Initials) *TO*

Phone Result:  Yes  No Add'l Phone #: \_\_\_\_\_  
 Fax Result:  Yes  No Add'l Fax #: \_\_\_\_\_  
 REMARKS: \_\_\_\_\_

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476





**ARDINAL LABORATORIES**  
 101 East Marland, Hobbs, NM 88240  
 (505) 393-2326 FAX (505) 393-2476

**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

Company Name: BBC International, Inc. Project Manager: Cliff Brunson Address: P.O. Box 805 City: Hobbs State: NM Zip: 88241 Phone #: 575-397-6388 Fax #: 575-397-0397 Project #: _____ Project Owner: OKY Project Name: Hazardous 15-0 8-25-18 Project Location: 2021292 Sampler Name: _____ FOR LAB USE ONLY		<b>BILL TO</b> P.O. #: _____ Company: _____ Attn: _____ Address: _____ City: _____ State: _____ Zip: _____ Phone #: _____ Fax #: _____		<b>ANALYSIS REQUEST</b>							
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX	PRESERV.	SAMPLING	DATE	TIME	TPH Extended	BTEX	LI
41	SP602	G	1	GROUNDWATER			9-20	059	X	X	X
42	3	C	1	WASTEWATER				919	X	X	X
43	4	C	1	SOIL				930	X	X	X
44	7	C	1	OIL				1022	X	X	X
45	9	C	1	SLUDGE				1041	X	X	X
46	12	C	1	OTHER :				1111	X	X	X
47	15	C	1	ACID/BASE:				1125	X	X	X
48	18	C	1	ICE / COOL				1159	X	X	X
49	SP705VK	C	1	OTHER :				1201	X	X	X
50		C	1					1208	X	X	X

PLEASE NOTE: Liability and Damages. Cardinal's safety and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analysis. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruption, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: *[Signature]* Date: 9-28-18 Time: 11:30  
 Received By: *[Signature]*  
 Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Received By: \_\_\_\_\_

Delivered By: (Circle One)  
 Sample Condition:  Cool  Intact  Yes  No  
 Sample - UPS - Bus - Other: -5:46 AM 70

CHECKED BY: (Initials) *[Initials]*

Phone Result:  Yes  No Add'l Phone #: \_\_\_\_\_  
 Fax Result:  Yes  No Add'l Fax #: \_\_\_\_\_

REMARKS:

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476



**ARDINAL LABORATORIES**  
 101 East Marland, Hobbs, NM 88240  
 (505) 393-2326 FAX (505) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: BBC International, Inc.		P.O. #:		<b>BILL TO</b>		<b>ANALYSIS REQUEST</b>					
Project Manager: Cliff Brunson		Company:									
Address: P.O. Box 805		State: NM Zip: 88241		Attn:							
City: Hobbs		Phone #: 575-397-6388		Fax #: 575-397-0397							
Project #:		Project Owner: <i>OKY</i>		City:							
Project Name: <i>Huron 15-8</i>		State: <i>OK</i>		Zip:							
Project Location: <i>M21292</i>		Phone #:		Fax #:							
Sampler Name: <i>12</i>		FOR LAB USE ONLY									

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV	SAMPLING	DATE	TIME	REMARKS	
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :					ACID/BASE:	ICE / COOL
51	SP702		1	X		X					9:20	1750	X	X	
52			1	X		X						1353	X	X	
53			1	X		X						140	X	X	
54			1	X		X						209	X	X	
55			1	X		X						214	X	X	
56			1	X		X						215	X	X	
57			1	X		X						212	X	X	
58			1	X		X						230	X	X	
59			1	X		X						240	X	X	
60			1	X		X							X	X	

PLEASE NOTE: Liability and Damage: Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal. Responses of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: *[Signature]* Date: *9-28-18* Time: *11:30*  
 Received By: *[Signature]* Date: \_\_\_\_\_ Time: \_\_\_\_\_

Delivered By: (Circle One)  
 Sampler - UPS - Bus - Other: *-514c #97*

Sample Condition: Cool  Intact   
 Yes  No   
 Checked By: *[Signature]*

Phone Result:  Yes  No Add'l Phone #: \_\_\_\_\_  
 Fax Result:  Yes  No Add'l Fax #: \_\_\_\_\_

REMARKS:



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

---

October 18, 2018

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: HARROUN 15 #008

Enclosed are the results of analyses for samples received by the laboratory on 10/16/18 15:55.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	10/16/2018	Sampling Date:	10/10/2018
Reported:	10/18/2018	Sampling Type:	Soil
Project Name:	HARROUN 15 #008	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	EDDY COUNTY, NM		

**Sample ID: SB 1 @ 20' (H802966-01)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>6000</b>	16.0	10/18/2018	ND	416	104	400	3.77	

**Sample ID: SB 1 @ 25' (H802966-02)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>13300</b>	16.0	10/18/2018	ND	416	104	400	3.77	

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- \*\* Samples not received at proper temperature of 6°C or below.
- \*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C  
Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

*Celey D. Keene*

Celey D. Keene, Lab Director/Quality Manager





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

---

October 18, 2018

Cliff Brunson

BBC International, Inc.

P.O. Box 805

Hobbs, NM 88241

RE: HARROUN 15 #008

Enclosed are the results of analyses for samples received by the laboratory on 10/16/18 15:55.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (575) 397-0397

Received:	10/16/2018	Sampling Date:	10/10/2018
Reported:	10/18/2018	Sampling Type:	Water
Project Name:	HARROUN 15 #008	Sampling Condition:	Cool & Intact
Project Number:	(8/29/18)	Sample Received By:	Tamara Oldaker
Project Location:	EDDY COUNTY, NM		

**Sample ID: WATER 1 (H802967-01)**

Chloride, SM4500Cl-B		mg/L		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride*</b>	<b>41000</b>	4.00	10/17/2018	ND	104	104	100	0.00	

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- \*\* Samples not received at proper temperature of 6°C or below.
- \*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C  
Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

*Celey D. Keene*

Celey D. Keene, Lab Director/Quality Manager





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

---

April 06, 2023

BEAUX JENNINGS  
ENSOLUM, LLC  
705 W WADLEY AVE.  
MIDLAND, TX 79705

RE: HARROUN 15 # 008

Enclosed are the results of analyses for samples received by the laboratory on 04/03/23 11:55.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style.

Celey D. Keene  
Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 04/03/2023  
 Reported: 04/06/2023  
 Project Name: HARROUN 15 # 008  
 Project Number: 03B1417046  
 Project Location: 32.21947,-103.97515

Sampling Date: 03/31/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: FS - 1 8' (H231512-01)**

BTEX 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/03/2023	ND	1.95	97.3	2.00	1.16	
Toluene*	<0.050	0.050	04/03/2023	ND	2.02	101	2.00	1.77	
Ethylbenzene*	<0.050	0.050	04/03/2023	ND	2.10	105	2.00	1.89	
Total Xylenes*	<0.150	0.150	04/03/2023	ND	6.45	107	6.00	2.19	
Total BTEX	<0.300	0.300	04/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	240	16.0	04/04/2023	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	187	93.3	200	3.84	
DRO >C10-C28*	<10.0	10.0	04/03/2023	ND	176	88.0	200	15.0	
EXT DRO >C28-C36	<10.0	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 82.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 93.0 % 49.1-148

Cardinal Laboratories

\* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 2 8' (H231512-02)**

BTEX 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/03/2023	ND	1.95	97.3	2.00	1.16	
Toluene*	<0.050	0.050	04/03/2023	ND	2.02	101	2.00	1.77	
Ethylbenzene*	<0.050	0.050	04/03/2023	ND	2.10	105	2.00	1.89	
Total Xylenes*	<0.150	0.150	04/03/2023	ND	6.45	107	6.00	2.19	
Total BTEX	<0.300	0.300	04/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2200	16.0	04/04/2023	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	187	93.3	200	3.84	
DRO >C10-C28*	<10.0	10.0	04/03/2023	ND	176	88.0	200	15.0	
EXT DRO >C28-C36	<10.0	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 84.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.9 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 3 8' (H231512-03)**

BTEX 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/03/2023	ND	1.95	97.3	2.00	1.16	
Toluene*	<0.050	0.050	04/03/2023	ND	2.02	101	2.00	1.77	
Ethylbenzene*	<0.050	0.050	04/03/2023	ND	2.10	105	2.00	1.89	
Total Xylenes*	<0.150	0.150	04/03/2023	ND	6.45	107	6.00	2.19	
Total BTEX	<0.300	0.300	04/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	20400	16.0	04/04/2023	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	187	93.3	200	3.84	
DRO >C10-C28*	<10.0	10.0	04/03/2023	ND	176	88.0	200	15.0	
EXT DRO >C28-C36	<10.0	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 86.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 95.1 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 4 8' (H231512-04)**

BTEX 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/03/2023	ND	1.95	97.3	2.00	1.16	
Toluene*	<0.050	0.050	04/03/2023	ND	2.02	101	2.00	1.77	
Ethylbenzene*	<0.050	0.050	04/03/2023	ND	2.10	105	2.00	1.89	
Total Xylenes*	<0.150	0.150	04/03/2023	ND	6.45	107	6.00	2.19	
Total BTEX	<0.300	0.300	04/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3480	16.0	04/04/2023	ND	448	112	400	3.64	QM-07

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	187	93.3	200	3.84	
DRO >C10-C28*	<10.0	10.0	04/03/2023	ND	176	88.0	200	15.0	
EXT DRO >C28-C36	<10.0	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 86.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 93.9 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 5 8' (H231512-05)**

BTEX 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/03/2023	ND	1.95	97.3	2.00	1.16	
Toluene*	<0.050	0.050	04/03/2023	ND	2.02	101	2.00	1.77	
Ethylbenzene*	<0.050	0.050	04/03/2023	ND	2.10	105	2.00	1.89	
Total Xylenes*	<0.150	0.150	04/03/2023	ND	6.45	107	6.00	2.19	
Total BTEX	<0.300	0.300	04/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3680	16.0	04/04/2023	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	187	93.3	200	3.84	
DRO >C10-C28*	31.2	10.0	04/03/2023	ND	176	88.0	200	15.0	
EXT DRO >C28-C36	<10.0	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 89.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 97.4 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 6 8' (H231512-06)**

BTEX 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/03/2023	ND	1.95	97.3	2.00	1.16	
Toluene*	<0.050	0.050	04/03/2023	ND	2.02	101	2.00	1.77	
Ethylbenzene*	<0.050	0.050	04/03/2023	ND	2.10	105	2.00	1.89	
Total Xylenes*	<0.150	0.150	04/03/2023	ND	6.45	107	6.00	2.19	
Total BTEX	<0.300	0.300	04/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7680	16.0	04/04/2023	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	187	93.3	200	3.84	
DRO >C10-C28*	21.1	10.0	04/03/2023	ND	176	88.0	200	15.0	
EXT DRO >C28-C36	<10.0	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 86.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 94.6 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 7 8' (H231512-07)**

BTEX 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/03/2023	ND	1.95	97.3	2.00	1.16	
Toluene*	<0.050	0.050	04/03/2023	ND	2.02	101	2.00	1.77	
Ethylbenzene*	<0.050	0.050	04/03/2023	ND	2.10	105	2.00	1.89	
Total Xylenes*	<0.150	0.150	04/03/2023	ND	6.45	107	6.00	2.19	
Total BTEX	<0.300	0.300	04/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	13300	16.0	04/04/2023	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	187	93.3	200	3.84	
DRO >C10-C28*	39.8	10.0	04/03/2023	ND	176	88.0	200	15.0	
EXT DRO >C28-C36	<10.0	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 88.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 96.9 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 8 8' (H231512-08)**

BTEX 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/03/2023	ND	1.95	97.3	2.00	1.16	
Toluene*	<0.050	0.050	04/03/2023	ND	2.02	101	2.00	1.77	
Ethylbenzene*	<0.050	0.050	04/03/2023	ND	2.10	105	2.00	1.89	
Total Xylenes*	<0.150	0.150	04/03/2023	ND	6.45	107	6.00	2.19	
Total BTEX	<0.300	0.300	04/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	8000	16.0	04/04/2023	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	171	85.4	200	1.69	
DRO >C10-C28*	<10.0	10.0	04/03/2023	ND	207	104	200	2.29	
EXT DRO >C28-C36	<10.0	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 82.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 104 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 9 8' (H231512-09)**

BTEX 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/03/2023	ND	1.95	97.3	2.00	1.16	
Toluene*	<0.050	0.050	04/03/2023	ND	2.02	101	2.00	1.77	
Ethylbenzene*	<0.050	0.050	04/03/2023	ND	2.10	105	2.00	1.89	
Total Xylenes*	<0.150	0.150	04/03/2023	ND	6.45	107	6.00	2.19	
Total BTEX	<0.300	0.300	04/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4800	16.0	04/04/2023	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	171	85.4	200	1.69	
DRO >C10-C28*	<10.0	10.0	04/03/2023	ND	207	104	200	2.29	
EXT DRO >C28-C36	<10.0	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 78.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 97.3 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 10 8' (H231512-10)**

BTEX 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/03/2023	ND	1.95	97.3	2.00	1.16	
Toluene*	<0.050	0.050	04/03/2023	ND	2.02	101	2.00	1.77	
Ethylbenzene*	<0.050	0.050	04/03/2023	ND	2.10	105	2.00	1.89	
Total Xylenes*	<0.150	0.150	04/03/2023	ND	6.45	107	6.00	2.19	
Total BTEX	<0.300	0.300	04/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	11100	16.0	04/04/2023	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	171	85.4	200	1.69	
DRO >C10-C28*	<10.0	10.0	04/03/2023	ND	207	104	200	2.29	
EXT DRO >C28-C36	<10.0	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 79.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 98.9 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 11 8' (H231512-11)**

BTEX 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/03/2023	ND	1.95	97.3	2.00	1.16	
Toluene*	<0.050	0.050	04/03/2023	ND	2.02	101	2.00	1.77	
Ethylbenzene*	<0.050	0.050	04/03/2023	ND	2.10	105	2.00	1.89	
Total Xylenes*	<0.150	0.150	04/03/2023	ND	6.45	107	6.00	2.19	
Total BTEX	<0.300	0.300	04/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>11200</b>	16.0	04/04/2023	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	171	85.4	200	1.69	
<b>DRO &gt;C10-C28*</b>	<b>27.2</b>	10.0	04/03/2023	ND	207	104	200	2.29	
EXT DRO >C28-C36	<10.0	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 84.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 105 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 12 8' (H231512-12)**

BTEX 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	1.95	97.3	2.00	1.16	
Toluene*	<0.050	0.050	04/04/2023	ND	2.02	101	2.00	1.77	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.10	105	2.00	1.89	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.45	107	6.00	2.19	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	23800	16.0	04/04/2023	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	171	85.4	200	1.69	
DRO >C10-C28*	42.5	10.0	04/03/2023	ND	207	104	200	2.29	
EXT DRO >C28-C36	<10.0	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 85.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 106 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 13 8' (H231512-13)**

BTEX 8021B		mg/L		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/04/2023	ND	1.95	97.3	2.00	1.16		
Toluene*	<0.050	0.050	04/04/2023	ND	2.02	101	2.00	1.77		
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.10	105	2.00	1.89		
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.45	107	6.00	2.19		
Total BTEX	<0.300	0.300	04/04/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	4920	16.0	04/04/2023	ND	448	112	400	3.64		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	171	85.4	200	1.69		
DRO >C10-C28*	<10.0	10.0	04/03/2023	ND	207	104	200	2.29		
EXT DRO >C28-C36	<10.0	10.0	04/03/2023	ND						

Surrogate: 1-Chlorooctane 83.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 103 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 14 8' (H231512-14)**

BTEX 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	1.95	97.3	2.00	1.16	
Toluene*	<0.050	0.050	04/04/2023	ND	2.02	101	2.00	1.77	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.10	105	2.00	1.89	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.45	107	6.00	2.19	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	592	16.0	04/04/2023	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	171	85.4	200	1.69	
DRO >C10-C28*	<10.0	10.0	04/03/2023	ND	207	104	200	2.29	
EXT DRO >C28-C36	<10.0	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 87.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 108 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 15 8' (H231512-15)**

BTEX 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	1.95	97.3	2.00	1.16	
Toluene*	<0.050	0.050	04/04/2023	ND	2.02	101	2.00	1.77	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.10	105	2.00	1.89	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.45	107	6.00	2.19	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	10000	16.0	04/04/2023	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	171	85.4	200	1.69	
DRO >C10-C28*	<10.0	10.0	04/03/2023	ND	207	104	200	2.29	
EXT DRO >C28-C36	<10.0	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 87.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 107 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 04/03/2023  
 Reported: 04/06/2023  
 Project Name: HARROUN 15 # 008  
 Project Number: 03B1417046  
 Project Location: 32.21947,-103.97515

Sampling Date: 03/31/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: FS - 16 8' (H231512-16)**

BTEX 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	1.95	97.3	2.00	1.16	
Toluene*	<0.050	0.050	04/04/2023	ND	2.02	101	2.00	1.77	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.10	105	2.00	1.89	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.45	107	6.00	2.19	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	11900	16.0	04/04/2023	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	171	85.4	200	1.69	
DRO >C10-C28*	605	10.0	04/03/2023	ND	207	104	200	2.29	
EXT DRO >C28-C36	186	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 87.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 95.1 % 49.1-148

Cardinal Laboratories

\* = Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 17 8' (H231512-17)**

BTEX 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	1.95	97.3	2.00	1.16	
Toluene*	<0.050	0.050	04/04/2023	ND	2.02	101	2.00	1.77	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.10	105	2.00	1.89	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.45	107	6.00	2.19	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	9200	16.0	04/04/2023	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	171	85.4	200	1.69	
DRO >C10-C28*	44.6	10.0	04/03/2023	ND	207	104	200	2.29	
EXT DRO >C28-C36	<10.0	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 73.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 90.9 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 18 8' (H231512-18)**

BTEX 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	1.95	97.3	2.00	1.16	
Toluene*	<0.050	0.050	04/04/2023	ND	2.02	101	2.00	1.77	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.10	105	2.00	1.89	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.45	107	6.00	2.19	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	20200	16.0	04/04/2023	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	171	85.4	200	1.69	
DRO >C10-C28*	153	10.0	04/03/2023	ND	207	104	200	2.29	
EXT DRO >C28-C36	46.1	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 80.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 101 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 19 8' (H231512-19)**

