



**DEFERRAL REQUEST**

Property:

**South Carlsbad Compressor Station**

**Unit P, S12, T23S, R27E  
32.313302° N, 104.137647° W  
Eddy County, New Mexico  
New Mexico EMNRD OCD Incident ID: nAPP2327931302**

March 12, 2024  
Ensolum Project No. 03B1226315

Prepared for:

**Enterprise Field Services LLC  
PO Box 4324  
Houston, Texas 77210**

**Attn: Thomas Long**

Prepared by:

  
Kelly Lowery  
Project Manager

  
Heather Holthaus  
Senior Project Manager



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# ENSOLUM

## DEFERRAL REQUEST

### South Carlsbad Compressor Station

Unit P, S12, T23S, R27E  
 32.313302° N, 104.137647° W  
 Eddy County, New Mexico  
 New Mexico EMNRD OCD Incident ID: nAPP2327931302

Ensolum Project No. 03B1226315

## 1.0 INTRODUCTION

### 1.1 Site Description & Background

<b>Operator:</b>	Enterprise Field Services LLC (Enterprise)
<b>Site Name:</b>	South Carlsbad Compressor Station
<b>Location:</b>	South Carlsbad Compressor Station Unit P, Section 12, Township 23 South, Range 27 East Eddy County, New Mexico
<b>Property:</b>	Private (Enterprise)
<b>Regulatory:</b>	New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)

On October 6, 2023, Enterprise discovered a historical release during the maintenance of a tank battery with approximately 5-10 barrels (bbls) of condensate saturating the ground surface at the South Carlsbad Compressor Station (Site). No condensate was recovered during initial response actions. Notification was made to the New Mexico EMNRD OCD on October 6, 2023, and was subsequently assigned Incident ID: nAPP2327931302.

The **Topographic Map** depicting the location of the Site is included as **Figure 1**, and the **Site Vicinity Map** is included as **Figure 2** in **Appendix A**.

### 1.2 Project Objective

The primary objective of the closure activities was to reduce constituent of concern (COC) concentrations in the on-Site soil to be in compliance with the applicable New Mexico EMNRD OCD closure criteria concentrations.

## 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 New Mexico Administrative Code (NMAC) 19.15.29 *Releases*, which establishes investigation and abatement action requirements for sites subject to reporting and/or corrective action. Ensolum, LLC (Ensolum) utilized information provided by Enterprise, 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. Supporting documentation and figures associated with the following bullets are provided in **Appendix B**.



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- The Site is not located within 300 feet of a New Mexico EMNRD OCD-defined continuously flowing watercourse or 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 a permanent residence, school, hospital, institution, or church.
- According to the OSE Water Rights Reporting System database there is one private, domestic freshwater well(s) used by less than five households for domestic or stock water purposes identified within 500 feet of the Site.
  - The one water well (C-03053) is located approximately 188 feet to the west of the Site and is utilized for domestic/livestock watering purposes.
- According to the OSE WRSS database, there are no freshwater well records identified within 1,000 feet of the Site; however, there are nine exploratory water wells, reportedly utilized for monitoring purposes.
- 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 New Mexico Statutes Annotated (NMSA) 1978, Section 3-27-3.
- The Site is located within 300 feet of a wetland.
- Based on information identified on the New Mexico Mining and Minerals Division's Geographical Information System (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 located within a relatively stable area, also referred to as medium karst potential.
- The Site is not located within a 100-year floodplain.

Based on the identified siting criteria, cleanup goals for soil remaining in place at the Site include:

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

### 3.0 SOIL REMEDIATION ACTIVITIES

On October 6, 2023, Enterprise discovered a historical release during the maintenance of a tank battery with approximately 5-10 bbls of condensate saturating the ground surface at the Site. No condensate was recovered during initial response actions.



From October 22, 2023, to January 2, 2024, the Site was excavated by New Mexico Rentals Pipeline Construction, LLC (NMR) utilizing a track-hoe and hydro-excavated by Riley Industrial Services, Inc. (Riley). The final excavation extent measured 75 feet long by 72 feet at its widest extent, with depths ranging from 10 – 14 feet below ground surface (bgs). Additionally, on January 24, 2024, three boreholes were hydro-excavated to the north, east, and south of the existing tank battery adjacent to the Site to delineate impacts left in place in the surrounding soils.