BTEX 8021B		mg/L		Analyzed By: JH				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	1.95	97.3	2.00	1.16	
<b>Toluene*</b>	<b>0.092</b>	0.050	04/04/2023	ND	2.02	101	2.00	1.77	
<b>Ethylbenzene*</b>	<b>0.323</b>	0.050	04/04/2023	ND	2.10	105	2.00	1.89	GC-NC1
<b>Total Xylenes*</b>	<b>1.63</b>	0.150	04/04/2023	ND	6.45	107	6.00	2.19	
<b>Total BTEX</b>	<b>2.04</b>	0.300	04/04/2023	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID) 155 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>8400</b>	16.0	04/04/2023	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS				S-06	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>70.6</b>	50.0	04/03/2023	ND	171	85.4	200	1.69	
<b>DRO &gt;C10-C28*</b>	<b>4200</b>	50.0	04/03/2023	ND	207	104	200	2.29	
<b>EXT DRO &gt;C28-C36</b>	<b>1070</b>	50.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 86.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 149 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 20 8' (H231512-20)**

BTEX 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	1.95	97.3	2.00	1.16	
Toluene*	<0.050	0.050	04/04/2023	ND	2.02	101	2.00	1.77	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.10	105	2.00	1.89	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.45	107	6.00	2.19	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	960	16.0	04/04/2023	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	171	85.4	200	1.69	
DRO >C10-C28*	<10.0	10.0	04/03/2023	ND	207	104	200	2.29	
EXT DRO >C28-C36	<10.0	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 83.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 100 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 21 8' (H231512-21)**

BTEX 8021B		mg/L		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/03/2023	ND	2.12	106	2.00	11.6	
Toluene*	<0.050	0.050	04/03/2023	ND	2.23	112	2.00	11.9	
Ethylbenzene*	<0.050	0.050	04/03/2023	ND	2.22	111	2.00	13.1	
Total Xylenes*	<0.150	0.150	04/03/2023	ND	6.90	115	6.00	12.8	
Total BTEX	<0.300	0.300	04/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	960	16.0	04/04/2023	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	171	85.4	200	1.69	
DRO >C10-C28*	<10.0	10.0	04/03/2023	ND	207	104	200	2.29	
EXT DRO >C28-C36	<10.0	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 80.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 96.5 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 22 8' (H231512-22)**

BTEX 8021B		mg/L		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/03/2023	ND	2.12	106	2.00	11.6	
Toluene*	<0.050	0.050	04/03/2023	ND	2.23	112	2.00	11.9	
Ethylbenzene*	<0.050	0.050	04/03/2023	ND	2.22	111	2.00	13.1	
Total Xylenes*	<0.150	0.150	04/03/2023	ND	6.90	115	6.00	12.8	
Total BTEX	<0.300	0.300	04/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>17400</b>	16.0	04/04/2023	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	171	85.4	200	1.69	
<b>DRO &gt;C10-C28*</b>	<b>155</b>	10.0	04/03/2023	ND	207	104	200	2.29	
<b>EXT DRO &gt;C28-C36</b>	<b>37.6</b>	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 86.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 107 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 23 8' (H231512-23)**

BTEX 8021B		mg/L		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/03/2023	ND	2.12	106	2.00	11.6	
Toluene*	<0.050	0.050	04/03/2023	ND	2.23	112	2.00	11.9	
Ethylbenzene*	<0.050	0.050	04/03/2023	ND	2.22	111	2.00	13.1	
Total Xylenes*	<0.150	0.150	04/03/2023	ND	6.90	115	6.00	12.8	
Total BTEX	<0.300	0.300	04/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	47200	16.0	04/04/2023	ND	448	112	400	3.64	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	171	85.4	200	1.69	
DRO >C10-C28*	225	10.0	04/03/2023	ND	207	104	200	2.29	
EXT DRO >C28-C36	75.9	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 82.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 116 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 04/03/2023  
 Reported: 04/06/2023  
 Project Name: HARROUN 15 # 008  
 Project Number: 03B1417046  
 Project Location: 32.21947,-103.97515

Sampling Date: 03/31/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: FS - 24 8' (H231512-24)**

BTEX 8021B		mg/L		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/03/2023	ND	2.12	106	2.00	11.6	
Toluene*	<0.050	0.050	04/03/2023	ND	2.23	112	2.00	11.9	
Ethylbenzene*	<0.050	0.050	04/03/2023	ND	2.22	111	2.00	13.1	
Total Xylenes*	<0.150	0.150	04/03/2023	ND	6.90	115	6.00	12.8	
Total BTEX	<0.300	0.300	04/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>23600</b>	16.0	04/04/2023	ND	432	108	400	3.77	QM-07

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	171	85.4	200	1.69	
<b>DRO &gt;C10-C28*</b>	<b>1130</b>	10.0	04/03/2023	ND	207	104	200	2.29	
<b>EXT DRO &gt;C28-C36</b>	<b>320</b>	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 83.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 88.7 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 25 8' (H231512-25)**

BTEX 8021B		mg/L		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/03/2023	ND	2.12	106	2.00	11.6	
Toluene*	<0.050	0.050	04/03/2023	ND	2.23	112	2.00	11.9	
Ethylbenzene*	<0.050	0.050	04/03/2023	ND	2.22	111	2.00	13.1	
Total Xylenes*	<0.150	0.150	04/03/2023	ND	6.90	115	6.00	12.8	
Total BTEX	<0.300	0.300	04/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	19200	16.0	04/04/2023	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/04/2023	ND	171	85.4	200	1.69	
DRO >C10-C28*	308	10.0	04/04/2023	ND	207	104	200	2.29	
EXT DRO >C28-C36	94.1	10.0	04/04/2023	ND					

Surrogate: 1-Chlorooctane 81.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 104 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 26 8' (H231512-26)**

BTEX 8021B		mg/L		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/03/2023	ND	2.12	106	2.00	11.6	
Toluene*	<0.050	0.050	04/03/2023	ND	2.23	112	2.00	11.9	
Ethylbenzene*	<0.050	0.050	04/03/2023	ND	2.22	111	2.00	13.1	
Total Xylenes*	<0.150	0.150	04/03/2023	ND	6.90	115	6.00	12.8	
Total BTEX	<0.300	0.300	04/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	22000	16.0	04/04/2023	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/04/2023	ND	171	85.4	200	1.69	
DRO >C10-C28*	291	10.0	04/04/2023	ND	207	104	200	2.29	
EXT DRO >C28-C36	110	10.0	04/04/2023	ND					

Surrogate: 1-Chlorooctane 83.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 111 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 27 8' (H231512-27)**

BTEX 8021B		mg/L		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/03/2023	ND	2.12	106	2.00	11.6	
Toluene*	<0.050	0.050	04/03/2023	ND	2.23	112	2.00	11.9	
Ethylbenzene*	<0.050	0.050	04/03/2023	ND	2.22	111	2.00	13.1	
Total Xylenes*	<0.150	0.150	04/03/2023	ND	6.90	115	6.00	12.8	
Total BTEX	<0.300	0.300	04/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3360	16.0	04/04/2023	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/04/2023	ND	171	85.4	200	1.69	
DRO >C10-C28*	<10.0	10.0	04/04/2023	ND	207	104	200	2.29	
EXT DRO >C28-C36	<10.0	10.0	04/04/2023	ND					

Surrogate: 1-Chlorooctane 76.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.7 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 28 8' (H231512-28)**

BTEX 8021B		mg/L		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/03/2023	ND	2.12	106	2.00	11.6	
Toluene*	<0.050	0.050	04/03/2023	ND	2.23	112	2.00	11.9	
Ethylbenzene*	<0.050	0.050	04/03/2023	ND	2.22	111	2.00	13.1	
Total Xylenes*	<0.150	0.150	04/03/2023	ND	6.90	115	6.00	12.8	
Total BTEX	<0.300	0.300	04/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4160	16.0	04/04/2023	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	189	94.3	200	7.03	
DRO >C10-C28*	<10.0	10.0	04/03/2023	ND	203	101	200	7.04	
EXT DRO >C28-C36	<10.0	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 91.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 99.9 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 29 8' (H231512-29)**

BTEX 8021B		mg/L		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/03/2023	ND	2.12	106	2.00	11.6	
Toluene*	<0.050	0.050	04/03/2023	ND	2.23	112	2.00	11.9	
Ethylbenzene*	<0.050	0.050	04/03/2023	ND	2.22	111	2.00	13.1	
Total Xylenes*	<0.150	0.150	04/03/2023	ND	6.90	115	6.00	12.8	
Total BTEX	<0.300	0.300	04/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6800	16.0	04/04/2023	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	189	94.3	200	7.03	
DRO >C10-C28*	<10.0	10.0	04/03/2023	ND	203	101	200	7.04	
EXT DRO >C28-C36	<10.0	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 78.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 86.2 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 30 8' (H231512-30)**

BTEX 8021B		mg/L		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/03/2023	ND	2.12	106	2.00	11.6		
Toluene*	<0.050	0.050	04/03/2023	ND	2.23	112	2.00	11.9		
Ethylbenzene*	<0.050	0.050	04/03/2023	ND	2.22	111	2.00	13.1		
Total Xylenes*	<0.150	0.150	04/03/2023	ND	6.90	115	6.00	12.8		
Total BTEX	<0.300	0.300	04/03/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	17800	16.0	04/04/2023	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	189	94.3	200	7.03		
DRO >C10-C28*	<10.0	10.0	04/03/2023	ND	203	101	200	7.04		
EXT DRO >C28-C36	<10.0	10.0	04/03/2023	ND						

Surrogate: 1-Chlorooctane 81.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 88.7 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 31 8' (H231512-31)**

BTEX 8021B		mg/L		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/03/2023	ND	2.12	106	2.00	11.6	
Toluene*	<0.050	0.050	04/03/2023	ND	2.23	112	2.00	11.9	
Ethylbenzene*	<0.050	0.050	04/03/2023	ND	2.22	111	2.00	13.1	
Total Xylenes*	<0.150	0.150	04/03/2023	ND	6.90	115	6.00	12.8	
Total BTEX	<0.300	0.300	04/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 77.5-125

Chloride, SM4500CI-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7600	16.0	04/04/2023	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	189	94.3	200	7.03	
DRO >C10-C28*	<10.0	10.0	04/03/2023	ND	203	101	200	7.04	
EXT DRO >C28-C36	<10.0	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 69.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 74.8 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 32 8' (H231512-32)**

BTEX 8021B		mg/L		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/03/2023	ND	2.12	106	2.00	11.6	
Toluene*	<0.050	0.050	04/03/2023	ND	2.23	112	2.00	11.9	
Ethylbenzene*	<0.050	0.050	04/03/2023	ND	2.22	111	2.00	13.1	
Total Xylenes*	<0.150	0.150	04/03/2023	ND	6.90	115	6.00	12.8	
Total BTEX	<0.300	0.300	04/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7460	16.0	04/04/2023	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	189	94.3	200	7.03	
DRO >C10-C28*	276	10.0	04/03/2023	ND	203	101	200	7.04	
EXT DRO >C28-C36	110	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 96.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 123 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 33 8' (H231512-33)**

BTEX 8021B		mg/L		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/03/2023	ND	2.12	106	2.00	11.6	
Toluene*	<0.050	0.050	04/03/2023	ND	2.23	112	2.00	11.9	
Ethylbenzene*	<0.050	0.050	04/03/2023	ND	2.22	111	2.00	13.1	
Total Xylenes*	<0.150	0.150	04/03/2023	ND	6.90	115	6.00	12.8	
Total BTEX	<0.300	0.300	04/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4640	16.0	04/04/2023	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	189	94.3	200	7.03	
DRO >C10-C28*	107	10.0	04/03/2023	ND	203	101	200	7.04	
EXT DRO >C28-C36	36.6	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 121 % 48.2-134

Surrogate: 1-Chlorooctadecane 147 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 34 8' (H231512-34)**

BTEX 8021B		mg/L		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/03/2023	ND	2.12	106	2.00	11.6	
Toluene*	<0.050	0.050	04/03/2023	ND	2.23	112	2.00	11.9	
Ethylbenzene*	<0.050	0.050	04/03/2023	ND	2.22	111	2.00	13.1	
Total Xylenes*	<0.150	0.150	04/03/2023	ND	6.90	115	6.00	12.8	
Total BTEX	<0.300	0.300	04/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6880	16.0	04/04/2023	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	189	94.3	200	7.03	
DRO >C10-C28*	<10.0	10.0	04/03/2023	ND	203	101	200	7.04	
EXT DRO >C28-C36	<10.0	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 114 % 48.2-134

Surrogate: 1-Chlorooctadecane 131 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 35 8' (H231512-35)**

BTEX 8021B		mg/L		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	04/03/2023	ND	2.12	106	2.00	11.6		
Toluene*	<0.050	0.050	04/03/2023	ND	2.23	112	2.00	11.9		
Ethylbenzene*	<0.050	0.050	04/03/2023	ND	2.22	111	2.00	13.1		
Total Xylenes*	<0.150	0.150	04/03/2023	ND	6.90	115	6.00	12.8		
Total BTEX	<0.300	0.300	04/03/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	14900	16.0	04/04/2023	ND	432	108	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	189	94.3	200	7.03		
DRO >C10-C28*	<10.0	10.0	04/03/2023	ND	203	101	200	7.04		
EXT DRO >C28-C36	<10.0	10.0	04/03/2023	ND						

Surrogate: 1-Chlorooctane 97.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 109 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 36 8' (H231512-36)**

BTEX 8021B		mg/L		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	2.12	106	2.00	11.6	
Toluene*	<0.050	0.050	04/04/2023	ND	2.23	112	2.00	11.9	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.22	111	2.00	13.1	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.90	115	6.00	12.8	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3760	16.0	04/04/2023	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	189	94.3	200	7.03		
DRO >C10-C28*	403	10.0	04/03/2023	ND	203	101	200	7.04		
EXT DRO >C28-C36	148	10.0	04/03/2023	ND						

Surrogate: 1-Chlorooctane 124 % 48.2-134

Surrogate: 1-Chlorooctadecane 161 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 37 8' (H231512-37)**

BTEX 8021B		mg/L		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	2.12	106	2.00	11.6	
Toluene*	<0.050	0.050	04/04/2023	ND	2.23	112	2.00	11.9	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.22	111	2.00	13.1	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.90	115	6.00	12.8	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>6480</b>	16.0	04/04/2023	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	189	94.3	200	7.03	
<b>DRO &gt;C10-C28*</b>	<b>85.0</b>	10.0	04/03/2023	ND	203	101	200	7.04	
<b>EXT DRO &gt;C28-C36</b>	<b>30.0</b>	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 103 % 48.2-134

Surrogate: 1-Chlorooctadecane 122 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 38 8' (H231512-38)**

BTEX 8021B		mg/L		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	2.12	106	2.00	11.6	
Toluene*	<0.050	0.050	04/04/2023	ND	2.23	112	2.00	11.9	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.22	111	2.00	13.1	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.90	115	6.00	12.8	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1250	16.0	04/04/2023	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	189	94.3	200	7.03	
DRO >C10-C28*	<10.0	10.0	04/03/2023	ND	203	101	200	7.04	
EXT DRO >C28-C36	<10.0	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 123 % 48.2-134

Surrogate: 1-Chlorooctadecane 145 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 39 8' (H231512-39)**

BTEX 8021B		mg/L		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	2.12	106	2.00	11.6	
Toluene*	<0.050	0.050	04/04/2023	ND	2.23	112	2.00	11.9	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.22	111	2.00	13.1	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.90	115	6.00	12.8	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2560	16.0	04/04/2023	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	189	94.3	200	7.03	
DRO >C10-C28*	<10.0	10.0	04/03/2023	ND	203	101	200	7.04	
EXT DRO >C28-C36	<10.0	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 113 % 48.2-134

Surrogate: 1-Chlorooctadecane 131 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 40 8' (H231512-40)**

BTEX 8021B		mg/L		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	2.12	106	2.00	11.6	
Toluene*	<0.050	0.050	04/04/2023	ND	2.23	112	2.00	11.9	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.22	111	2.00	13.1	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.90	115	6.00	12.8	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	10300	16.0	04/04/2023	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	189	94.3	200	7.03	
DRO >C10-C28*	119	10.0	04/03/2023	ND	203	101	200	7.04	
EXT DRO >C28-C36	28.1	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 109 % 48.2-134

Surrogate: 1-Chlorooctadecane 132 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 41 8' (H231512-41)**

BTEX 8021B		mg/L		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/03/2023	ND	1.95	97.6	2.00	3.53	
Toluene*	<0.050	0.050	04/03/2023	ND	2.07	103	2.00	4.01	
Ethylbenzene*	<0.050	0.050	04/03/2023	ND	2.10	105	2.00	3.24	
Total Xylenes*	<0.150	0.150	04/03/2023	ND	6.32	105	6.00	2.68	
Total BTEX	<0.300	0.300	04/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7600	16.0	04/04/2023	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	189	94.3	200	7.03	
DRO >C10-C28*	34.6	10.0	04/03/2023	ND	203	101	200	7.04	
EXT DRO >C28-C36	<10.0	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 121 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 42 8' (H231512-42)**

BTEX 8021B		mg/L		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/03/2023	ND	1.95	97.6	2.00	3.53	
Toluene*	<0.050	0.050	04/03/2023	ND	2.07	103	2.00	4.01	
Ethylbenzene*	<0.050	0.050	04/03/2023	ND	2.10	105	2.00	3.24	
<b>Total Xylenes*</b>	<b>0.237</b>	0.150	04/03/2023	ND	6.32	105	6.00	2.68	
Total BTEX	<0.300	0.300	04/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>6130</b>	16.0	04/04/2023	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10*</b>	<b>35.7</b>	10.0	04/04/2023	ND	189	94.3	200	7.03		
<b>DRO &gt;C10-C28*</b>	<b>6820</b>	10.0	04/04/2023	ND	203	101	200	7.04		
<b>EXT DRO &gt;C28-C36</b>	<b>1600</b>	10.0	04/04/2023	ND						

Surrogate: 1-Chlorooctane 119 % 48.2-134

Surrogate: 1-Chlorooctadecane 275 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 43 8' (H231512-43)**

BTEX 8021B		mg/L		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/03/2023	ND	1.95	97.6	2.00	3.53	
Toluene*	<0.050	0.050	04/03/2023	ND	2.07	103	2.00	4.01	
Ethylbenzene*	<0.050	0.050	04/03/2023	ND	2.10	105	2.00	3.24	
Total Xylenes*	<0.150	0.150	04/03/2023	ND	6.32	105	6.00	2.68	
Total BTEX	<0.300	0.300	04/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: GM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3800	16.0	04/04/2023	ND	432	108	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	12.8	10.0	04/04/2023	ND	189	94.3	200	7.03		
DRO >C10-C28*	2590	10.0	04/04/2023	ND	203	101	200	7.04		
EXT DRO >C28-C36	820	10.0	04/04/2023	ND						

Surrogate: 1-Chlorooctane 112 % 48.2-134

Surrogate: 1-Chlorooctadecane 161 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 44 8' (H231512-44)**

BTEX 8021B		mg/L		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/03/2023	ND	1.95	97.6	2.00	3.53	
Toluene*	<0.050	0.050	04/03/2023	ND	2.07	103	2.00	4.01	
Ethylbenzene*	<0.050	0.050	04/03/2023	ND	2.10	105	2.00	3.24	
Total Xylenes*	<0.150	0.150	04/03/2023	ND	6.32	105	6.00	2.68	
Total BTEX	<0.300	0.300	04/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.8 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>8800</b>	16.0	04/04/2023	ND	416	104	400	3.77	QM-07

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	189	94.3	200	7.03	
<b>DRO &gt;C10-C28*</b>	<b>184</b>	10.0	04/03/2023	ND	203	101	200	7.04	
<b>EXT DRO &gt;C28-C36</b>	<b>60.0</b>	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 107 % 48.2-134

Surrogate: 1-Chlorooctadecane 133 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 45 8' (H231512-45)**

BTEX 8021B		mg/L		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/03/2023	ND	1.95	97.6	2.00	3.53	
<b>Toluene*</b>	<b>0.066</b>	0.050	04/03/2023	ND	2.07	103	2.00	4.01	
<b>Ethylbenzene*</b>	<b>0.157</b>	0.050	04/03/2023	ND	2.10	105	2.00	3.24	GC-NC1
<b>Total Xylenes*</b>	<b>0.969</b>	0.150	04/03/2023	ND	6.32	105	6.00	2.68	
<b>Total BTEX</b>	<b>1.19</b>	0.300	04/03/2023	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID) 97.0 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>14600</b>	16.0	04/04/2023	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10*</b>	<b>79.8</b>	50.0	04/04/2023	ND	189	94.3	200	7.03		
<b>DRO &gt;C10-C28*</b>	<b>8640</b>	50.0	04/04/2023	ND	203	101	200	7.04		
<b>EXT DRO &gt;C28-C36</b>	<b>2030</b>	50.0	04/04/2023	ND						

Surrogate: 1-Chlorooctane 113 % 48.2-134

Surrogate: 1-Chlorooctadecane 247 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 46 8' (H231512-46)**

BTEX 8021B		mg/L		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/03/2023	ND	1.95	97.6	2.00	3.53	
Toluene*	<0.050	0.050	04/03/2023	ND	2.07	103	2.00	4.01	
Ethylbenzene*	<0.050	0.050	04/03/2023	ND	2.10	105	2.00	3.24	
Total Xylenes*	<0.150	0.150	04/03/2023	ND	6.32	105	6.00	2.68	
Total BTEX	<0.300	0.300	04/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>4960</b>	16.0	04/04/2023	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS						S-04
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10*</b>	<b>15.5</b>	10.0	04/03/2023	ND	189	94.3	200	7.03		
<b>DRO &gt;C10-C28*</b>	<b>1440</b>	10.0	04/03/2023	ND	203	101	200	7.04		
<b>EXT DRO &gt;C28-C36</b>	<b>400</b>	10.0	04/03/2023	ND						

Surrogate: 1-Chlorooctane 105 % 48.2-134

Surrogate: 1-Chlorooctadecane 176 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 47 8' (H231512-47)**

BTEX 8021B		mg/L		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/03/2023	ND	1.95	97.6	2.00	3.53	
Toluene*	<0.050	0.050	04/03/2023	ND	2.07	103	2.00	4.01	
Ethylbenzene*	<0.050	0.050	04/03/2023	ND	2.10	105	2.00	3.24	
Total Xylenes*	<0.150	0.150	04/03/2023	ND	6.32	105	6.00	2.68	
Total BTEX	<0.300	0.300	04/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	9460	16.0	04/04/2023	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/04/2023	ND	189	94.3	200	7.03	
DRO >C10-C28*	77.1	10.0	04/04/2023	ND	203	101	200	7.04	
EXT DRO >C28-C36	29.8	10.0	04/04/2023	ND					

Surrogate: 1-Chlorooctane 106 % 48.2-134

Surrogate: 1-Chlorooctadecane 125 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 48 8' (H231512-48)**

BTEX 8021B		mg/L		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/03/2023	ND	1.95	97.6	2.00	3.53	
Toluene*	<0.050	0.050	04/03/2023	ND	2.07	103	2.00	4.01	
Ethylbenzene*	<0.050	0.050	04/03/2023	ND	2.10	105	2.00	3.24	
<b>Total Xylenes*</b>	<b>0.327</b>	0.150	04/03/2023	ND	6.32	105	6.00	2.68	
<b>Total BTEX</b>	<b>0.327</b>	0.300	04/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>5760</b>	16.0	04/04/2023	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS						S-06
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>GRO C6-C10*</b>	<b>56.5</b>	50.0	04/04/2023	ND	176	88.1	200	2.59		
<b>DRO &gt;C10-C28*</b>	<b>5880</b>	50.0	04/04/2023	ND	196	97.8	200	3.08	QM-07, QR-03	
<b>EXT DRO &gt;C28-C36</b>	<b>1370</b>	50.0	04/04/2023	ND						

Surrogate: 1-Chlorooctane 122 % 48.2-134

Surrogate: 1-Chlorooctadecane 333 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 49 8' (H231512-49)**

BTEX 8021B		mg/L		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/03/2023	ND	1.95	97.6	2.00	3.53	
Toluene*	<0.050	0.050	04/03/2023	ND	2.07	103	2.00	4.01	
Ethylbenzene*	<0.050	0.050	04/03/2023	ND	2.10	105	2.00	3.24	
Total Xylenes*	<0.150	0.150	04/03/2023	ND	6.32	105	6.00	2.68	
Total BTEX	<0.300	0.300	04/03/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<b>2200</b>	16.0	04/04/2023	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	176	88.1	200	2.59	
<b>DRO &gt;C10-C28*</b>	<b>20.3</b>	10.0	04/03/2023	ND	196	97.8	200	3.08	
EXT DRO >C28-C36	<10.0	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 94.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 95.5 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 50 8' (H231512-50)**

BTEX 8021B		mg/L		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	1.95	97.6	2.00	3.53	
Toluene*	<0.050	0.050	04/04/2023	ND	2.07	103	2.00	4.01	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.10	105	2.00	3.24	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.32	105	6.00	2.68	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>7600</b>	16.0	04/04/2023	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	176	88.1	200	2.59	
<b>DRO &gt;C10-C28*</b>	<b>110</b>	10.0	04/03/2023	ND	196	97.8	200	3.08	
<b>EXT DRO &gt;C28-C36</b>	<b>39.4</b>	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 94.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 97.8 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 51 8' (H231512-51)**

BTEX 8021B		mg/L		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	1.95	97.6	2.00	3.53	
Toluene*	<0.050	0.050	04/04/2023	ND	2.07	103	2.00	4.01	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.10	105	2.00	3.24	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.32	105	6.00	2.68	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4480	16.0	04/04/2023	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	176	88.1	200	2.59	
DRO >C10-C28*	974	10.0	04/03/2023	ND	196	97.8	200	3.08	
EXT DRO >C28-C36	239	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 77.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 115 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 52 8' (H231512-52)**

BTEX 8021B		mg/L		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	1.95	97.6	2.00	3.53	
Toluene*	<0.050	0.050	04/04/2023	ND	2.07	103	2.00	4.01	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.10	105	2.00	3.24	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.32	105	6.00	2.68	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>4800</b>	16.0	04/04/2023	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	176	88.1	200	2.59	
<b>DRO &gt;C10-C28*</b>	<b>136</b>	10.0	04/03/2023	ND	196	97.8	200	3.08	
<b>EXT DRO &gt;C28-C36</b>	<b>56.8</b>	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 95.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 102 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 53 8' (H231512-53)**

BTEX 8021B		mg/L		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	1.95	97.6	2.00	3.53	
Toluene*	<0.050	0.050	04/04/2023	ND	2.07	103	2.00	4.01	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.10	105	2.00	3.24	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.32	105	6.00	2.68	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.4 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3240	16.0	04/04/2023	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	176	88.1	200	2.59	
DRO >C10-C28*	239	10.0	04/03/2023	ND	196	97.8	200	3.08	
EXT DRO >C28-C36	67.8	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 92.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 101 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 54 8' (H231512-54)**

BTEX 8021B		mg/L		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	1.95	97.6	2.00	3.53	
Toluene*	<0.050	0.050	04/04/2023	ND	2.07	103	2.00	4.01	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.10	105	2.00	3.24	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.32	105	6.00	2.68	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.7 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	352	16.0	04/04/2023	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	176	88.1	200	2.59	
DRO >C10-C28*	<10.0	10.0	04/03/2023	ND	196	97.8	200	3.08	
EXT DRO >C28-C36	<10.0	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 89.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 89.5 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: FS - 55 8' (H231512-55)**

BTEX 8021B		mg/L		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	1.95	97.6	2.00	3.53	
Toluene*	<0.050	0.050	04/04/2023	ND	2.07	103	2.00	4.01	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.10	105	2.00	3.24	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.32	105	6.00	2.68	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	04/04/2023	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	176	88.1	200	2.59	
DRO >C10-C28*	<10.0	10.0	04/03/2023	ND	196	97.8	200	3.08	
EXT DRO >C28-C36	<10.0	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 93.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 95.8 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 04/03/2023  
 Reported: 04/06/2023  
 Project Name: HARROUN 15 # 008  
 Project Number: 03B1417046  
 Project Location: 32.21947,-103.97515

Sampling Date: 03/31/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SW - 1 0-8' (H231512-56)**

BTEX 8021B		mg/L		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	1.95	97.6	2.00	3.53	
Toluene*	<0.050	0.050	04/04/2023	ND	2.07	103	2.00	4.01	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.10	105	2.00	3.24	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.32	105	6.00	2.68	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.0 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	896	16.0	04/04/2023	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	176	88.1	200	2.59	
DRO >C10-C28*	<10.0	10.0	04/03/2023	ND	196	97.8	200	3.08	
EXT DRO >C28-C36	<10.0	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 102 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: SW - 2 0-8' (H231512-57)**

BTEX 8021B		mg/L		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	1.95	97.6	2.00	3.53	
Toluene*	<0.050	0.050	04/04/2023	ND	2.07	103	2.00	4.01	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.10	105	2.00	3.24	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.32	105	6.00	2.68	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.8 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	864	16.0	04/04/2023	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	176	88.1	200	2.59	
DRO >C10-C28*	<10.0	10.0	04/03/2023	ND	196	97.8	200	3.08	
EXT DRO >C28-C36	<10.0	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 89.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 90.7 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: SW - 3 0-8' (H231512-58)**

BTEX 8021B		mg/L		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	1.95	97.6	2.00	3.53	
Toluene*	<0.050	0.050	04/04/2023	ND	2.07	103	2.00	4.01	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.10	105	2.00	3.24	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.32	105	6.00	2.68	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	448	16.0	04/04/2023	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/03/2023	ND	176	88.1	200	2.59	
DRO >C10-C28*	<10.0	10.0	04/03/2023	ND	196	97.8	200	3.08	
EXT DRO >C28-C36	<10.0	10.0	04/03/2023	ND					

Surrogate: 1-Chlorooctane 98.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 100 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: SW - 4 0-8' (H231512-59)**

BTEX 8021B		mg/L		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	1.95	97.6	2.00	3.53	
Toluene*	<0.050	0.050	04/04/2023	ND	2.07	103	2.00	4.01	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.10	105	2.00	3.24	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.32	105	6.00	2.68	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6660	16.0	04/04/2023	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/04/2023	ND	176	88.1	200	2.59	
DRO >C10-C28*	<10.0	10.0	04/04/2023	ND	196	97.8	200	3.08	
EXT DRO >C28-C36	<10.0	10.0	04/04/2023	ND					

Surrogate: 1-Chlorooctane 100 % 48.2-134

Surrogate: 1-Chlorooctadecane 103 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: SW - 5 0-8' (H231512-60)**

BTEX 8021B		mg/L		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	1.95	97.6	2.00	3.53	
Toluene*	<0.050	0.050	04/04/2023	ND	2.07	103	2.00	4.01	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.10	105	2.00	3.24	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.32	105	6.00	2.68	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	544	16.0	04/04/2023	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/04/2023	ND	176	88.1	200	2.59	
DRO >C10-C28*	<10.0	10.0	04/04/2023	ND	196	97.8	200	3.08	
EXT DRO >C28-C36	<10.0	10.0	04/04/2023	ND					

Surrogate: 1-Chlorooctane 94.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 101 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: SW - 6 0-8' (H231512-61)**

BTEX 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	2.01	101	2.00	8.46	
Toluene*	<0.050	0.050	04/04/2023	ND	2.04	102	2.00	8.70	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.07	103	2.00	8.64	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.11	102	6.00	8.55	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4720	16.0	04/04/2023	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/04/2023	ND	176	88.1	200	2.59	
DRO >C10-C28*	<10.0	10.0	04/04/2023	ND	196	97.8	200	3.08	
EXT DRO >C28-C36	<10.0	10.0	04/04/2023	ND					

Surrogate: 1-Chlorooctane 99.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 105 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: SW - 7 0-8' (H231512-62)**

BTEX 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	2.01	101	2.00	8.46	
Toluene*	<0.050	0.050	04/04/2023	ND	2.04	102	2.00	8.70	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.07	103	2.00	8.64	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.11	102	6.00	8.55	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.7 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3360	16.0	04/04/2023	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/04/2023	ND	176	88.1	200	2.59	
DRO >C10-C28*	<10.0	10.0	04/04/2023	ND	196	97.8	200	3.08	
EXT DRO >C28-C36	<10.0	10.0	04/04/2023	ND					

Surrogate: 1-Chlorooctane 93.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 96.0 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: SW - 8 0-8' (H231512-63)**

BTEX 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	2.01	101	2.00	8.46	
Toluene*	<0.050	0.050	04/04/2023	ND	2.04	102	2.00	8.70	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.07	103	2.00	8.64	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.11	102	6.00	8.55	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1310	16.0	04/04/2023	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/04/2023	ND	176	88.1	200	2.59	
DRO >C10-C28*	<10.0	10.0	04/04/2023	ND	196	97.8	200	3.08	
EXT DRO >C28-C36	<10.0	10.0	04/04/2023	ND					

Surrogate: 1-Chlorooctane 96.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 100 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: SW - 9 0-8' (H231512-64)**

BTEX 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	2.01	101	2.00	8.46	
Toluene*	<0.050	0.050	04/04/2023	ND	2.04	102	2.00	8.70	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.07	103	2.00	8.64	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.11	102	6.00	8.55	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.8 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>9730</b>	16.0	04/04/2023	ND	432	108	400	0.00	QM-07

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/04/2023	ND	176	88.1	200	2.59	
<b>DRO &gt;C10-C28*</b>	<b>396</b>	10.0	04/04/2023	ND	196	97.8	200	3.08	
<b>EXT DRO &gt;C28-C36</b>	<b>148</b>	10.0	04/04/2023	ND					

Surrogate: 1-Chlorooctane 90.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 111 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: SW - 10 0-8' (H231512-65)**

BTEX 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	2.01	101	2.00	8.46	
Toluene*	<0.050	0.050	04/04/2023	ND	2.04	102	2.00	8.70	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.07	103	2.00	8.64	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.11	102	6.00	8.55	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 93.7 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1230	16.0	04/04/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/04/2023	ND	176	88.1	200	2.59	
DRO >C10-C28*	47.4	10.0	04/04/2023	ND	196	97.8	200	3.08	
EXT DRO >C28-C36	11.9	10.0	04/04/2023	ND					

Surrogate: 1-Chlorooctane 90.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 100 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: SW - 11 0-8' (H231512-66)**

BTEX 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	2.01	101	2.00	8.46	
Toluene*	<0.050	0.050	04/04/2023	ND	2.04	102	2.00	8.70	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.07	103	2.00	8.64	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.11	102	6.00	8.55	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.2 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>3600</b>	16.0	04/04/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/04/2023	ND	176	88.1	200	2.59	
<b>DRO &gt;C10-C28*</b>	<b>14.8</b>	10.0	04/04/2023	ND	196	97.8	200	3.08	
EXT DRO >C28-C36	<10.0	10.0	04/04/2023	ND					

Surrogate: 1-Chlorooctane 89.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 91.0 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: SW - 12 0-8' (H231512-67)**

BTEX 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	2.01	101	2.00	8.46	
Toluene*	<0.050	0.050	04/04/2023	ND	2.04	102	2.00	8.70	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.07	103	2.00	8.64	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.11	102	6.00	8.55	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>5600</b>	16.0	04/04/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/04/2023	ND	176	88.1	200	2.59	
<b>DRO &gt;C10-C28*</b>	<b>876</b>	10.0	04/04/2023	ND	196	97.8	200	3.08	
<b>EXT DRO &gt;C28-C36</b>	<b>246</b>	10.0	04/04/2023	ND					

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 142 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: SW - 13 0-8' (H231512-68)**

BTEX 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	2.01	101	2.00	8.46	
Toluene*	<0.050	0.050	04/04/2023	ND	2.04	102	2.00	8.70	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.07	103	2.00	8.64	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.11	102	6.00	8.55	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 101 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	04/04/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/04/2023	ND	175	87.5	200	1.95	
DRO >C10-C28*	<10.0	10.0	04/04/2023	ND	174	87.0	200	3.24	
EXT DRO >C28-C36	<10.0	10.0	04/04/2023	ND					

Surrogate: 1-Chlorooctane 85.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 91.8 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: SW - 14 0-8' (H231512-69)**

BTEX 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	2.01	101	2.00	8.46	
Toluene*	<0.050	0.050	04/04/2023	ND	2.04	102	2.00	8.70	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.07	103	2.00	8.64	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.11	102	6.00	8.55	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 100 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	04/04/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/04/2023	ND	175	87.5	200	1.95	
DRO >C10-C28*	<10.0	10.0	04/04/2023	ND	174	87.0	200	3.24	
EXT DRO >C28-C36	<10.0	10.0	04/04/2023	ND					

Surrogate: 1-Chlorooctane 84.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 91.4 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: SW - 15 0-8' (H231512-70)**

BTEX 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	2.01	101	2.00	8.46	
Toluene*	<0.050	0.050	04/04/2023	ND	2.04	102	2.00	8.70	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.07	103	2.00	8.64	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.11	102	6.00	8.55	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.5 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	04/04/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/04/2023	ND	170	85.0	200	12.9	
DRO >C10-C28*	<10.0	10.0	04/04/2023	ND	183	91.6	200	12.3	
EXT DRO >C28-C36	<10.0	10.0	04/04/2023	ND					

Surrogate: 1-Chlorooctane 110 % 48.2-134

Surrogate: 1-Chlorooctadecane 128 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: SW - 16 0-8' (H231512-71)**