Excavated soil was removed from the Site and disposed off-Site at Lea Land LLC in Hobbs, New Mexico, a New Mexico EMNRD OCD-permitted disposal facility. The excavation area was subsequently backfilled with clean fill material.

**Figure 3** is a map that identifies approximate soil sample locations and depicts the approximate dimensions of the excavation (**Appendix A**).

#### 4.0 SOIL SAMPLING PROGRAM

From November 9, 2023, to January 2, 2024, Ensolum collected a total of 69 composite excavation soil samples from 30 locations on the excavation floor (FS01 through FS30) and 21 locations on the excavation sidewalls (SW01 through SW21). The excavation floor samples were collected at depths ranging from 10 to 14 feet bgs and the excavation sidewall samples were collected at a depth of 0 – 10 feet bgs.

In addition, Ensolum collected lateral delineation soil samples from seven locations (Northeast, North, Northwest, West, Southwest, South and Southeast), within approximately 2 feet outside of the impacted area, at a depth of 0 – 0.25 feet bgs. Two background soil samples (BG01 and BG02) were also collected at a depth of 0 – 0.25 feet bgs, no closer than 50 feet but no greater than 100 feet from the lateral and horizontal extents of the impacted area.

On January 24, 2024, Ensolum collected a total of nine deferment delineation soil samples from three hydrovac borehole locations (North, East, and South) surrounding the adjacent tank battery to the east of the release area. The three hydrovac borehole locations (North, East and South) were situated approximately 15 feet to the north, east, and south of the extent of the lined containment for the tank battery adjacent east to the release area. Three soil samples were collected from each hydrovac borehole at depth ranging from 3 to 9.5 feet bgs.

The composite excavation soil samples, lateral delineation soil samples, deferment delineation soil samples, and background soil 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 under proper chain-of-custody procedures.

#### 5.0 SOIL LABORATORY ANALYTICAL METHODS

The composite excavation soil samples, lateral delineation soil samples, and deferment delineation soil samples and were analyzed for chloride following United States Environmental Protection Agency (EPA) Method SM4500Cl-B, total petroleum hydrocarbons (TPH)-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-motor oil/lube oil range organics (MRO) following EPA SW-846 Method 8015M, and benzene, toluene, ethylbenzene and total xylenes (BTEX) following EPA SW-846 Method 8021B. The background soil samples were analyzed for chloride only following EPA Method SM4500Cl-B.

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

#### 6.0 DATA EVALUATION

Ensolum compared the chloride, BTEX, and/or TPH-GRO/DRO/MRO concentrations and/or laboratory sample detection limits (SDLs) associated with the final composite excavation soil samples, lateral

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delineation soil samples, deferment delineation soil samples, and background soil samples for soil remaining in place to the applicable New Mexico EMNRD OCD closure criteria.

Historical data from the currently on-going groundwater investigation at the South Carlsbad Compressor Station, New Mexico EMNRD OCD Incident ID: nAPP2134932726, demonstrates naturally occurring high chloride concentrations in the groundwater at the Site, as depicted in **Table 3** in **Appendix B**. Based on the groundwater monitoring data, the depth to groundwater in the vicinity of the release Site ranges from approximately 10 to 15 feet bgs. Due to the presence of elevated concentrations of chloride in the surrounding soils and in the groundwater, Ensolum utilized the detected concentrations of chloride in the confirmation samples collected outside of the impacted area (BG01 and BG02, Northeast, North, Northwest, West, Southwest, South and Southeast, and North, East, and South) to calculate the 95<sup>th</sup> Upper Tolerance Limit (UTL) for the Site. Ensolum compared the chloride concentrations and/or laboratory SDLs associated with the confirmation soil samples to the calculated site-specific UTL (**Appendix D**).