BTEX 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	1.94	97.2	2.00	5.66	
Toluene*	<0.050	0.050	04/04/2023	ND	2.00	99.9	2.00	5.19	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.05	102	2.00	4.62	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.21	104	6.00	3.78	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	04/04/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/04/2023	ND	170	85.0	200	12.9	
DRO >C10-C28*	<10.0	10.0	04/04/2023	ND	183	91.6	200	12.3	
EXT DRO >C28-C36	<10.0	10.0	04/04/2023	ND					

Surrogate: 1-Chlorooctane 98.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 116 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: SW - 17 0-8' (H231512-72)**

BTEX 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	1.94	97.2	2.00	5.66	
Toluene*	<0.050	0.050	04/04/2023	ND	2.00	99.9	2.00	5.19	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.05	102	2.00	4.62	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.21	104	6.00	3.78	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	04/04/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/04/2023	ND	170	85.0	200	12.9	
DRO >C10-C28*	<10.0	10.0	04/04/2023	ND	183	91.6	200	12.3	
EXT DRO >C28-C36	<10.0	10.0	04/04/2023	ND					

Surrogate: 1-Chlorooctane 83.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 98.1 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: SW - 18 0-8' (H231512-73)**

BTEX 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	1.94	97.2	2.00	5.66	
Toluene*	<0.050	0.050	04/04/2023	ND	2.00	99.9	2.00	5.19	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.05	102	2.00	4.62	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.21	104	6.00	3.78	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	04/04/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/04/2023	ND	170	85.0	200	12.9	
DRO >C10-C28*	<10.0	10.0	04/04/2023	ND	183	91.6	200	12.3	
EXT DRO >C28-C36	<10.0	10.0	04/04/2023	ND					

Surrogate: 1-Chlorooctane 103 % 48.2-134

Surrogate: 1-Chlorooctadecane 120 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: SW - 19 0-8' (H231512-74)**

BTEX 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	1.94	97.2	2.00	5.66	
Toluene*	<0.050	0.050	04/04/2023	ND	2.00	99.9	2.00	5.19	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.05	102	2.00	4.62	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.21	104	6.00	3.78	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	384	16.0	04/04/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/04/2023	ND	170	85.0	200	12.9	
DRO >C10-C28*	<10.0	10.0	04/04/2023	ND	183	91.6	200	12.3	
EXT DRO >C28-C36	<10.0	10.0	04/04/2023	ND					

Surrogate: 1-Chlorooctane 85.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 99.9 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: SW - 20 0-8' (H231512-75)**

BTEX 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	1.94	97.2	2.00	5.66	
Toluene*	<0.050	0.050	04/04/2023	ND	2.00	99.9	2.00	5.19	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.05	102	2.00	4.62	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.21	104	6.00	3.78	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	576	16.0	04/04/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/04/2023	ND	170	85.0	200	12.9	
DRO >C10-C28*	<10.0	10.0	04/04/2023	ND	183	91.6	200	12.3	
EXT DRO >C28-C36	<10.0	10.0	04/04/2023	ND					

Surrogate: 1-Chlorooctane 110 % 48.2-134

Surrogate: 1-Chlorooctadecane 127 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: SW - 21 0-8' (H231512-76)**

BTEX 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	1.94	97.2	2.00	5.66	
Toluene*	<0.050	0.050	04/04/2023	ND	2.00	99.9	2.00	5.19	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.05	102	2.00	4.62	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.21	104	6.00	3.78	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	04/04/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/04/2023	ND	170	85.0	200	12.9	
DRO >C10-C28*	<10.0	10.0	04/04/2023	ND	183	91.6	200	12.3	
EXT DRO >C28-C36	<10.0	10.0	04/04/2023	ND					

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 118 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: SW - 22 0-8' (H231512-77)**

BTEX 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	1.94	97.2	2.00	5.66	
Toluene*	<0.050	0.050	04/04/2023	ND	2.00	99.9	2.00	5.19	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.05	102	2.00	4.62	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.21	104	6.00	3.78	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	04/04/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/04/2023	ND	170	85.0	200	12.9	
DRO >C10-C28*	<10.0	10.0	04/04/2023	ND	183	91.6	200	12.3	
EXT DRO >C28-C36	<10.0	10.0	04/04/2023	ND					

Surrogate: 1-Chlorooctane 93.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 108 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/03/2023	Sampling Date:	03/31/2023
Reported:	04/06/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	32.21947,-103.97515		

**Sample ID: SW - 23 0-8' (H231512-78)**

BTEX 8021B		mg/L		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	04/04/2023	ND	1.94	97.2	2.00	5.66	
Toluene*	<0.050	0.050	04/04/2023	ND	2.00	99.9	2.00	5.19	
Ethylbenzene*	<0.050	0.050	04/04/2023	ND	2.05	102	2.00	4.62	
Total Xylenes*	<0.150	0.150	04/04/2023	ND	6.21	104	6.00	3.78	
Total BTEX	<0.300	0.300	04/04/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 77.5-125

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	272	16.0	04/04/2023	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/04/2023	ND	170	85.0	200	12.9	
DRO >C10-C28*	<10.0	10.0	04/04/2023	ND	183	91.6	200	12.3	
EXT DRO >C28-C36	<10.0	10.0	04/04/2023	ND					

Surrogate: 1-Chlorooctane 78.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 90.4 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

- S-06 The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-03 The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.
QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
GC-NC1 8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are biased high with interfering compounds.
BS-3 Blank spike recovery outside of lab established statistical limits, but still within method limits. Data is not adversely affected.
ND Analyte NOT DETECTED at or above the reporting limit
RPD Relative Percent Difference
\*\* Samples not received at proper temperature of 6°C or below.
\*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

page 1 of 8

Company Name: Ensolum, LLC Project Manager: Beaux Jennings Address: 601 N Marientfeld Street, Suite 400 City: Midland State: TX Zip: 79701 Phone #: 210-219-8858 Fax #: 210-219-8858 Project #: 0381140581414946 Project Owner: Harrovn K #1002 Project Name: Harrovn K #1002 Project Location: 32 21947 -103.97515 Sampler Name: Kalleet TG FOR LAB USE ONLY		P.O. #: _____ Company: Oxy USA Inc. Attn: Wade Ditchrich Address: _____ City: _____ State: _____ Zip: _____ Phone #: 575-390-2828 Fax #: _____	
Lab I.D. H231512 Sample I.D. FS-1 Depth (feet) 8' (G)RAB OR (C)OMP. C # CONTAINERS 1 MATRIX: GROUNDWATER, WASTEWATER, SOIL, OIL, SLUDGE, OTHER: PRESERV: ACID/BASE, ICE / COOL, OTHER: DATE 3-31-23 TIME 0920 Chlorides 4500 BTEX 80216 TPH 8015m		ANALYSIS REQUEST	
Relinquished By: _____ Date: 4-3-23 Time: 1:55 Received By: _____ Date: _____ Time: _____		Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Add'l Phone #: _____ All Results are emailed. Please provide Email address: _____ REMARKS: _____	
Delivered By: (Circle One) Sampler - UPS - Bus - Other: _____ Observed Temp. °C 1.5 Corrected Temp. °C 0.9 Sample Condition: Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No CHECKED BY: (Initials) _____ Turnaround Time: _____ Thermometer ID #113 Correction Factor -0.5°C Standard <input checked="" type="checkbox"/> Bacteria (only) <input type="checkbox"/> Cool Intact <input checked="" type="checkbox"/> <input type="checkbox"/> Yes <input type="checkbox"/> No Sample Condition: Observed Temp. °C _____ Corrected Temp. °C _____		Turnaround Time: _____ Thermometer ID #113 Correction Factor -0.5°C Standard <input checked="" type="checkbox"/> Bacteria (only) <input type="checkbox"/> Cool Intact <input checked="" type="checkbox"/> <input type="checkbox"/> Yes <input type="checkbox"/> No Sample Condition: Observed Temp. °C _____ Corrected Temp. °C _____	

PLEASE NOTE: Liability and Damages: Cardinal's liability and client's exclusive remedy for any claim arising when based in contact or tort shall be limited to the amount paid by the client for the analysis. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable analysis. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services rendered by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 2 of 8

Company Name: Ensolum, LLC

Project Manager: Beau Jennings

Address: 601 N Marlenfeld Street, Suite 400

City: Midland

Phone #: 210-219-8858

Project #: 03B1417046

Project Location: Hartran 15 #508

Sampler Name: Kailee Smith; TG

FOR LAB USE ONLY

Lab I.D.

Sample I.D.

Depth (feet)

(G)RAB OR (C)OMP.

# CONTAINERS

MATRIX

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER:

ACID/BASE:

ICE / COOL

OTHER:

DATE

TIME

ANALYSIS REQUEST

Chlorides 4500  
BTEX 80216  
TPH 8015M

Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE / COOL	OTHER:	DATE	TIME	ANALYSIS REQUEST
H231512	FS-11	8'	C	1	X										3-31-23	0930	X
	FS-12	8'	C	1	X										3-31-23	0931	X
	FS-13	8'	C	1	X										3-31-23	0932	X
	FS-14	8'	C	1	X										3-31-23	0937	X
	FS-15	8'	C	1	X										3-31-23	0939	X
	FS-16	8'	C	1	X										3-31-23	0941	X
	FS-17	8'	C	1	X										3-31-23	0943	X
	FS-18	8'	C	1	X										3-31-23	0945	X
	FS-19	8'	C	1	X										3-31-23	0947	X
	FS-20	8'	C	1	X										3-31-23	0950	X

PLEASE NOTE: Laboratory and client's exclusive remedy for any claim arising whether based in contract or tort shall be limited to the amount paid by the client for the analysis. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:

Date: 4-3-23

Time: 1:55

Received By:

Date:

Time:

Relinquished By:

Date:

Time:

Received By:

Date:

Time:

Relinquished By:

Date:

Time:

Received By:

Date:

Time:

Relinquished By:

Date:

Time:

Delivered By: (Circle One)

Sampler - UPS - Bus - Other:

Observed Temp. °C

Corrected Temp. °C

Sample Condition

Cool Intact

Checked By: (Initials)

Turnaround Time:

Thermometer ID #113

Corrected Factor -0.5°C

Standard Rush

Bacteria (only)

Cool Intact

Sample Condition

Observed Temp. °C

Corrected Temp. °C

Remarks:

Verbal Result:  Yes  No

Add'l Phone #:

All Results are emailed. Please provide Email address:

Cardinal cannot accept verbal changes. Please email changes to cely.keene@cardinalabnm.com



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 3 of 3

Company Name: Ensolum, LLC

Project Manager: Beaux Jennings

Address: 601 N Marientfeld Street, Suite 400

City: Midland

Phone #: 210-219-8858

Project #: 03B1414046

Project Name: Hutton 15 #008

Project Location: 32.71447, -103.97515

Sampler Name: Kaylee Smith, TG

P.O. #: **BILL TO**

Company: Oxy USA Inc.

Attn: Wade Dittrich

Address:

City:

State:

Phone #: 575-390-2828

Fax #:

ANALYSIS REQUEST

Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)COMP.	# CONTAINERS	MATRIX							DATE	TIME	Chlorides 4500	BTEX 8021b	TPH 8015m
					GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:					
H231512																
21	F5-21	8'	C	1	X							3-31-23	0455	X	X	X
22	F5-22	8'	C	1	X							3-31-23	1000	X	X	X
23	F5-23	8'	C	1	X							3-31-23	1030	X	X	X
24	F5-24	8'	C	1	X							3-31-23	1032	X	X	X
25	F5-25	8'	C	1	X							3-31-23	1034	X	X	X
26	F5-26	8'	C	1	X							3-31-23	1036	X	X	X
27	F5-27	8'	C	1	X							3-31-23	1039	X	X	X
28	F5-28	8'	C	1	X							3-31-23	1040	X	X	X
29	F5-29	8'	C	1	X							3-31-23	1042	X	X	X
30	F5-30	8'	C	1	X							3-31-23	1044	X	X	X

PLEASE NOTE: Liability and claims exclusion remedy for any claim arising whether based in contract or tort shall be limited to the amount paid by the client for the analysis. All claims including those for negligence and any other cause whatsoever shall be denied unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By:

Date: 4-3-23

Time: 1155

Received By:

Verbal Result:  Yes  No  Add'l Phone #:

All Results are emailed. Please provide Email address:

Relinquished By:

Date:

Time:

Received By:

REMARKS:

Delivered By: (Circle One)

Observed Temp. °C

Sample Condition

CHECKED BY: (Initials)

Turnaround Time:

Standard  Rush

Bacteria (only) Sample Condition

Sampler - UPS - Bus - Other:

Corrected Temp. °C

Cool Intact  Yes  No

Thermometer ID #113

Corrected Temp. °C

Cool Intact  Yes  No

Corrected Temp. °C

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



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 4 of 8

Company Name: Ensolium, LLC  
 Project Manager: Beaux Jennings  
 Address: 601 N Marlenfeld Street, Suite 400  
 City: Midland State: TX Zip: 79701  
 Phone #: 210-219-8858 Fax #: Project Owner:  
 Project #: 03BILIT046  
 Project Name: Harroun 15 #008  
 Project Location: 92.21947, -103.93515  
 Sampler Name: Kaitie Smith & TG  
 P.O. #: Company: Oxy USA Inc.  
 Attn: Wade Dittrich  
 Address:  
 City: State: Zip:  
 Phone #: 575-390-2828  
 Fax #: PRESERV. OTHER:

Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX							DATE	TIME	ANALYSIS REQUEST
					GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:			
H231512	31	F5-31	8'	1								3-31-23	1046	Chlorides 4500
	32	F5-32	8'	1								3-31-23	1048	BTEX 8021b
	33	F5-33	8'	1								3-31-23	1050	TPH 8015m
	34	F5-34	8'	1								3-31-23	1116	
	35	F5-35	8'	1								3-31-28	1148	
	36	F5-36	8'	1								3-31-23	1121	
	37	F5-37	8'	1								3-31-23	1123	
	38	F5-38	8'	1								3-31-23	1125	
	39	F5-39	8'	1								3-31-23	1127	
	40	F5-40	8'	1								3-31-23	1170	

PLEASE NOTE: Lab and Damages, Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analysis. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: [Signature]  
 Date: 4-3-23  
 Time: 1:55  
 Received By: [Signature]  
 Date: [Blank]  
 Time: [Blank]

Delivered By: (Circle One) Observed Temp. °C: 15  
 Corrected Temp. °C: 0.9  
 Sample Condition: Cool Intact [X] Yes [ ] No  
 Checked By: [Signature] (Initials): [Blank]

Turnaround Time: Standard [X] Rush [ ]  
 Bacteria (only) Sample Condition: Cool Intact [X] Yes [ ] No  
 Corrected Temp. °C: [Blank]

REMARKS: Verbal Result: [ ] Yes [X] No Add'l Phone #: [Blank]  
 All Results are emailed. Please provide Email address: [Blank]





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

**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

Page 6 of 8

Company Name: <b>Ensolium, LLC</b> Project Manager: <b>Beaux Jennings</b>		<b>BILL TO</b> P.O. #: _____ Company: <b>Oxy USA Inc.</b> Attn: <b>Wade Ditrich</b>		<b>ANALYSIS REQUEST</b>				
Address: <b>601 N Marientfeld Street, Suite 400</b> City: <b>Midland</b> State: <b>TX</b> Zip: <b>79701</b>		Phone #: <b>210-219-8858</b> Fax #: _____ Project #: <b>03B147046</b> Project Owner: _____		Project Name: <b>HARRISON 15 #008</b> Project Location: <b>32.21947, -103.91515</b> Sample Name: <b>Mobile Smith ITG</b> FOR LAB USE ONLY				
Project Name: <b>HARRISON 15 #008</b> Project Location: <b>32.21947, -103.91515</b> Sample Name: <b>Mobile Smith ITG</b>		City: _____ State: _____ Zip: _____ Address: _____ Phone #: <b>575-390-2828</b> Fax #: _____		# CONTAINERS: _____ MATRIX: GROUNDWATER _____ WASTEWATER _____ SOIL _____ OIL _____ SLUDGE _____ OTHER: _____ PRESERV: ACID/BASE: _____ ICE / COOL _____ OTHER: _____ DATE: _____ TIME: _____				
Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX	PRESERV	SAMPLING	REMARKS
H231512	F5-51	8'	C	1	X	X	3-31-23 12:16	Chlorides 4500
	F5-52	8'	C	1	X	X	3-31-23 12:18	BTEX 8021b
	F5-53	8'	C	1	X	X	3-31-23 12:21	TPH 8015m
	F5-54	8'	C	1	X	X	3-31-23 12:23	
	F5-55	8'	C	1	X	X	3-31-23 12:25	
	SW-1	0-9'	C	1	X	X	3-31-23 12:56	
	SW-2	0-8'	C	1	X	X	3-31-23 12:56	
	SW-3	0-8'	C	1	X	X	3-31-23 13:00	
	SW-4	0-8'	C	1	X	X	3-31-23 13:02	
	SW-5	0-8'	C	1	X	X	3-31-23 13:04	

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analysis. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated limitations or otherwise.

Relinquished By: \_\_\_\_\_  
 Date: **4-3-23**  
 Received By: \_\_\_\_\_  
 Date: **1/5/24**

Delivered By: (Circle One) \_\_\_\_\_  
 Sampler - UPS - Bus - Other: \_\_\_\_\_

Observed Temp.: **15**  
 Corrected Temp.: **0.9**  
 Sample Condition: Cool Intact  Yes  No

Checked By: \_\_\_\_\_  
 Turnaround Time: \_\_\_\_\_  
 Thermometer ID #113  
 Correction Factor: -0.5°C

REMARKS: \_\_\_\_\_  
 Verbal Result:  Yes  No Add'l Phone #: \_\_\_\_\_  
 All Results are emailed. Please provide Email address: \_\_\_\_\_





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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 80 of 8

**Company Name:** Ensolum, LLC **BILL TO** **ANALYSIS REQUEST**

**Project Manager:** Beaux Jennings **P.O. #:**

**Address:** 601 N. Marientfield St. STE 400 **Company:** Oxy USA, Inc.

**City:** Midland **State:** TX **Zip:** 79701 **Attn:** Wade Dittrich

**Phone #:** 210-219-8858 **Fax #:** **Address:**

**Project #:** 03B1417046 **Project Owner:** **City:**

**Project Name:** Herdman 15 #008 **State:** **Zip:**

**Project Location:** 32.21947, -103.97515 **Phone #:** 575-390-2828

**Sampler Name:** Kaitie Smith '17 **Fax #:**

**FOR LAB USE ONLY**

Lab I.D.	Sample I.D.	Sample Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX							DATE	TIME	Chlorides 4500	BTEX 80215	TPH 8015m
					GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:					
H23152																
	71	SW-16	0-8'	C	1											
	72	SW-17	0-8'	C	1											
	73	SW-18	0-8'	C	1											
	74	SW-19	0-8'	C	1											
	75	SW-20	0-8'	C	1											
	76	SW-21	0-8'	C	1											
	77	SW-22	0-8'	C	1											
	78	SW-23	0-8'	C	1											

**PLEASE NOTE:** Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits, incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

**Relinquished By:** [Signature] **Date:** 4-3-23 **Received By:** [Signature] **Date:** 4-3-23

**Relinquished By:** [Signature] **Date:** 4-3-23 **Received By:** [Signature] **Date:** 4-3-23

**Delivered By:** (Circle One) **Observed Temp. °C:** 1.5 **Sample Condition:** Cool Intact **Checked By:** [Signature]

**Sampler - UPS - Bus - Other:** **Corrected Temp. °C:** 0.9 **Sample Condition:** Cool Intact **Checked By:** [Signature]

**Turnaround Time:** **Standard Rush:** **Bacteria (only) Sample Condition:** Cool Intact **Observed Temp. °C:**

**Thermometer ID #113** **Correction Factor: -0.5°C** **Corrected Temp. °C:**

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



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

---

May 02, 2023

BEAUX JENNINGS  
ENSOLUM, LLC  
705 W WADLEY AVE.  
MIDLAND, TX 79705

RE: HARROUN 15 # 008

Enclosed are the results of analyses for samples received by the laboratory on 04/27/23 15:00.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style.

Celey D. Keene  
Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/27/2023	Sampling Date:	04/27/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	OXY 32.21947,-103.97515		

**Sample ID: FS - 2 12' (H232085-01)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5760	16.0	04/28/2023	ND	448	112	400	3.64	

**Sample ID: FS - 3 12' (H232085-02)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	9200	16.0	04/28/2023	ND	448	112	400	3.64	

**Sample ID: FS - 4 12' (H232085-03)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	10600	16.0	04/28/2023	ND	448	112	400	3.64	

**Sample ID: FS - 5 12' (H232085-04)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	7520	16.0	04/28/2023	ND	448	112	400	3.64	

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 04/27/2023  
 Reported: 05/02/2023  
 Project Name: HARROUN 15 # 008  
 Project Number: 03B1417046  
 Project Location: OXY 32.21947,-103.97515

Sampling Date: 04/27/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: FS - 6 12' (H232085-05)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	11200	16.0	04/28/2023	ND	448	112	400	3.64	

**Sample ID: FS - 7 12' (H232085-06)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	10400	16.0	04/28/2023	ND	448	112	400	3.64	

**Sample ID: FS - 8 12' (H232085-07)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	736	16.0	04/28/2023	ND	448	112	400	3.64	

**Sample ID: FS - 9 12' (H232085-08)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2800	16.0	04/28/2023	ND	448	112	400	3.64	

**Sample ID: FS - 10 12' (H232085-09)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4040	16.0	04/28/2023	ND	448	112	400	3.64	

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 04/27/2023  
 Reported: 05/02/2023  
 Project Name: HARROUN 15 # 008  
 Project Number: 03B1417046  
 Project Location: OXY 32.21947,-103.97515

Sampling Date: 04/27/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: FS - 11 12' (H232085-10)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3680	16.0	04/28/2023	ND	448	112	400	3.64	

**Sample ID: FS - 12 12' (H232085-11)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	10600	16.0	04/28/2023	ND	448	112	400	3.64	

**Sample ID: FS - 13 12' (H232085-12)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6480	16.0	04/28/2023	ND	448	112	400	3.64	

**Sample ID: FS - 15 12' (H232085-13)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4400	16.0	04/28/2023	ND	448	112	400	3.64	

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 04/27/2023  
 Reported: 05/02/2023  
 Project Name: HARROUN 15 # 008  
 Project Number: 03B1417046  
 Project Location: OXY 32.21947,-103.97515

Sampling Date: 04/27/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: FS - 16 12' (H232085-14)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>976</b>	16.0	05/01/2023	ND	432	108	400	7.69	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/28/2023	ND	216	108	200	21.5	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	204	102	200	20.9	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					
Surrogate: 1-Chlorooctane	90.0 %	48.2-134							
Surrogate: 1-Chlorooctadecane	94.0 %	49.1-148							

**Sample ID: FS - 17 12' (H232085-15)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>7680</b>	16.0	05/01/2023	ND	432	108	400	7.69	

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 04/27/2023  
 Reported: 05/02/2023  
 Project Name: HARROUN 15 # 008  
 Project Number: 03B1417046  
 Project Location: OXY 32.21947,-103.97515

Sampling Date: 04/27/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: FS - 18 12' (H232085-16)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>9800</b>	16.0	05/01/2023	ND	432	108	400	7.69	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<50.0	50.0	04/28/2023	ND	216	108	200	21.5	
<b>DRO &gt;C10-C28*</b>	<b>2970</b>	50.0	04/28/2023	ND	204	102	200	20.9	
<b>EXT DRO &gt;C28-C36</b>	<b>571</b>	50.0	04/28/2023	ND					
Surrogate: 1-Chlorooctane	93.4 %	48.2-134							
Surrogate: 1-Chlorooctadecane	116 %	49.1-148							

**Sample ID: FS - 19 12' (H232085-17)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>8200</b>	16.0	05/01/2023	ND	432	108	400	7.69	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/28/2023	ND	216	108	200	21.5	
<b>DRO &gt;C10-C28*</b>	<b>51.2</b>	10.0	04/28/2023	ND	204	102	200	20.9	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					
Surrogate: 1-Chlorooctane	89.7 %	48.2-134							
Surrogate: 1-Chlorooctadecane	96.6 %	49.1-148							

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 04/27/2023  
 Reported: 05/02/2023  
 Project Name: HARROUN 15 # 008  
 Project Number: 03B1417046  
 Project Location: OXY 32.21947,-103.97515

Sampling Date: 04/27/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: FS - 20 12' (H232085-18)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4560	16.0	05/01/2023	ND	432	108	400	7.69	

**Sample ID: FS - 21 12' (H232085-19)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6320	16.0	05/01/2023	ND	432	108	400	7.69	

**Sample ID: FS - 22 12' (H232085-20)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	960	16.0	05/01/2023	ND	432	108	400	7.69	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/28/2023	ND	216	108	200	21.5	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	204	102	200	20.9	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					

Surrogate: 1-Chlorooctane 87.7 % 48.2-134  
 Surrogate: 1-Chlorooctadecane 89.8 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 04/27/2023  
 Reported: 05/02/2023  
 Project Name: HARROUN 15 # 008  
 Project Number: 03B1417046  
 Project Location: OXY 32.21947,-103.97515

Sampling Date: 04/27/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: FS - 23 12' (H232085-21)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>6480</b>	16.0	05/01/2023	ND	432	108	400	7.69	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/28/2023	ND	216	108	200	21.5	
<b>DRO &gt;C10-C28*</b>	<b>691</b>	10.0	04/28/2023	ND	204	102	200	20.9	
<b>EXT DRO &gt;C28-C36</b>	<b>127</b>	10.0	04/28/2023	ND					
Surrogate: 1-Chlorooctane	92.7 %	48.2-134							
Surrogate: 1-Chlorooctadecane	94.1 %	49.1-148							

**Sample ID: FS - 24 12' (H232085-22)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>8400</b>	16.0	05/01/2023	ND	432	108	400	7.69	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/28/2023	ND	166	83.0	200	1.99	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	187	93.7	200	5.96	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					
Surrogate: 1-Chlorooctane	83.8 %	48.2-134							
Surrogate: 1-Chlorooctadecane	108 %	49.1-148							

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/27/2023	Sampling Date:	04/27/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	OXY 32.21947,-103.97515		

**Sample ID: FS - 25 12' (H232085-23)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>7680</b>	16.0	05/01/2023	ND	432	108	400	7.69	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/28/2023	ND	166	83.0	200	1.99	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	187	93.7	200	5.96	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					
Surrogate: 1-Chlorooctane	86.1 %	48.2-134							
Surrogate: 1-Chlorooctadecane	109 %	49.1-148							

**Sample ID: FS - 26 12' (H232085-24)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>11600</b>	16.0	05/01/2023	ND	432	108	400	7.69	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/28/2023	ND	166	83.0	200	1.99	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	187	93.7	200	5.96	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					
Surrogate: 1-Chlorooctane	94.3 %	48.2-134							
Surrogate: 1-Chlorooctadecane	121 %	49.1-148							

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 04/27/2023  
 Reported: 05/02/2023  
 Project Name: HARROUN 15 # 008  
 Project Number: 03B1417046  
 Project Location: OXY 32.21947,-103.97515

Sampling Date: 04/27/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: FS - 27 12' (H232085-25)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6880	16.0	05/01/2023	ND	432	108	400	7.69	

**Sample ID: FS - 28 12' (H232085-26)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	976	16.0	05/01/2023	ND	432	108	400	7.69	

**Sample ID: FS - 29 12' (H232085-27)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1020	16.0	05/01/2023	ND	432	108	400	7.69	

**Sample ID: FS - 30 12' (H232085-28)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2120	16.0	05/01/2023	ND	432	108	400	7.69	

**Sample ID: FS - 31 12' (H232085-29)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6000	16.0	05/01/2023	ND	432	108	400	7.69	

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 04/27/2023  
 Reported: 05/02/2023  
 Project Name: HARROUN 15 # 008  
 Project Number: 03B1417046  
 Project Location: OXY 32.21947,-103.97515

Sampling Date: 04/27/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: FS - 32 12' (H232085-30)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>5200</b>	16.0	05/01/2023	ND	432	108	400	7.69	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/28/2023	ND	166	83.0	200	1.99	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	187	93.7	200	5.96	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					
Surrogate: 1-Chlorooctane	91.4 %	48.2-134							
Surrogate: 1-Chlorooctadecane	118 %	49.1-148							

**Sample ID: FS - 33 12' (H232085-31)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>1360</b>	16.0	05/01/2023	ND	432	108	400	7.69	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/28/2023	ND	166	83.0	200	1.99	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	187	93.7	200	5.96	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					
Surrogate: 1-Chlorooctane	87.6 %	48.2-134							
Surrogate: 1-Chlorooctadecane	113 %	49.1-148							

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 04/27/2023  
 Reported: 05/02/2023  
 Project Name: HARROUN 15 # 008  
 Project Number: 03B1417046  
 Project Location: OXY 32.21947,-103.97515

Sampling Date: 04/27/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: FS - 34 12' (H232085-32)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1470	16.0	05/01/2023	ND	432	108	400	7.69	

**Sample ID: FS - 35 12' (H232085-33)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4560	16.0	05/01/2023	ND	432	108	400	7.69	

**Sample ID: FS - 36 12' (H232085-34)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3360	16.0	04/28/2023	ND	432	108	400	3.77	QM-07

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/28/2023	ND	166	83.0	200	1.99	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	187	93.7	200	5.96	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					

Surrogate: 1-Chlorooctane 87.5 % 48.2-134  
 Surrogate: 1-Chlorooctadecane 112 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 04/27/2023  
 Reported: 05/02/2023  
 Project Name: HARROUN 15 # 008  
 Project Number: 03B1417046  
 Project Location: OXY 32.21947,-103.97515

Sampling Date: 04/27/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: FS - 37 12' (H232085-35)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>832</b>	16.0	04/28/2023	ND	432	108	400	3.77	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/28/2023	ND	166	83.0	200	1.99	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	187	93.7	200	5.96	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					
Surrogate: 1-Chlorooctane	94.6 %	48.2-134							
Surrogate: 1-Chlorooctadecane	123 %	49.1-148							

**Sample ID: FS - 38 12' (H232085-36)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>1070</b>	16.0	04/28/2023	ND	432	108	400	3.77	

**Sample ID: FS - 39 12' (H232085-37)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>656</b>	16.0	04/28/2023	ND	432	108	400	3.77	

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 04/27/2023  
 Reported: 05/02/2023  
 Project Name: HARROUN 15 # 008  
 Project Number: 03B1417046  
 Project Location: OXY 32.21947,-103.97515

Sampling Date: 04/27/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: FS - 40 12' (H232085-38)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>9000</b>	16.0	04/28/2023	ND	432	108	400	3.77	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/28/2023	ND	166	83.0	200	1.99	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	187	93.7	200	5.96	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					
Surrogate: 1-Chlorooctane	93.1 %	48.2-134							
Surrogate: 1-Chlorooctadecane	120 %	49.1-148							

**Sample ID: FS - 41 12' (H232085-39)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>6240</b>	16.0	04/28/2023	ND	432	108	400	3.77	

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 04/27/2023  
 Reported: 05/02/2023  
 Project Name: HARROUN 15 # 008  
 Project Number: 03B1417046  
 Project Location: OXY 32.21947,-103.97515

Sampling Date: 04/27/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: FS - 42 12' (H232085-40)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>2760</b>	16.0	04/28/2023	ND	432	108	400	3.77	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/28/2023	ND	166	83.0	200	1.99	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	187	93.7	200	5.96	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					
Surrogate: 1-Chlorooctane	75.4 %	48.2-134							
Surrogate: 1-Chlorooctadecane	100 %	49.1-148							

**Sample ID: FS - 43 12' (H232085-41)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>3360</b>	16.0	04/28/2023	ND	432	108	400	3.77	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/28/2023	ND	166	83.0	200	1.99	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	187	93.7	200	5.96	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					
Surrogate: 1-Chlorooctane	88.3 %	48.2-134							
Surrogate: 1-Chlorooctadecane	113 %	49.1-148							

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/27/2023	Sampling Date:	04/27/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	OXY 32.21947,-103.97515		

**Sample ID: FS - 44 12' (H232085-42)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>2720</b>	16.0	04/28/2023	ND	432	108	400	3.77	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/28/2023	ND	166	83.0	200	1.99	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	187	93.7	200	5.96	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					
Surrogate: 1-Chlorooctane	86.9 %	48.2-134							
Surrogate: 1-Chlorooctadecane	108 %	49.1-148							

**Sample ID: FS - 45 12' (H232085-43)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>5280</b>	16.0	04/28/2023	ND	432	108	400	3.77	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/28/2023	ND	166	83.0	200	1.99	
<b>DRO &gt;C10-C28*</b>	<b>329</b>	10.0	04/28/2023	ND	187	93.7	200	5.96	
<b>EXT DRO &gt;C28-C36</b>	<b>58.3</b>	10.0	04/28/2023	ND					
Surrogate: 1-Chlorooctane	91.9 %	48.2-134							
Surrogate: 1-Chlorooctadecane	115 %	49.1-148							

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/27/2023	Sampling Date:	04/27/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	OXY 32.21947,-103.97515		

**Sample ID: FS - 46 12' (H232085-44)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>5200</b>	16.0	04/28/2023	ND	432	108	400	3.77	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/28/2023	ND	166	83.0	200	1.99	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	187	93.7	200	5.96	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					
Surrogate: 1-Chlorooctane	91.2 %	48.2-134							
Surrogate: 1-Chlorooctadecane	117 %	49.1-148							

**Sample ID: FS - 47 12' (H232085-45)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>3680</b>	16.0	04/28/2023	ND	432	108	400	3.77	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/28/2023	ND	166	83.0	200	1.99	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	187	93.7	200	5.96	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					
Surrogate: 1-Chlorooctane	93.7 %	48.2-134							
Surrogate: 1-Chlorooctadecane	120 %	49.1-148							

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 04/27/2023  
 Reported: 05/02/2023  
 Project Name: HARROUN 15 # 008  
 Project Number: 03B1417046  
 Project Location: OXY 32.21947,-103.97515

Sampling Date: 04/27/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: FS - 48 12' (H232085-46)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>9000</b>	16.0	04/28/2023	ND	432	108	400	3.77	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/28/2023	ND	166	83.0	200	1.99	
<b>DRO &gt;C10-C28*</b>	<b>41.7</b>	10.0	04/28/2023	ND	187	93.7	200	5.96	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					
Surrogate: 1-Chlorooctane	88.4 %	48.2-134							
Surrogate: 1-Chlorooctadecane	114 %	49.1-148							

**Sample ID: FS - 49 12' (H232085-47)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>2520</b>	16.0	04/28/2023	ND	432	108	400	3.77	

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	04/27/2023	Sampling Date:	04/27/2023
Reported:	05/02/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	OXY 32.21947,-103.97515		

**Sample ID: FS - 50 12' (H232085-48)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>11000</b>	16.0	04/28/2023	ND	432	108	400	3.77	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/28/2023	ND	166	83.0	200	1.99	
<b>DRO &gt;C10-C28*</b>	<b>21.5</b>	10.0	04/28/2023	ND	187	93.7	200	5.96	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					
Surrogate: 1-Chlorooctane	93.2 %	48.2-134							
Surrogate: 1-Chlorooctadecane	120 %	49.1-148							

**Sample ID: FS - 51 12' (H232085-49)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>4800</b>	16.0	04/28/2023	ND	432	108	400	3.77	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/28/2023	ND	166	83.0	200	1.99	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	187	93.7	200	5.96	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					
Surrogate: 1-Chlorooctane	90.1 %	48.2-134							
Surrogate: 1-Chlorooctadecane	115 %	49.1-148							

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 04/27/2023  
 Reported: 05/02/2023  
 Project Name: HARROUN 15 # 008  
 Project Number: 03B1417046  
 Project Location: OXY 32.21947,-103.97515

Sampling Date: 04/27/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: FS - 52 12' (H232085-50)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>4640</b>	16.0	04/28/2023	ND	432	108	400	3.77	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/28/2023	ND	166	83.0	200	1.99	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	187	93.7	200	5.96	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					
Surrogate: 1-Chlorooctane	90.9 %	48.2-134							
Surrogate: 1-Chlorooctadecane	116 %	49.1-148							

**Sample ID: FS - 53 12' (H232085-51)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>3520</b>	16.0	04/28/2023	ND	432	108	400	3.77	

**Sample ID: SW - 1 0-12' (H232085-52)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>5120</b>	16.0	04/28/2023	ND	432	108	400	3.77	

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 04/27/2023  
 Reported: 05/02/2023  
 Project Name: HARROUN 15 # 008  
 Project Number: 03B1417046  
 Project Location: OXY 32.21947,-103.97515

Sampling Date: 04/27/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SW - 2 0-12' (H232085-53)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6720	16.0	04/28/2023	ND	432	108	400	3.77	

**Sample ID: SW - 4 0-12' (H232085-54)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	9330	16.0	05/01/2023	ND	432	108	400	0.00	QM-07

**Sample ID: SW - 6 0-12' (H232085-55)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	26000	16.0	05/01/2023	ND	432	108	400	0.00	

**Sample ID: SW - 7 0-12' (H232085-56)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	24000	16.0	05/01/2023	ND	432	108	400	0.00	