- Laboratory analytical results indicated benzene concentrations for soil remaining in place within the excavation extent (FS01 through FS30, and SW01 through SW21), delineation soil samples (Northeast, North, Northwest, West, Southwest, South, and Southeast), background soil samples (BG01 and BG02), and deferment delineation soil samples (North, East, and South) do not exceed the laboratory SDLs and/or the New Mexico EMNRD OCD closure criteria of 10 milligrams per kilogram (mg/kg).
- Laboratory analytical results indicated total BTEX concentrations for soil remaining in place within the excavation extent (FS01 through FS30, and SW01 through SW21), delineation soil samples (Northeast, North, Northwest, West, Southwest, South, and Southeast), background soil samples (BG01 and BG02), and deferment delineation soil samples (North, East, and South) do not exceed the laboratory SDLs and/or the New Mexico EMNRD OCD closure criteria of 50 mg/kg.
- Laboratory analytical results indicated combined TPH GRO/DRO/MRO concentrations for soil remaining in place within the excavation extent (FS01 through FS30, and SW01 through SW05, SW07, and SW10 through SW21), delineation soil samples (Northeast, North, Northwest, West, Southwest, South, and Southeast), background soil samples (BG01 and BG02), and deferment delineation soil samples (North, East, and South) do not exceed the laboratory SDLs and/or the New Mexico EMNRD OCD closure criteria of 100 mg/kg.
- Laboratory analytical results indicated combined TPH GRO/DRO/MRO concentrations for soil remaining in place at sidewall soil sample locations SW06, SW08, and SW-09 at depths of 0-10 feet bgs exceed the New Mexico EMNRD OCD closure criteria of 100 mg/kg. However, due to the location of the soils in this area relative to on-Site tanks and equipment, additional excavation could not be conducted in order to maintain the structural integrity. The soils in these areas are included in the deferral request.
- Laboratory analytical results indicate chloride concentrations for soil remaining in place within the excavation extent (FS01 through FS30, and SW01 through SW21) do not exceed the New Mexico EMNRD OCD closure criteria of 600 mg/kg. Laboratory analytical results indicate chloride concentrations for soil remaining in place at the locations of the delineation soil samples (Northeast, North, Northwest, West, Southwest, South, and Southeast), background soil samples (BG01 and BG02), and deferment delineation soil samples (North, East and South) do exceed the New Mexico EMNRD OCD closure criteria of 600 mg/kg; however, these concentrations do not exceed the calculated site-specific UTL of 9,065 mg/kg.

Laboratory analytical results are summarized in **Table 1** and **Table 2** in **Appendix D**.

## 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. The excavated area was backfilled with clean imported material, and

then contoured to the original surrounding grade. The spill area is a caliche pad and does not require reclamation or revegetation at this time.

## 8.0 DEFERRAL REQUEST

Enterprise is requesting deferral of final remediation due to the presence of active production equipment and tank batteries to the east of the spill area. The impacted soil is limited to the area immediately adjacent to and beneath active production equipment, where remediation would require a major facility deconstruction.

The impacted soil remaining in place beneath the tank battery containment and equipment consists of an area comprising of approximately 71,820 cubic feet, or 2,660 cubic yards, as indicated in orange on **Figure 3 (Appendix A)**.

**Based on field observations, field screening activities, and soil sample analytical results, Enterprise is submitting this Deferral Request, describing site assessment, remediation and delineation activities that have occurred and requesting deferral of final remediation for NMOCID Incident ID nAPP2327931302 until the Site is reconstructed, and/or abandoned.**

## 9.0 FINDINGS AND RECOMMENDATION

- The primary objective of the closure activities was to reduce COC concentrations in the on-Site soils to be in compliance with the applicable New Mexico EMNRD OCD closure criteria using the New Mexico EMNRD OCD's NMAC 19.15.29 *Releases* as guidance.
- From November 9, 2023, to January 2, 2024, Ensolum collected a total of 69 composite excavation soil samples from 30 locations on the excavation floor (FS01 through FS30) and 21 locations on the excavation sidewall (SW01 through SW21). The excavation floor samples were collected at depths ranging from 10 to 14 feet bgs and the excavation sidewall samples were collected at a depth of 0 – 10 feet bgs. Subsequent to the results of the final confirmation soil sampling, the excavation was backfilled with clean material.
- In addition, Ensolum collected lateral delineation soil samples from seven locations (Northeast, North, Northwest, West, Southwest, South and Southeast), within approximately 2 feet outside of the impacted area, at a depth of 0 – 0.25 feet bgs. Two background soil samples (BG01 and BG02) were also collected at a depth of 0 – 0.25 feet bgs, no closer than 50 feet but no greater than 100 feet from the lateral and horizontal extents of the impacted area.
- On January 24, 2024, Ensolum collected a total of nine deferment delineation soil samples from three hydrovac borehole locations (North, East, and South) surrounding the adjacent tank battery to the east of the release area. The three hydrovac borehole locations (North, East and South) were situated approximately 15 feet to the north, east, and south of the extent of the lined containment for the tank battery adjacent east to the release area. Three soil samples were collected from each hydrovac borehole at depth ranging from 3 to 9.5 feet bgs.
- Historical data from a currently on-going groundwater investigation at the South Carlsbad Compressor Station, New Mexico EMNRD OCD Incident ID: nAPP2134932726, demonstrates naturally occurring high chloride concentrations in the groundwater at the Site, as depicted in **Table 3 in Appendix B**. Based on the groundwater monitoring data, the depth to groundwater in the vicinity of the release Site ranges from approximately 10 to 15 feet bgs. Due to the presence of elevated concentrations of chloride in the surrounding soils and in the groundwater, Ensolum utilized the detected concentrations of chloride in the confirmation samples collected outside of the impacted area (BG01 and BG02, Northeast, North, Northwest, West, Southwest, South and Southeast, and North, East, and South) to calculate the 95<sup>th</sup> UTL for the Site. Ensolum compared the chloride concentrations and/or laboratory SDLs associated with the confirmation soil samples to the calculated site-specific UTL (**Appendix D**).