**Sample ID: SW - 8 0-12' (H232085-57)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	19600	16.0	05/01/2023	ND	432	108	400	0.00	

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 04/27/2023  
 Reported: 05/02/2023  
 Project Name: HARROUN 15 # 008  
 Project Number: 03B1417046  
 Project Location: OXY 32.21947,-103.97515

Sampling Date: 04/27/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SW - 9 0-12' (H232085-58)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>8000</b>	16.0	05/01/2023	ND	432	108	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/28/2023	ND	166	83.0	200	1.99	
DRO >C10-C28*	<10.0	10.0	04/28/2023	ND	187	93.7	200	5.96	
EXT DRO >C28-C36	<10.0	10.0	04/28/2023	ND					
Surrogate: 1-Chlorooctane	85.2 %	48.2-134							
Surrogate: 1-Chlorooctadecane	110 %	49.1-148							

**Sample ID: SW - 10 0-12' (H232085-59)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>3520</b>	16.0	05/01/2023	ND	432	108	400	0.00	

**Sample ID: SW - 11 0-12' (H232085-60)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>336</b>	16.0	05/01/2023	ND	432	108	400	0.00	

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 04/27/2023  
 Reported: 05/02/2023  
 Project Name: HARROUN 15 # 008  
 Project Number: 03B1417046  
 Project Location: OXY 32.21947,-103.97515

Sampling Date: 04/27/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SW - 12 0-12' (H232085-61)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>1200</b>	16.0	05/01/2023	ND	432	108	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/28/2023	ND	166	83.0	200	1.99	
<b>DRO &gt;C10-C28*</b>	<b>155</b>	10.0	04/28/2023	ND	187	93.7	200	5.96	
<b>EXT DRO &gt;C28-C36</b>	<b>14.3</b>	10.0	04/28/2023	ND					

Surrogate: 1-Chlorooctane 92.4 % 48.2-134  
 Surrogate: 1-Chlorooctadecane 120 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

- QR-04 The RPD for the BS/BSD was outside of historical limits.
QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND Analyte NOT DETECTED at or above the reporting limit
RPD Relative Percent Difference
\*\* Samples not received at proper temperature of 6°C or below.
\*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager





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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 2 of 7

**BILL TO**

**ANALYSIS REQUEST**

Company Name: Ensolum, LLC  
 Project Manager: Beaux Jennings  
 Address: 601 N. Marientfield St. STE 400  
 City: Midland State: TX Zip: 79701  
 Phone #: 210-219-8858 Fax #:   
 Project #: 0381417046 Project Owner:   
 Project Name: Harrison 15 #208  
 Project Location: 32.21947, -103.97515 Eddy County, NM  
 Sampler Name: Keilee Smith 'SD  
 P.O. #:   
 Company: Oxy USA, Inc.  
 Attn: Wade Dittich  
 Address:   
 City:   
 State: Zip:   
 Phone #: 575-390-2828  
 Fax #:

FOR LAB USE ONLY	Lab I.D.	Sample I.D.	Sample Depth (feet)	PRESERV		DATE	TIME	SAMPLING	
				OTHER :	OTHER :			OTHER :	OTHER :
				(G)RAB OR (C)OMP.	# CONTAINERS				
				GROUNDWATER					
				WASTEWATER					
				SOIL					
				OIL					
				SLUDGE					
				OTHER :					
				ACID/BASE:					
				ICE / COOL					
				OTHER :					

11	FS-12	12'	C	1	X	4-27-23	1000	X											
12	FS-13	12'	C	1	X	4-27-23	1001	X											
13	FS-15	12'	C	1	X	4-27-23	1003	X											
14	FS-16	12'	C	1	X	4-27-23	1004	X											
15	FS-17	12'	C	1	X	4-27-23	1005	X											
16	FS-18	12'	C	1	X	4-27-23	1006	X											
17	FS-19	12'	C	1	X	4-27-23	1007	X											
18	FS-20	12'	C	1	X	4-27-23	1008	X											
19	FS-21	12'	C	1	X	4-27-23	1008	X											
20	FS-22	12'	C	1	X	4-27-23	1009	X											

PLEASE NOTE: Labels and Damages: Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analysis. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: *[Signature]* Date: 4-27-23 Time: 1500  
 Received By: *[Signature]* Date:   
 Time:   
 Verbal Result:  Yes  No  Add'l Phone #:   
 All Results are emailed. Please provide Email address:   
 REMARKS:   
 Turnaround Time:  Standard  Rush   
 Bacteria (only)  Cool Intact  Yes  No   
 Sample Condition  Intact  Yes  No   
 Checked By: *[Signature]*   
 Thermometer ID #113   
 Correction Factor -0.5°C   
 Standard  Bacteria (only)  Cool Intact  Yes  No   
 Sample Condition  Intact  Yes  No   
 Corrected Temp. °C

Delivered By: (Circle One)  UPS  Bus  Other:   
 Observed Temp. °C: 47.3   
 Corrected Temp. °C: 37   
 Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinalabnm.com



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 3 of 7

ANALYSIS REQUEST

BILL TO

P.O. #:

Company: Oxy USA, Inc.

Attn: Wade Dittich

Address:

City:

State:

Zip:

Fax #:

Phone #:

Project Name:

Project Location:

Sampler Name:

FOR LAB USE ONLY

Company Name: Ensolum, LLC  
 Project Manager: Beaux Jennings  
 Address: 601 N. Marientfeld St. STE 400  
 City: Midland State: TX Zip: 79701  
 Phone #: 210-219-8858 Fax #:   
 Project #: 03B1117046 Project Owner:   
 Project Name: Harroun 15 #2008  
 Project Location: 32.21447, -103.97515 eddy county, NM  
 Sampler Name: Valerie Smith #5D

(G)RAB OR (C)OMP. # CONTAINERS  
 MATRIX: GROUNDWATER, WASTEWATER, SOIL, OIL, SLUDGE, OTHER:  
 PRESERV: ACID/BASE, ICE/COOL, OTHER:  
 DATE TIME

Lab I.D.	Sample I.D.	Sample Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX	PRESERV	SAMPLING	DATE	TIME	REMARKS
H232085	21	FS-23	C	1	X	X	X	4-27-23	1010	Chlorides 4500
	22	FS-24	C	1	X	X	X	4-27-23	1011	TPH 8015m
	23	FS-25	C	1	X	X	X	4-27-23	1012	
	24	FS-26	C	1	X	X	X	4-27-23	1013	
	25	FS-27	C	1	X	X	X	4-27-23	1014	
	26	FS-28	C	1	X	X	X	4-27-23	1015	
	27	FS-29	C	1	X	X	X	4-27-23	1016	
	28	FS-30	C	1	X	X	X	4-27-23	1017	
	29	FS-31	C	1	X	X	X	4-27-23	1018	
	30	FS-32	C	1	X	X	X	4-27-23	1019	

PLEASE NOTE: Liability and Damages. Cardinal's liability and clients exclusive remedy for any claim arising whether based in contract or tort shall be limited to the amount paid by the client for the analysis. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: *[Signature]* Date: 4-27-23 Time: 1500  
 Received By: *[Signature]* Date:   
 Time:   
 Remarks:   
 Verbal Results:  Yes  No  Add'l Phone #:   
 All Results are emailed. Please provide Email address:   
 Buennings@ensolum.com

Delivered By: (Circle One) Observed Temp. °C: 44.3 Sample Condition: Cool Intact  Yes  No Intact  Yes  No  
 Corrected Temp. °C: 38.9  
 Turnaround Time: Standard  Rush   
 Bacteria (only) Sample Condition: Cool Intact  Yes  No Intact  Yes  No  
 Corrected Temp. °C:   
 Cardinal cannot accept verbal changes. Please email changes to caley.keene@cardinalabnm.com



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 4 of 7

ANALYSIS REQUEST

Company Name: Ensolum, LLC		P.O. #:		<b>BILL TO</b>		ANALYSIS REQUEST	
Project Manager: Beaux Jennings		Company: Oxy USA, Inc.					
Address: 601 N. Marnefield St. STE 400		Attn: Wade Dittrich					
City: Midland		State: TX		Zip: 79701			
Phone #: 210-219-8858		Fax #:		Address:			
Project #: 0381417046		Project Owner:		City:			
Project Name: Harrow 15 #008		State:		Zip:			
Project Location: 92.21947, -103.97515 Eddy County, NM		Phone #:		575-390-2828			
Sample Name: Leilee Smith #50		Fax #:					
FOR LAB USE ONLY		PRESERV:		SAMPLING			
Lab I.D.	Sample I.D.	Sample Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	DATE	TIME	
H232085	F3-33	12		1	4-14-23	1020	X
	F3-34	12		1	4-14-23	1021	X
	F3-35	12		1	4-14-23	1022	X
	F3-36	12		1	4-14-23	1023	X
	F3-37	12		1	4-14-23	1024	X
	F3-38	12		1	4-14-23	1025	X
	F3-39	12		1	4-14-23	1026	X
	F3-40	12		1	4-14-23	1102	X
	F3-41	12		1	4-14-23	1103	X
	F3-42	12		1	4-14-23	1104	X

PLEASE NOTE: Liability and Damages, Cardinal's liability and client's exclusive remedy for any claim arising weather based in contract or tort, shall be limited to the amount paid by the client for the analysis. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: *[Signature]* Date: 4-17-23 Time: 1300  
Received By: *[Signature]* Date: *[Blank]* Time: *[Blank]*

Delivered By: (Circle One)  UPS  Bus  Other:  Corrected Temp. °C: 3.7

Observed Temp. °C: 4.3  
Corrected Temp. °C: 3.7

Sample Condition:  Cool  Intact  Yes  No

Checked By: *[Signature]*

Turnaround Time:  Standard  Rush

Thermometer ID #113  
Correction Factor -0.5°C

Bacteria (only)  Cool  Intact  Yes  No

Sample Condition  Observed Temp. °C  Corrected Temp. °C

Vertical Result:  Yes  No  Add'l Phone #:  
All Results are emailed. Please provide Email address: Blennings@ensolum.com

REMARKS:

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



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST  
 Page 5 of 7

**BILL TO**

**ANALYSIS REQUEST**

Company Name: Ensolum, LLC		P.O. #:	
Project Manager: Beaux Jennings		Company: Oxy USA, Inc.	
Address: 601 N. Marientfeld St. STE 400		Attn: Wade Dittich	
City: Midland	State: TX	Zip: 79701	Address:
Phone #: 210-219-8858	Fax #: 210-219-8858	City:	Address:
Project #: 03B141746	Project Owner:	State:	Zip:
Project Name: Harrison 15 #2008	Project Location: 32.21447, -103.97515 Eddy County, NM	Phone #:	575-390-2828
Sample Name: Water Sample #5D	FOR LAB USE ONLY	Fax #:	

Lab I.D.	Sample I.D.	Sample Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	REMARKS
					GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :			
41	FS-43	12'	C	1						4-27-23	1105	Chlorides 4500	
42	FS-41	12'	C	1	X					4-27-23	1104	TPH 80.5m	
43	FS-45	12'	C	1	X					4-27-23	1107		
44	FS-46	12'	C	1	X					4-27-23	1108		
45	FS-47	12'	C	1	X					4-27-23	1109		
46	FS-48	12'	C	1	X					4-27-23	1110		
47	FS-49	12'	C	1	X					4-27-23	1111		
48	FS-50	12'	C	1	X					4-27-23	1112		
49	FS-51	12'	C	1	X					4-27-23	1113		
50	FS-52	12'	C	1	X					4-27-23	1114		

PLEASE NOTE: Liability and Damages: Cardinal's liability and client's exclusive remedy for any claim arising from this contract or from any amount paid by the client for the analysis. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable analysis. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: [Signature] Date: 4-27-23 Time: 1500

Received By: [Signature] Date: 4-27-23 Time: 1500

Delivered By: (Circle One) Observed Temp.: 43 Corrected Temp.: 37

Sampler - UPS - Bus - Other: Sample Condition Cool Intact Yes No

Turnaround Time: Standard Rush Bacteria (only) Sample Condition Cool Intact Yes No Corrected Temp.: C

Vertical Result: Yes No Add'l Phone #: All Results are emailed. Please provide Email address: Blennings@ensolum.com

REMARKS:



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 6 of 7

**BILL TO**

**ANALYSIS REQUEST**

Company Name: Ensolum, LLC P.O. #:   
 Project Manager: Beaux Jennings Company: Oxy USA, Inc.   
 Address: 601 N. Marlenfield St. STE 400 Attn: Wade Dittich   
 City: Midland State: TX Zip: 79701 Address:   
 Phone #: 210-219-8858 Fax #:   
 Project #: 0381417516 Project Owner: City:   
 Project Name: Hartman 15 Fee 08 State: Zip:   
 Project Location: 32, 21441, -10392515 Eddy County, NM Phone #: 575-390-2828   
 Sampler Name: Lighter Sample SPD Fax #:   
 FOR LAB USE ONLY

Lab I.D.	Sample I.D.	Sample Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX							PRESERV.	SAMPLING	DATE	TIME	REMARKS	ANALYSIS REQUEST
					GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:						
HE3-2085	FS53	12'	C	1									4-27-23	1115	X	chlorides 4500	
	SW-1	0-12'	C	1	X								4-27-23	1015	X		
	SW-2	0-12'	C	1	X								4-27-23	1016	X		
	SW-4	0-12'	C	1	X								4-27-23	1020	X		
	SW-6	0-12'	C	1	X								4-27-23	1017	X		
	SW-7	0-12'	C	1	X								4-27-23	1018	X		
	SW-8	0-12'	C	1	X								4-27-23	1019	X		
	SW-9	0-12'	C	1	X								4-27-23	1114	X		
	SW-10	0-12'	C	1	X								4-27-23	1117	X		
	SW-11	0-12'	C	1	X								4-27-23	1118	X		

PLEASE NOTE: Labity and Damages: Cardinal's liability and client's exclusive remedy for any claim arising under this contract or for the amount paid by the client for the analysis. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruption, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: *[Signature]* Date: 4-27-23 Received By: *[Signature]* Date: 4-27-23  
 Time: 1500  
 Verbal Result:  Yes  No Add'l Phone #: Blennings@ensolum.com  
 All Results are emailed. Please provide Email address:  
 REMARKS:

Delivered By: (Circle One) Observed Temp. °C: 43 Sample Condition:  Intact  Cool  Yes  No  No CHECKED BY: (Initials) *[Signature]*  
 Corrected Temp. °C: 3.7  
 Thermometer ID #113 Standard  Bacteria (only)  Sample Condition:  Intact  Observed Temp. °C:  Yes  No  No Corrected Temp. °C:  Yes  No

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





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

---

May 24, 2023

BEAUX JENNINGS  
ENSOLUM, LLC  
705 W WADLEY AVE.  
MIDLAND, TX 79705

RE: HARROUN 15 # 008

Enclosed are the results of analyses for samples received by the laboratory on 05/23/23 13:00.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene  
Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	05/23/2023	Sampling Date:	05/23/2023
Reported:	05/24/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	OXY 32.21947,-103.97515		

**Sample ID: FS - 18 12' (H232619-01)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>3680</b>	16.0	05/23/2023	ND	416	104	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/24/2023	ND	188	93.9	200	0.894	
<b>DRO &gt;C10-C28*</b>	<b>671</b>	10.0	05/24/2023	ND	150	74.8	200	6.15	
<b>EXT DRO &gt;C28-C36</b>	<b>182</b>	10.0	05/24/2023	ND					

Surrogate: 1-Chlorooctane 103 % 48.2-134  
 Surrogate: 1-Chlorooctadecane 111 % 49.1-148

**Sample ID: FS - 23 12' (H232619-02)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>46400</b>	16.0	05/23/2023	ND	416	104	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/23/2023	ND	188	93.9	200	0.894	
DRO >C10-C28*	<10.0	10.0	05/23/2023	ND	150	74.8	200	6.15	
EXT DRO >C28-C36	<10.0	10.0	05/23/2023	ND					

Surrogate: 1-Chlorooctane 84.4 % 48.2-134  
 Surrogate: 1-Chlorooctadecane 85.8 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	05/23/2023	Sampling Date:	05/23/2023
Reported:	05/24/2023	Sampling Type:	Soil
Project Name:	HARROUN 15 # 008	Sampling Condition:	Cool & Intact
Project Number:	03B1417046	Sample Received By:	Tamara Oldaker
Project Location:	OXY 32.21947,-103.97515		

**Sample ID: FS - 45 12' (H232619-03)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>1070</b>	16.0	05/23/2023	ND	416	104	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/23/2023	ND	188	93.9	200	0.894	
DRO >C10-C28*	<10.0	10.0	05/23/2023	ND	150	74.8	200	6.15	
EXT DRO >C28-C36	<10.0	10.0	05/23/2023	ND					
Surrogate: 1-Chlorooctane	91.0 %	48.2-134							
Surrogate: 1-Chlorooctadecane	91.7 %	49.1-148							

**Sample ID: FS - 53 12' (H232619-04)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>848</b>	16.0	05/23/2023	ND	416	104	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/23/2023	ND	188	93.9	200	0.894	
DRO >C10-C28*	<10.0	10.0	05/23/2023	ND	150	74.8	200	6.15	
EXT DRO >C28-C36	<10.0	10.0	05/23/2023	ND					
Surrogate: 1-Chlorooctane	85.7 %	48.2-134							
Surrogate: 1-Chlorooctadecane	86.0 %	49.1-148							

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 05/23/2023  
 Reported: 05/24/2023  
 Project Name: HARROUN 15 # 008  
 Project Number: 03B1417046  
 Project Location: OXY 32.21947,-103.97515

Sampling Date: 05/23/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SW - 1 0-12' (H232619-05)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	304	16.0	05/23/2023	ND	416	104	400	0.00	

**Sample ID: SW - 2 0-12' (H232619-06)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	05/23/2023	ND	416	104	400	0.00	

**Sample ID: SW - 4 0-12' (H232619-07)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4640	16.0	05/23/2023	ND	416	104	400	0.00	

**Sample ID: SW - 6 0-12' (H232619-08)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	192	16.0	05/23/2023	ND	416	104	400	0.00	

**Sample ID: SW - 7 0-12' (H232619-09)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	05/23/2023	ND	416	104	400	0.00	

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 05/23/2023  
 Reported: 05/24/2023  
 Project Name: HARROUN 15 # 008  
 Project Number: 03B1417046  
 Project Location: OXY 32.21947,-103.97515

Sampling Date: 05/23/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SW - 8 0-12' (H232619-10)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	05/23/2023	ND	416	104	400	0.00	

**Sample ID: SW - 9 0-12' (H232619-11)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	05/23/2023	ND	416	104	400	0.00	

**Sample ID: SW - 10 0-12' (H232619-12)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	05/23/2023	ND	416	104	400	0.00	

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 BEAUX JENNINGS  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 05/23/2023  
 Reported: 05/24/2023  
 Project Name: HARROUN 15 # 008  
 Project Number: 03B1417046  
 Project Location: OXY 32.21947,-103.97515

Sampling Date: 05/23/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SW - 12 0-12' (H232619-13)**

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>32.0</b>	16.0	05/23/2023	ND	416	104	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	05/23/2023	ND	188	93.9	200	0.894	
DRO >C10-C28*	<10.0	10.0	05/23/2023	ND	150	74.8	200	6.15	
EXT DRO >C28-C36	<10.0	10.0	05/23/2023	ND					
Surrogate: 1-Chlorooctane	90.5 %	48.2-134							
Surrogate: 1-Chlorooctadecane	90.8 %	49.1-148							

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND Analyte NOT DETECTED at or above the reporting limit
RPD Relative Percent Difference
\*\* Samples not received at proper temperature of 6°C or below.
\*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager





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

**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

**BILL TO**

**ANALYSIS REQUEST**

Company Name: Ensolum, LLC		P.O. #:	
Project Manager: Beaux Jennings		Company: Oxy USA, Inc.	
Address: 601 N. Marfield St. STE 400		Attn: Wade Dittrich	
City: Midland	State: TX	Zip: 79701	Address:
Phone #: 210-219-9858	Fax #:	City:	State:
Project #: 03B1417046	Project Owner:	Phone #:	Zip:
Project Name: Harrow 15 H008			
Project Location: 32.21947, -103.97515 Eddy County, NM			
Sampler Name: Kaitie Smith & SM			

Lab I.D.	Sample I.D.	Sample Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX							DATE	TIME	REMARKS
					GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:			
183310P1	SW-9	0-12'	C 1	1	X							5-23-23	1024	chl.oids 4500
	SW-10	0-12'	C 1	1	X							5-23-23	024	TPH 8015m
	SW-12	0-12'	C 1	1	X							5-23-23	1624	
	N/A													

PLEASE NOTE: Liability and Damages, Cardinal's liability and client's exclusive remedy for any claim arising from this contract or for the amount paid by the client for the analyses, all claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above defined reasons, or otherwise.

Relinquished By: *[Signature]* Date: 5-23-23 Received By: *[Signature]* Date: 5-23-23

Time: 1300 Received By: *[Signature]*

Delivered By: (Circle One) Observed Temp. °C: 4.5 Sample Condition: Cool Intact  Yes  No

Sampler - UPS - Bus - Other: Corrected Temp. °C: 3.9

Checked By: (Initials) *[Initials]*

Turnaround Time: 48 hr Standard  Rush

Thermometer ID #113 Corrosion Factor: 0.5°C

Bacteria (only) Sample Condition: Cool Intact  Yes  No

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



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

June 16, 2023

BEAUX JENNINGS  
ENSOLUM, LLC  
705 W WADLEY AVE.  
MIDLAND, TX 79705

RE: HARROUN 15 # 008

Enclosed are the results of analyses for samples received by the laboratory on 06/14/23 14:00.

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

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

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

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

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

Sincerely,

Celey D. Keene  
Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC 705 W WADLEY AVE. MIDLAND TX, 79705	Project: HARROUN 15 # 008 Project Number: 03B1417046 Project Manager: BEAUX JENNINGS Fax To:	Reported: 16-Jun-23 11:16
--	---	------------------------------

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
FS - 18 16'	H233061-01	Soil	13-Jun-23 11:46	14-Jun-23 14:00
FS - 23 16'	H233061-02	Soil	13-Jun-23 11:48	14-Jun-23 14:00
SW - 4 0-12'	H233061-03	Soil	13-Jun-23 13:50	14-Jun-23 14:00

06/16/23 - Client added analysis (see COC). This is the revised report and will replace the one sent on 06/15/23.

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC 705 W WADLEY AVE. MIDLAND TX, 79705	Project: HARROUN 15 # 008 Project Number: 03B1417046 Project Manager: BEAUX JENNINGS Fax To:	Reported: 16-Jun-23 11:16
--	---	------------------------------

**FS - 18 16'**  
**H233061-01 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories**

**Inorganic Compounds**

<b>Chloride</b>	<b>1920</b>		16.0	mg/kg	4	3061428	AC	14-Jun-23	4500-Cl-B	
-----------------	-------------	--	------	-------	---	---------	----	-----------	-----------	--

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	3061533	MS	15-Jun-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3061533	MS	15-Jun-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3061533	MS	15-Jun-23	8015B	
Surrogate: 1-Chlorooctane			82.9 %	48.2-134		3061533	MS	15-Jun-23	8015B	
Surrogate: 1-Chlorooctadecane			80.9 %	49.1-148		3061533	MS	15-Jun-23	8015B	

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC 705 W WADLEY AVE. MIDLAND TX, 79705	Project: HARROUN 15 # 008 Project Number: 03B1417046 Project Manager: BEAUX JENNINGS Fax To:	Reported: 16-Jun-23 11:16
--	---	------------------------------

**FS - 23 16'**  
**H233061-02 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories**

**Inorganic Compounds**

<b>Chloride</b>	<b>3520</b>		16.0	mg/kg	4	3061552	AC	15-Jun-23	4500-CI-B	
-----------------	-------------	--	------	-------	---	---------	----	-----------	-----------	--

**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	3061424	MS	15-Jun-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3061424	MS	15-Jun-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3061424	MS	15-Jun-23	8015B	
Surrogate: 1-Chlorooctane			92.4 %	48.2-134		3061424	MS	15-Jun-23	8015B	
Surrogate: 1-Chlorooctadecane			98.9 %	49.1-148		3061424	MS	15-Jun-23	8015B	

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC 705 W WADLEY AVE. MIDLAND TX, 79705	Project: HARROUN 15 # 008 Project Number: 03B1417046 Project Manager: BEAUX JENNINGS Fax To:	Reported: 16-Jun-23 11:16
--	---	------------------------------

**SW - 4 0-12'**  
**H233061-03 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
---------	--------	-----	-----------------	-------	----------	-------	---------	----------	--------	-------

**Cardinal Laboratories**

**Inorganic Compounds**

<b>Chloride</b>	<b>752</b>		16.0	mg/kg	4	3061428	AC	14-Jun-23	4500-CI-B	
-----------------	------------	--	------	-------	---	---------	----	-----------	-----------	--

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC 705 W WADLEY AVE. MIDLAND TX, 79705	Project: HARROUN 15 # 008 Project Number: 03B1417046 Project Manager: BEAUX JENNINGS Fax To:	Reported: 16-Jun-23 11:16
--	---	------------------------------

**Inorganic Compounds - Quality Control**

**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 3061428 - 1:4 DI Water**

<b>Blank (3061428-BLK1)</b>		Prepared & Analyzed: 14-Jun-23								
Chloride	ND	16.0	mg/kg							
<b>LCS (3061428-BS1)</b>		Prepared & Analyzed: 14-Jun-23								
Chloride	416	16.0	mg/kg	400		104	80-120			
<b>LCS Dup (3061428-BSD1)</b>		Prepared & Analyzed: 14-Jun-23								
Chloride	448	16.0	mg/kg	400		112	80-120	7.41	20	

**Batch 3061552 - 1:4 DI Water**

<b>Blank (3061552-BLK1)</b>		Prepared & Analyzed: 15-Jun-23								
Chloride	ND	16.0	mg/kg							
<b>LCS (3061552-BS1)</b>		Prepared & Analyzed: 15-Jun-23								
Chloride	416	16.0	mg/kg	400		104	80-120			
<b>LCS Dup (3061552-BSD1)</b>		Prepared & Analyzed: 15-Jun-23								
Chloride	432	16.0	mg/kg	400		108	80-120	3.77	20	

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC 705 W WADLEY AVE. MIDLAND TX, 79705	Project: HARROUN 15 # 008 Project Number: 03B1417046 Project Manager: BEAUX JENNINGS Fax To:	Reported: 16-Jun-23 11:16
--	---	------------------------------

**Petroleum Hydrocarbons by GC FID - Quality Control**

**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 3061424 - General Prep - Organics**

<b>Blank (3061424-BLK1)</b>		Prepared & Analyzed: 14-Jun-23								
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	38.7		mg/kg	49.6		78.0	48.2-134			
Surrogate: 1-Chlorooctadecane	42.2		mg/kg	50.0		84.5	49.1-148			

<b>LCS (3061424-BS1)</b>		Prepared: 14-Jun-23 Analyzed: 15-Jun-23								
GRO C6-C10	200	10.0	mg/kg	200		100	78.5-124			
DRO >C10-C28	206	10.0	mg/kg	200		103	72.5-126			
Total TPH C6-C28	406	10.0	mg/kg	400		102	77.6-123			
Surrogate: 1-Chlorooctane	54.3		mg/kg	49.6		109	48.2-134			
Surrogate: 1-Chlorooctadecane	55.5		mg/kg	50.0		111	49.1-148			

<b>LCS Dup (3061424-BSD1)</b>		Prepared: 14-Jun-23 Analyzed: 15-Jun-23								
GRO C6-C10	189	10.0	mg/kg	200		94.7	78.5-124	5.53	17.7	
DRO >C10-C28	196	10.0	mg/kg	200		97.8	72.5-126	5.33	21	
Total TPH C6-C28	385	10.0	mg/kg	400		96.3	77.6-123	5.43	18.5	
Surrogate: 1-Chlorooctane	51.6		mg/kg	49.6		104	48.2-134			
Surrogate: 1-Chlorooctadecane	52.4		mg/kg	50.0		105	49.1-148			

**Batch 3061533 - General Prep - Organics**

<b>Blank (3061533-BLK1)</b>		Prepared & Analyzed: 15-Jun-23								
GRO C6-C10	ND	10.0	mg/kg							
DRO >C10-C28	ND	10.0	mg/kg							
EXT DRO >C28-C36	ND	10.0	mg/kg							
Surrogate: 1-Chlorooctane	47.7		mg/kg	49.6		96.3	48.2-134			
Surrogate: 1-Chlorooctadecane	46.0		mg/kg	50.0		92.1	49.1-148			

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC 705 W WADLEY AVE. MIDLAND TX, 79705	Project: HARROUN 15 # 008 Project Number: 03B1417046 Project Manager: BEAUX JENNINGS Fax To:	Reported: 16-Jun-23 11:16
--	---	------------------------------

**Petroleum Hydrocarbons by GC FID - Quality Control**

**Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
---------	--------	-----------------	-------	-------------	---------------	------	-------------	-----	-----------	-------

**Batch 3061533 - General Prep - Organics**

**LCS (3061533-BS1)**

Prepared & Analyzed: 15-Jun-23

GRO C6-C10	226	10.0	mg/kg	200		113	78.5-124			
DRO >C10-C28	208	10.0	mg/kg	200		104	72.5-126			
Total TPH C6-C28	434	10.0	mg/kg	400		109	77.6-123			
Surrogate: 1-Chlorooctane	60.4		mg/kg	49.6		122	48.2-134			
Surrogate: 1-Chlorooctadecane	61.8		mg/kg	50.0		124	49.1-148			

**LCS Dup (3061533-BSD1)**

Prepared & Analyzed: 15-Jun-23

GRO C6-C10	215	10.0	mg/kg	200		108	78.5-124	4.96	17.7	
DRO >C10-C28	202	10.0	mg/kg	200		101	72.5-126	3.03	21	
Total TPH C6-C28	417	10.0	mg/kg	400		104	77.6-123	4.03	18.5	
Surrogate: 1-Chlorooctane	54.5		mg/kg	49.6		110	48.2-134			
Surrogate: 1-Chlorooctadecane	55.7		mg/kg	50.0		111	49.1-148			

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- \*\* Samples not received at proper temperature of 6°C or below.
- \*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C  
Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence or any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damage including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

*Celey D. Keene*

Celey D. Keene, Lab Director/Quality Manager



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

**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

<b>Company Name:</b> Ensolum, LLC <b>Project Manager:</b> Beaux Jennings <b>Address:</b> 601 N. Marrenfeld St. STE 400 <b>City:</b> Midland <b>State:</b> TX <b>Zip:</b> 79701 <b>Phone #:</b> 210-219-8858 <b>Fax #:</b> <b>Project #:</b> 03B1117046 <b>Project Owner:</b> <b>Project Name:</b> Herron IS #208 <b>Project Location:</b> 32.21447, -103.973515 <b>Sampler Name:</b> Kaylee Smith		<b>BILL TO</b> <b>P.O. #:</b> <b>Company:</b> Oxy USA, Inc. <b>Attn:</b> Wade Dittich <b>Address:</b> <b>City:</b> <b>State:</b> <b>Zip:</b> <b>Phone #:</b> 575-390-2828 <b>Fax #:</b>		<b>ANALYSIS REQUEST</b>	
<b>Lab I.D.</b> H233061	<b>Sample I.D.</b> FS-18 FS-23 SW-4	<b>Sample Depth (feet)</b> 16' 16' 6-12'	(G)RAB OR (C)OMP. # CONTAINERS GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER : ACID/BASE: ICE / COOL OTHER :	DATE 4-13-23 4-13-23 6-13-23	TIME 1146 1148 1350
Matrix: <input checked="" type="checkbox"/> SOIL <input type="checkbox"/> OIL <input type="checkbox"/> SLUDGE <input type="checkbox"/> OTHER : Preservation: <input type="checkbox"/> ACID/BASE: <input type="checkbox"/> ICE / COOL <input type="checkbox"/> OTHER :			Analysis: Chlorides 4500 TPH added CL 6/15/23 TO added TPH 6/15/23 TO		
PR PLEASE NOTE: Liability and Damages. Cardinal's liability and claims exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analysis. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.					
<b>Reinquinshed By:</b> [Signature]		<b>Date:</b> 6-14-23		<b>Received By:</b> [Signature]	
<b>Delivered By:</b> (Circle One) Sampler - UPS - Bus - Other:		<b>Observed Temp. °C</b> Corrected Temp. °C		<b>Sample Condition</b> Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Bacteria (only) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Corrected Temp. °C	
<b>Turnaround Time:</b> 24 hr Standard Thermometer ID #113 Corrosion Factor -0.5°C		CHECKED BY: [Signature] Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Add'l Phone #: All Results are emailed. Please provide Email address: <a href="mailto:BJennings@ensolum.com">BJennings@ensolum.com</a> REMARKS:			

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



Environment Testing

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

# ANALYTICAL REPORT

## PREPARED FOR

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

Generated 11/27/2023 1:55:40 PM Revision 1

## JOB DESCRIPTION

HARROUN #15  
Eddy County NM

## JOB NUMBER

890-5593-1

Eurofins Carlsbad  
1089 N Canal St.  
Carlsbad NM 88220



# Eurofins Carlsbad

## Job Notes

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

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

## Authorization



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

Generated  
11/27/2023 1:55:40 PM  
Revision 1



Client: Ensolum  
Project/Site: HARROUN #15

Laboratory Job ID: 890-5593-1  
SDG: Eddy County NM

# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	3
Definitions/Glossary . . . . .	4
Case Narrative . . . . .	5
Client Sample Results . . . . .	6
QC Sample Results . . . . .	7
QC Association Summary . . . . .	9
Lab Chronicle . . . . .	10
Certification Summary . . . . .	11
Method Summary . . . . .	12
Sample Summary . . . . .	13
Chain of Custody . . . . .	14
Receipt Checklists . . . . .	15

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

## Definitions/Glossary

Client: Ensolum  
Project/Site: HARROUN #15

Job ID: 890-5593-1  
SDG: Eddy County NM

## Qualifiers

## HPLC/IC

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

## General Chemistry

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

## Glossary

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

### Case Narrative

Client: Ensolum  
Project/Site: HARROUN #15

Job ID: 890-5593-1  
SDG: Eddy County NM

**Job ID: 890-5593-1**

**Laboratory: Eurofins Carlsbad**

**Narrative**

**Job Narrative  
890-5593-1**

REVISION

The report being provided is a revision of the original report sent on 11/17/2023. The report (revision 1) is being revised due to Per client email, requesting sample ID correction and add updated COC.