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- Based on laboratory analytical results, the final soil samples did not exhibit benzene, BTEX, TPH GRO/DRO/MRO, or chloride concentration above the applicable New Mexico EMNRD OCD closure criteria except for the following:
  - Laboratory analytical results indicated combined TPH GRO/DRO/MRO concentrations for soil remaining in place at sidewall soil sample locations SW06, SW08, and SW-09 at depths of 0-10 feet bgs exceed the New Mexico EMNRD OCD closure criteria of 100 mg/kg. However, due to the location of the soils in this area relative to on-Site tanks and equipment, additional excavation could not be conducted in order to maintain the structural integrity. The soils in these areas are included in the deferral request.
  - Laboratory analytical results indicate chloride concentrations for soil remaining in place at the locations of the delineation soil samples (Northeast, North, Northwest, West, Southwest, South, and Southeast), background soil samples (BG01 and BG02), and deferment delineation soil samples (North, East and South) do exceed the New Mexico EMNRD OCD closure criteria of 600 mg/kg; however, these concentrations do not exceed the calculated site-specific UTL of 9,065 mg/kg.
- Due to the current tank battery to the east of the release area preventing further remediation activities, a deferral request for remediation is required in this area, comprising of approximately 71,820 cubic feet, or 2,660 cubic yards, as indicated in orange on **Figure 3 (Appendix A)**.

**Based on field observations, field screening activities, and soil sample analytical results, Enterprise is submitting this Deferral Request, describing site assessment, remediation and delineation activities that have occurred and requesting deferral of final remediation for NMOCD Incident ID nAPP2327931302 until the Site is reconstructed, and/or abandoned.**

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

### **10.1 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.

### **10.2 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 in 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.

### **10.3 Reliance**

This report has been prepared for the exclusive use of Enterprise Field Services, LLC, 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 Enterprise Field Services, LLC 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

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*March 12, 2024*

Ensolum's Master Services Agreement. The limitation of liability defined in the agreement is the aggregate limit of Ensolum's liability to the client.

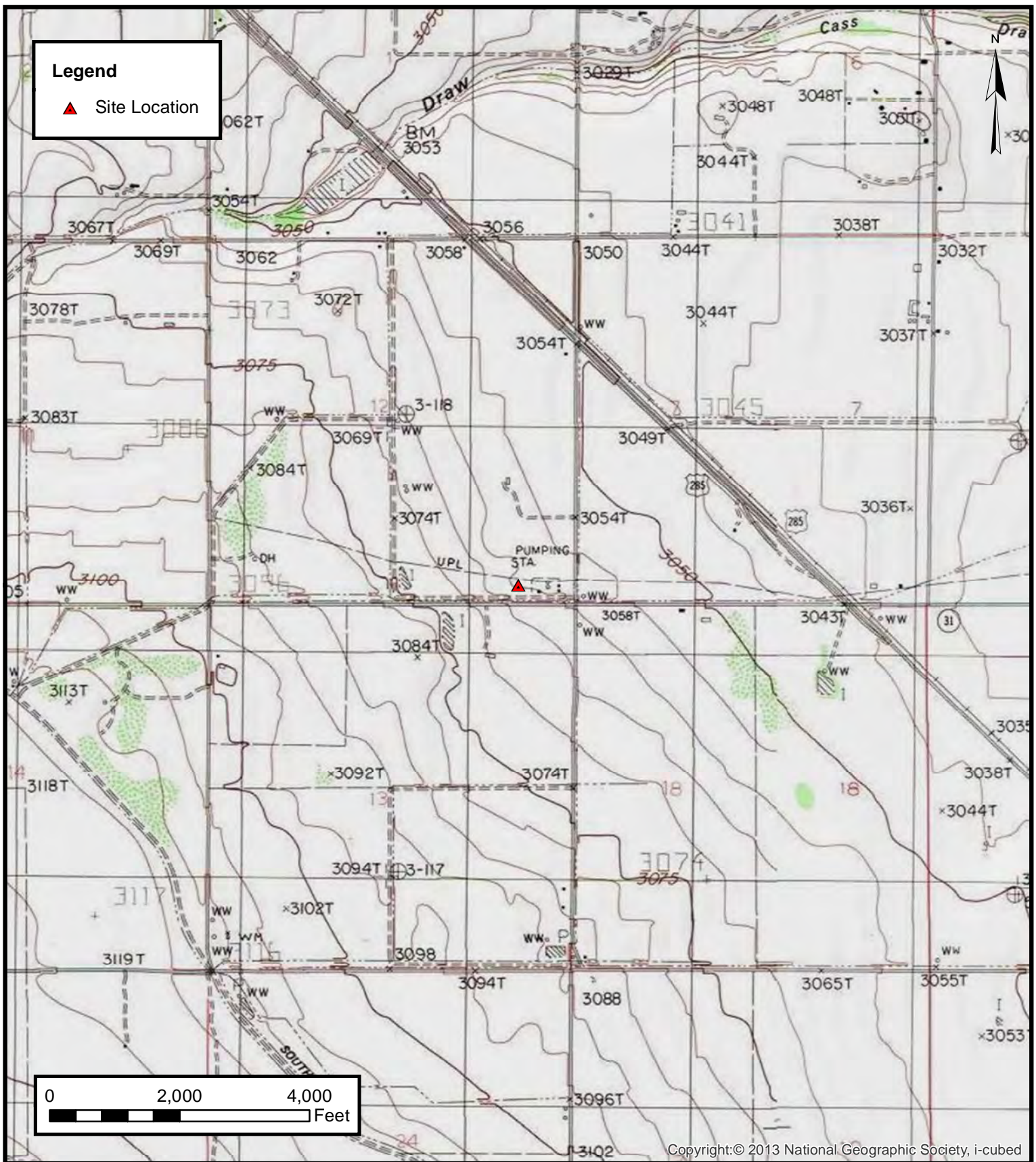


## APPENDIX A

### Figures

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## Topographic Map

Enterprise Field Services LLC  
South Carlsbad Compressor Station

Incident Number: nAPP2327931302

32.313302° N, 104.137647° W

Eddy County, New Mexico

**FIGURE**

**1**

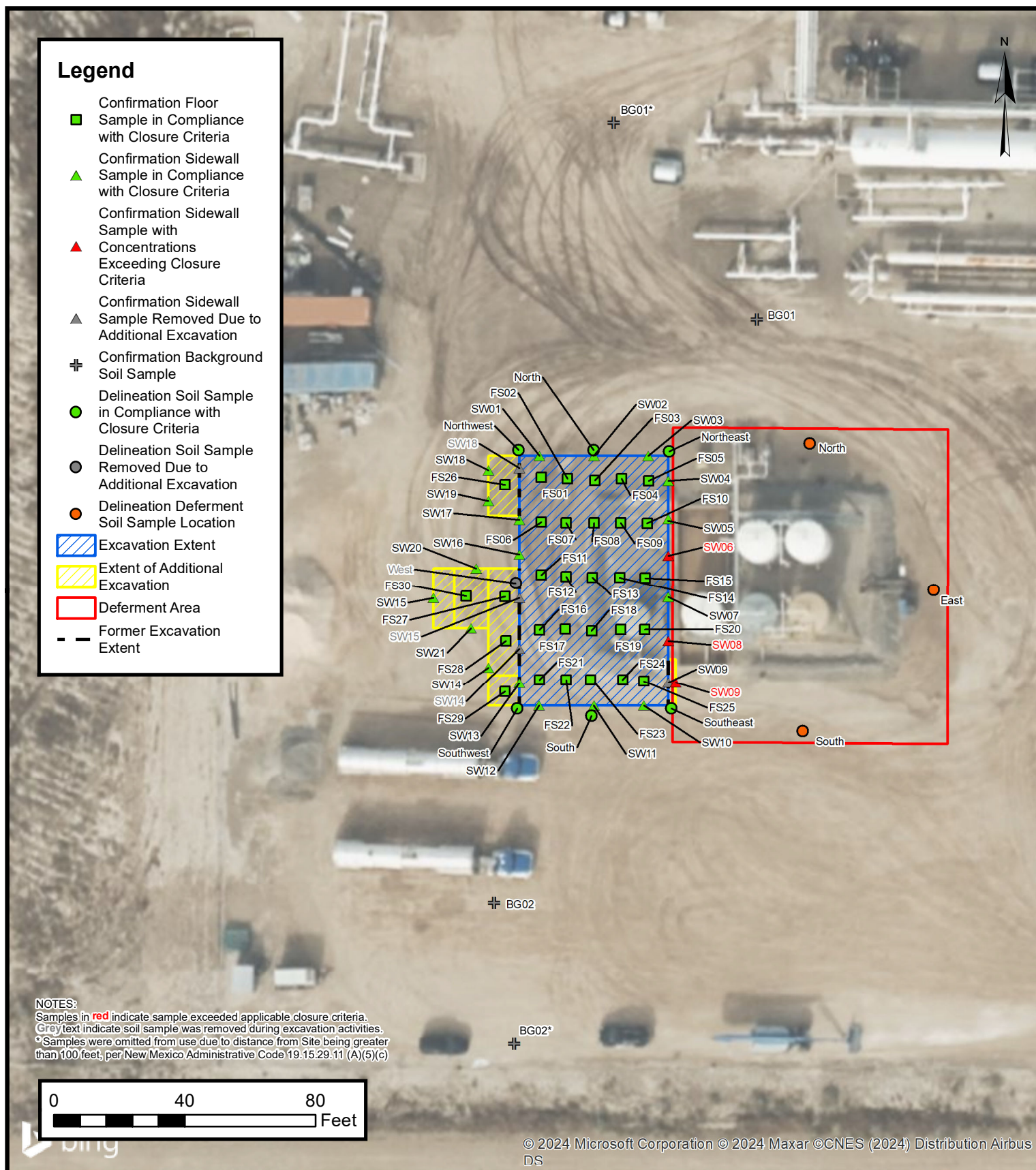




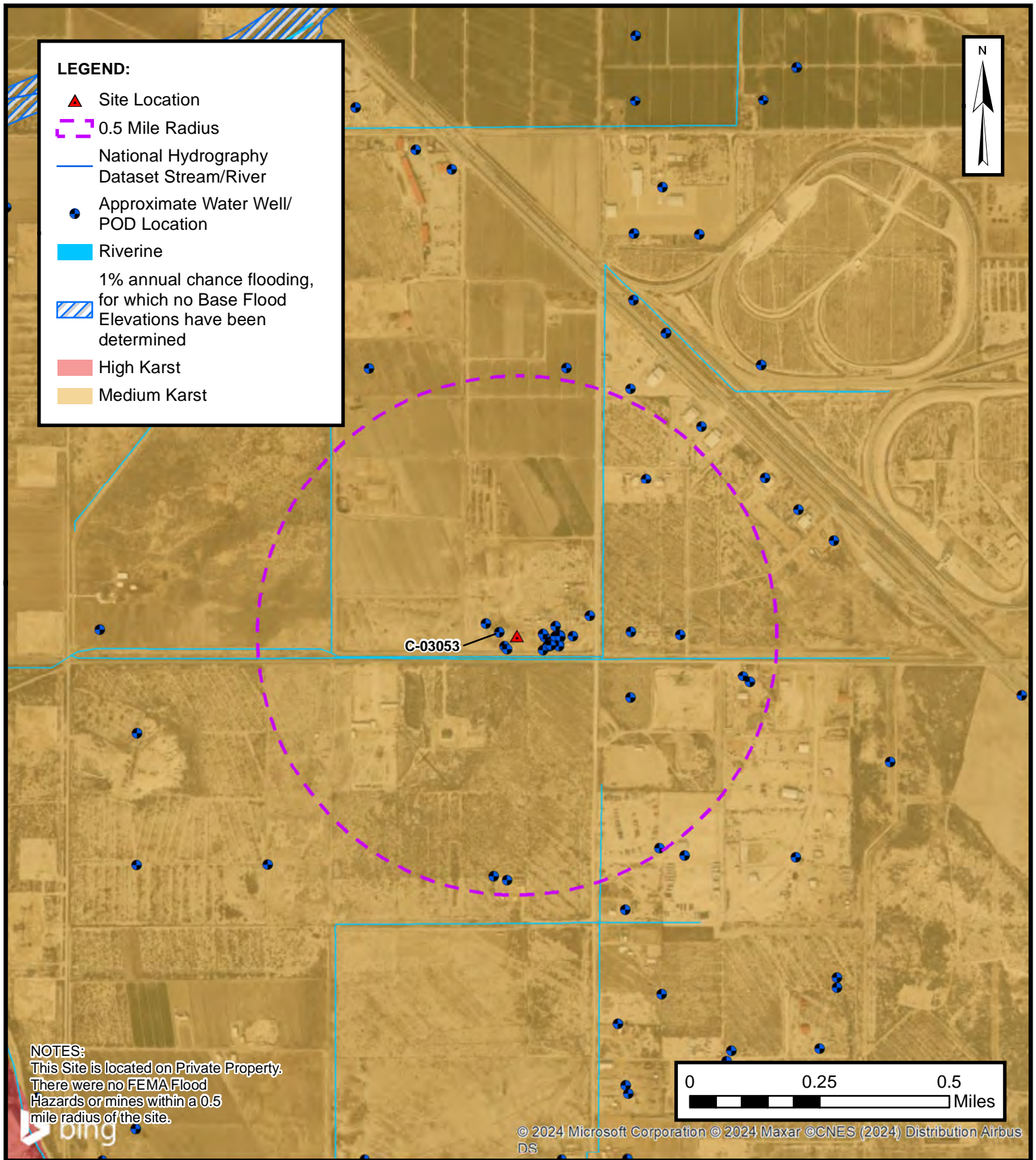
**Site Vicinity Map**  
Enterprise Field Services LLC  
South Carlsbad Compressor Station  
Incident Number: nAPP2327931302  
32.313302° N, 104.137647° W  
Eddy County, New Mexico

**FIGURE**  
**2**









## Closure Criteria Map

Enterprise Field Services LLC  
 South Carlsbad Compressor Station  
 Incident Number: nAPP2327931302  