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method. Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

**Receipt**

The samples were received on 11/8/2023 3:10 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 6.6°C

**HPLC/IC**

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

**General Chemistry**

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: HARROUN #15

Job ID: 890-5593-1  
 SDG: Eddy County NM

**Client Sample ID: BMW-1**  
 Date Collected: 11/08/23 12:10  
 Date Received: 11/08/23 15:10

**Lab Sample ID: 890-5593-1**  
 Matrix: Water

**Method: EPA 300.0 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5510		50.0	34.6	mg/L			11/14/23 16:24	100

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	18700		100	100	mg/L			11/15/23 20:18	1

**Client Sample ID: BMW-2**  
 Date Collected: 11/08/23 12:50  
 Date Received: 11/08/23 15:10

**Lab Sample ID: 890-5593-2**  
 Matrix: Water

**Method: EPA 300.0 - Anions, Ion Chromatography**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6160		50.0	34.6	mg/L			11/14/23 16:35	100

**General Chemistry**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (SM 2540C)	16300		100	100	mg/L			11/15/23 20:18	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

### QC Sample Results

Client: Ensolum  
Project/Site: HARROUN #15

Job ID: 890-5593-1  
SDG: Eddy County NM

#### Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-66985/3  
Matrix: Water  
Analysis Batch: 66985

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.346	U	0.500	0.346	mg/L			11/14/23 15:21	1

Lab Sample ID: LCS 880-66985/4  
Matrix: Water  
Analysis Batch: 66985

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	25.0	24.86		mg/L		99	90 - 110

Lab Sample ID: LCSD 880-66985/5  
Matrix: Water  
Analysis Batch: 66985

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	25.0	24.88		mg/L		100	90 - 110	0	20

Lab Sample ID: 880-35729-A-1 MS  
Matrix: Water  
Analysis Batch: 66985

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	249		250	494.3		mg/L		98	90 - 110

Lab Sample ID: 880-35729-A-1 MSD  
Matrix: Water  
Analysis Batch: 66985

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

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	249		250	493.7		mg/L		98	90 - 110	0	20

#### Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 860-131138/1  
Matrix: Water  
Analysis Batch: 131138

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<5.00	U	5.00	5.00	mg/L			11/15/23 09:58	1

Lab Sample ID: LCS 860-131138/2  
Matrix: Water  
Analysis Batch: 131138

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Dissolved Solids	1000	1001		mg/L		100	80 - 120

Eurofins Carlsbad

### QC Sample Results

Client: Ensolum  
 Project/Site: HARROUN #15

Job ID: 890-5593-1  
 SDG: Eddy County NM

**Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)**

Lab Sample ID: LCSD 860-131138/3  
 Matrix: Water  
 Analysis Batch: 131138

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Total Dissolved Solids	1000	1004		mg/L		100	80 - 120	0	10

Lab Sample ID: 830-4467-C-2 DU  
 Matrix: Water  
 Analysis Batch: 131138

Client Sample ID: Duplicate  
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	1700		1704		mg/L		0.2	10

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

## QC Association Summary

Client: Ensolum  
Project/Site: HARROUN #15

Job ID: 890-5593-1  
SDG: Eddy County NM

## HPLC/IC

## Analysis Batch: 66985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5593-1	BMW-1	Total/NA	Water	300.0	
890-5593-2	BMW-2	Total/NA	Water	300.0	
MB 880-66985/3	Method Blank	Total/NA	Water	300.0	
LCS 880-66985/4	Lab Control Sample	Total/NA	Water	300.0	
LCSD 880-66985/5	Lab Control Sample Dup	Total/NA	Water	300.0	
880-35729-A-1 MS	Matrix Spike	Total/NA	Water	300.0	
880-35729-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	300.0	

## General Chemistry

## Analysis Batch: 131138

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5593-1	BMW-1	Total/NA	Water	SM 2540C	
890-5593-2	BMW-2	Total/NA	Water	SM 2540C	
MB 860-131138/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 860-131138/2	Lab Control Sample	Total/NA	Water	SM 2540C	
LCSD 860-131138/3	Lab Control Sample Dup	Total/NA	Water	SM 2540C	
830-4467-C-2 DU	Duplicate	Total/NA	Water	SM 2540C	

### Lab Chronicle

Client: Ensolum  
 Project/Site: HARROUN #15

Job ID: 890-5593-1  
 SDG: Eddy County NM

**Client Sample ID: BMW-1**  
**Date Collected: 11/08/23 12:10**  
**Date Received: 11/08/23 15:10**

**Lab Sample ID: 890-5593-1**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		100	10 mL	10 mL	66985	11/14/23 16:24	CH	EET MID
Total/NA	Analysis	SM 2540C		1	10 mL	200 mL	131138	11/15/23 20:18	SA	EET HOU

**Client Sample ID: BMW-2**  
**Date Collected: 11/08/23 12:50**  
**Date Received: 11/08/23 15:10**

**Lab Sample ID: 890-5593-2**  
**Matrix: Water**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		100	10 mL	10 mL	66985	11/14/23 16:35	CH	EET MID
Total/NA	Analysis	SM 2540C		1	10 mL	200 mL	131138	11/15/23 20:18	SA	EET HOU

**Laboratory References:**

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200  
 EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

### Accreditation/Certification Summary

Client: Ensolum  
Project/Site: HARROUN #15

Job ID: 890-5593-1  
SDG: Eddy County NM

#### Laboratory: Eurofins Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-00759	08-03-24
Florida	NELAP	E871002	06-30-24
Louisiana (All)	NELAP	03054	06-30-24
Oklahoma	NELAP	1306	08-31-24
Oklahoma	State	2023-139	08-31-24
Texas	NELAP	T104704215-23-53	06-30-24
Texas	TCEQ Water Supply	T104704215	12-28-25
USDA	US Federal Programs	525-23-79-79507	03-20-26

#### Laboratory: Eurofins Midland

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	06-30-24

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

# Method Summary

Client: Ensolum  
Project/Site: HARROUN #15

Job ID: 890-5593-1  
SDG: Eddy County NM

Method	Method Description	Protocol	Laboratory
300.0	Anions, Ion Chromatography	EPA	EET MID
SM 2540C	Solids, Total Dissolved (TDS)	SM	EET HOU

**Protocol References:**

EPA = US Environmental Protection Agency  
SM = "Standard Methods For The Examination Of Water And Wastewater"

**Laboratory References:**

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200  
EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440



# Sample Summary

Client: Ensolum  
Project/Site: HARROUN #15

Job ID: 890-5593-1  
SDG: Eddy County NM

---

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-5593-1	BMW-1	Water	11/08/23 12:10	11/08/23 15:10
890-5593-2	BMW-2	Water	11/08/23 12:50	11/08/23 15:10

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13



Environment Testing

5545

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300  
Midland, TX (432) 704-5400, San Antonio, TX (210) 509-3334  
McAllen, TX (361) 291-1100, El Paso, TX (957) 291-1100  
Hobbs, NM (575) 392-7350, Carlsbad, NM (575) 988-3199

Work Order No

www.xenco.com Page 1 of 1

Project Manager: Beau Teanings  
 Company Name: Engelken LLC  
 Address: 601 Macmillan Rd #400  
 City/State/Zip: MIDLAND TX 79701  
 Phone: 432-230-3344  
 Project Name: Herrera #15  
 Project Number: 03R1417046  
 Project Location: Eddy Co. NM  
 Sample's Name: Blank G. Hr  
 P.O #: 03R1417046  
 SAMPLE RECEIPT: Blank Yes No  
 Samples Received Intact: Yes No  
 Cooler/Custody Seals: Yes No  
 Sample Custody Seals: Yes No  
 Total Containers: 6

Bill to: (if different)  
 Company Name:  
 Address:  
 City/State/Zip:  
 Email: blanings@engelsken.com  
 Turn Around: Standard  Rush   
 Due Date:  
 TAT starts the day received by the lab, if received by 4:30pm  
 Wet Ice: Yes No  
 Thermometer ID: TANP01  
 Correction Factor: 0.8  
 Temperature Residual: 6.8  
 Corrected Temperature: 6.0  
 Parameters: 705  
 ANALYSIS REQUEST  
 Program:  UST/PST  PPP  Brownfields  RRC  Superfund   
 State of Project:  
 Reporting: Level II  Level III  PST/UST  TRRP  Level IV   
 Deliverables: EDD  ADAPT  Other

Sample Identification	Matrix	Date sampled	Time sampled	Depth	Sn/Cont	# of Cont	Preservative Codes
<u>SMW-1</u>	<u>SW</u>	<u>11-8-23</u>	<u>12:10</u>	<u>-</u>	<u>6</u>	<u>2</u>	<u>DI Water H<sub>2</sub>O</u> <u>MeOH: Me</u> <u>HCL: HCl</u> <u>H<sub>2</sub>SO<sub>4</sub>: H<sub>2</sub></u> <u>H<sub>2</sub>PO<sub>4</sub>: HP</u> <u>NaHSO<sub>4</sub>: NABIS</u> <u>Na<sub>2</sub>S<sub>2</sub>O<sub>5</sub>: NaSO<sub>3</sub></u> <u>Zn Acetate+NaOH: Zn</u> <u>NaOH+Ascorbic Acid: SAFC</u>
<u>SMW-2</u>	<u>SW</u>	<u>11-8-23</u>	<u>12:50</u>	<u>-</u>	<u>6</u>	<u>2</u>	



890-5593 Chain of Custody

Total 2007/6010 2008/6020: BRORA 13PPM Texas 17 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO<sub>2</sub> Na Sr Tl Sn U V Zn  
 Circle Method(s) and Metal(s) to be analyzed: TCP / SPLP 6010 BRORA 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) [Signature] Date/Time 11/8  
 Received by: (Signature) [Signature] Date/Time 11/8

Revised Date: 08/25/2020 Rev. 2023.2

### Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-5593-1  
SDG Number: Eddy County NM

**Login Number: 5593**  
**List Number: 1**  
**Creator: Bruns, Shannon**

**List Source: Eurofins Carlsbad**

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

### Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-5593-1  
SDG Number: Eddy County NM

**Login Number: 5593**  
**List Number: 3**  
**Creator: Torrez, Lisandra**

**List Source: Eurofins Houston**  
**List Creation: 11/10/23 05:34 PM**

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

### Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-5593-1  
SDG Number: Eddy County NM

**Login Number: 5593**  
**List Number: 2**  
**Creator: Rodriguez, Leticia**

**List Source: Eurofins Midland**  
**List Creation: 11/10/23 10:59 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	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13



---

APPENDIX F

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	NMAP1826380135
District RP	2RP-4974
Facility ID	
Application ID	pMAP1826379886

## Release Notification

### Responsible Party

Responsible Party: Oxy USA Inc.	OGRID: 16696
Contact Name: Wade Dittrich	Contact Telephone: 575-390-2828
Contact email: wade_dittrich@oxy.com	Incident # NMAP1826380135
Contact mailing address: PO Box 4294, Houston, TX 77210	

### Location of Release Source

Latitude 32.21947 Longitude -103.97515  
*(NAD 83 in decimal degrees to 5 decimal places)*

Site Name: Harroun 15 #008	Site Type: Flowline
Date Release Discovered: 08/29/2018	API# (if applicable)

Unit Letter	Section	Township	Range	County
F	15	24S	29E	Eddy

Surface Owner:  State  Federal  Tribal  Private (Name: Oxy USA Inc.)

### Nature and Volume of Release

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

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls): 10	Volume Recovered (bbls): 5
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls): 20	Volume Recovered (bbls): 15
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release: Compromised 3" flowline.

Incident ID	NMAP1826380135
District RP	2RP-4974
Facility ID	
Application ID	pMAP1826379886

Was this a major release as defined by 19.15.29.7(A) NMAC?  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? Release is greater than 25 barrels.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Yes, by Wade Dittrich of Oxy via email to Mike Bratcher and Maria Pruett of the NMOCD on 09/04/2018 at 0700.	

### Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.
If all the actions described above have <u>not</u> 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: Wade Dittrich Title: <u>Environmental Advisor</u>  Signature:  _____ Date: <u>12/7/23</u> email: <u>wade_dittrich@oxy.com</u> Telephone: <u>575-390-2828</u>
<b>OCD Only</b>  Received by: _____ Date: _____

Incident ID	NMAP1826380135
District RP	2RP-4974
Facility ID	
Application ID	pMAP1826379886

## 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?	<u>21</u> (ft bgs)
Did this release impact groundwater or surface water?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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 1/2-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.

Received by OCB: 12/8/2023 11:50:10 AM

Released to Imaging: 1/26/2024 3:48:11 PM

Incident ID	NMAP1826380135
District RP	2RP-4974
Facility ID	
Application ID	pMAP1826379886

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: Wade Dittrich

Title: Environmental Advisor

Signature: 

Date: 12-7-23

email: wade\_dittrich@oxy.com

Telephone: 575-390-2828

**OCD Only**

Received by: \_\_\_\_\_

Date: \_\_\_\_\_

Incident ID	NMAP1826380135
District RP	2RP-4974
Facility ID	
Application ID	pMAP1826379886

### 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: Wade, Dittrich  
 Signature:   
 email: wade\_dittrich@oxy.com

Title: Environmental Advisor  
 Date: 12-7-23  
 Telephone: 575-390-2828

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

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: Michael Buchanan  
 Printed Name: Mike Buchanan

Date: 01/26/24  
 Title: Environmental Specialist

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

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

QUESTIONS

Action 292731

**QUESTIONS**

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 292731
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

<b>Prerequisites</b>	
Incident ID (n#)	nMAP1826380135
Incident Name	NMAP1826380135 HARROUN 15 #008 @ 30-015-30253
Incident Type	Oil Release
Incident Status	Remediation Closure Report Received
Incident Well	[30-015-30253] HARROUN 15 #008

**Location of Release Source**

Please answer all the questions in this group.

Site Name	HARROUN 15 #008
Date Release Discovered	08/29/2018
Surface Owner	Private

**Incident Details**

Please answer all the questions in this group.

Incident Type	Oil Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

**Nature and Volume of Release**

Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.

Crude Oil Released (bbls) Details	Cause: Equipment Failure   Flow Line - Production   Crude Oil   Released: 10 BBL   Recovered: 5 BBL   Lost: 5 BBL.
Produced Water Released (bbls) Details	Cause: Equipment Failure   Flow Line - Production   Produced Water   Released: 20 BBL   Recovered: 15 BBL   Lost: 5 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

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

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

QUESTIONS, Page 2

Action 292731

**QUESTIONS (continued)**

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 292731
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

<b>Nature and Volume of Release (continued)</b>	
Is this a gas only submission (i.e. only significant Mcf values reported)	<b>No, according to supplied volumes this does not appear to be a "gas only" report.</b>
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	<b>Yes</b>
Reasons why this would be considered a submission for a notification of a major release	<b>From paragraph A. "Major release" determine using: (1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.</b>
<i>With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.</i>	

**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	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	Not answered.

*Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.*

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.

I hereby agree and sign off to the above statement	Name: Wade Dittrich Title: Environmental Coordinator Email: wade_dittrich@oxy.com Date: 12/08/2023
--	---

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

**District II**  
811 S. First St., Artesia, NM 88210  
Phone:(575) 748-1283 Fax:(575) 748-9720

**District III**  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone:(505) 334-6178 Fax:(505) 334-6170

**District IV**  
1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS, Page 3

Action 292731

**QUESTIONS (continued)**

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 292731
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

**Site Characterization**  
*Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). 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 in feet below ground surface (ft bgs)	Less than or equal 25 (ft.)
What method was used to determine the depth to ground water	Attached Document
Did this release impact groundwater or surface water	Yes
<b>What is the minimum distance, between the closest lateral extents of the release and the following surface areas:</b>	
A continuously flowing watercourse or any other significant watercourse	Between 1000 (ft.) and ½ (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1000 (ft.) and ½ (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1000 (ft.) and ½ (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Between ½ and 1 (mi.)
Categorize the risk of this well / site being in a karst geology	Medium
A 100-year floodplain	Zero feet, overlying, or within area
Did the release impact areas not on an exploration, development, production, or storage site	Yes

**Remediation Plan**

*Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.*

Requesting a remediation plan approval with this submission	Yes
<i>Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.</i>	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No

**Soil Contamination Sampling:** (Provide the highest observable value for each, in milligrams per kilograms.)

Chloride (EPA 300.0 or SM4500 Cl B)	49200
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	35097
GRO+DRO (EPA SW-846 Method 8015M)	28577
BTEX (EPA SW-846 Method 8021B or 8260B)	8.7
Benzene (EPA SW-846 Method 8021B or 8260B)	0.1

*Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.*

On what estimated date will the remediation commence	09/17/2018
On what date will (or did) the final sampling or liner inspection occur	06/13/2023
On what date will (or was) the remediation complete(d)	06/13/2023
What is the estimated surface area (in square feet) that will be reclaimed	22500
What is the estimated volume (in cubic yards) that will be reclaimed	10000
What is the estimated surface area (in square feet) that will be remediated	22500
What is the estimated volume (in cubic yards) that will be remediated	10000

*These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.*

*The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.*

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

**District II**  
 811 S. First St., Artesia, NM 88210  
 Phone:(575) 748-1283 Fax:(575) 748-9720

**District III**  
 1000 Rio Brazos Rd., Aztec, NM 87410  
 Phone:(505) 334-6178 Fax:(505) 334-6170

**District IV**  
 1220 S. St Francis Dr., Santa Fe, NM 87505  
 Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS, Page 4

Action 292731

**QUESTIONS (continued)**

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 292731
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

**Remediation Plan (continued)**

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

**This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:**

(Select all answers below that apply.)

(Ex Situ) Excavation and <b>off-site</b> disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for <b>off-site</b> disposal	LEA LAND LANDFILL [fEEM0112342028]
<b>OR</b> which OCD approved well (API) will be used for <b>off-site</b> disposal	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, out-of-state	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and <b>on-site</b> remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Yes
OTHER (Non-listed remedial process)	Not answered.

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

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.

I hereby agree and sign off to the above statement	Name: Wade Dittrich Title: Environmental Coordinator Email: wade_dittrich@oxy.com Date: 12/08/2023
--	---

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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

**District II**  
 811 S. First St., Artesia, NM 88210  
 Phone:(575) 748-1283 Fax:(575) 748-9720

**District III**  
 1000 Rio Brazos Rd., Aztec, NM 87410  
 Phone:(505) 334-6178 Fax:(505) 334-6170

**District IV**  
 1220 S. St Francis Dr., Santa Fe, NM 87505  
 Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS, Page 5

Action 292731

**QUESTIONS (continued)**

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 292731
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

**Deferral Requests Only**

*Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.*

Requesting a deferral of the remediation closure due date with the approval of this submission	No
--	----

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

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

QUESTIONS, Page 6

Action 292731

**QUESTIONS (continued)**

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID:	16696
	Action Number:	292731
	Action Type:	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

<b>Sampling Event Information</b>	
Last sampling notification (C-141N) recorded	<b>290967</b>
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	<b>06/13/2023</b>
What was the (estimated) number of samples that were to be gathered	<b>78</b>
What was the sampling surface area in square feet	<b>22500</b>

**Remediation Closure Request**

*Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.*

Requesting a remediation closure approval with this submission	<b>Yes</b>
Have the lateral and vertical extents of contamination been fully delineated	<b>Yes</b>
Was this release entirely contained within a lined containment area	<b>No</b>
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	<b>Yes</b>
What was the total surface area (in square feet) remediated	<b>22500</b>
What was the total volume (cubic yards) remediated	<b>10000</b>
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	<b>Yes</b>
What was the total surface area (in square feet) reclaimed	<b>22500</b>
What was the total volume (in cubic yards) reclaimed	<b>10000</b>
Summarize any additional remediation activities not included by answers (above)	<b>None</b>

*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 (in .pdf format) 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.*

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.

I hereby agree and sign off to the above statement	Name: Wade Dittrich Title: Environmental Coordinator Email: wade_dittrich@oxy.com Date: 12/08/2023
--	---

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

**District II**  
 811 S. First St., Artesia, NM 88210  
 Phone:(575) 748-1283 Fax:(575) 748-9720

**District III**  
 1000 Rio Brazos Rd., Aztec, NM 87410  
 Phone:(505) 334-6178 Fax:(505) 334-6170

**District IV**  
 1220 S. St Francis Dr., Santa Fe, NM 87505  
 Phone:(505) 476-3470 Fax:(505) 476-3462

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

QUESTIONS, Page 7

Action 292731

**QUESTIONS (continued)**

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 292731
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

<b>Reclamation Report</b>	
<i>Only answer the questions in this group if all reclamation steps have been completed.</i>	
Requesting a reclamation approval with this submission	No

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

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

CONDITIONS

Action 292731

**CONDITIONS**

Operator: OXY USA INC P.O. Box 4294 Houston, TX 772104294	OGRID: 16696
	Action Number: 292731
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**CONDITIONS**

Created By	Condition	Condition Date
michael.buchanan	<ul style="list-style-type: none"> <li>Remediation Closure approved. Areas reasonably needed for production or subsequent drilling operations will need to be reclaimed and revegetated as soon as they are no longer reasonably needed. The reclamation report will need to address all of the requirements of 19.15.29.13 NMAC including pictures of the reclaimed area, and a proposed revegetation plan. A report for reclamation and revegetation will need to be submitted and approved prior to this incident receiving the final status of "Restoration Complete". PLEASE BE ADVISED: Liners will NOT be approved for remedial projects in the future</li> </ul>	1/26/2024