 32.313302° N, 104.137647° W  
 Eddy County, New Mexico

**FIGURE**  
**4**



## APPENDIX B

### Supporting Documentation

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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	NAPP2327931302
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party: <b>Enterprise Field Services LLC</b>	OGRID: <b>241602</b>
Contact Name: <b>Thomas Long</b>	Contact Telephone: <b>505-599-2286</b>
Contact email: <b>tjlong@eprod.com</b>	Incident # (assigned by OCD) #: <b>nAPP2327931302</b>
Contact mailing address: <b>614 Reilly Ave, Farmington, NM 87401</b>	

Location of Release Source

Latitude 32.313302 Longitude -104.137647 NAD 83 in decimal degrees to 5 decimal places)

Site Name: <b>South Carlsbad Compressor Station</b>	Site Type <b>Natural Gas Gathering Compressor Station</b>
Date Release Discovered: <b>10/06/2023</b>	Serial # (if applicable) <b>N/A</b>

Unit Letter	Section	Township	Range	County
<b>P</b>	<b>12</b>	<b>23S</b>	<b>27E</b>	<b>Eddy</b>

Surface Owner: State ☐ Federal ☐ Tribal ☒ Private (Name: **Enterprise Field Services, LLC** )

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)		
<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input checked="" type="checkbox"/> Condensate	Volume Released (bbls): <b>Estimated 5-10 BBLS</b>	Volume Recovered (bbls): <b>None</b>
<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)
Fire		

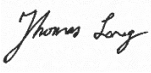
**Cause of Release:** On October 06, 2023, Enterprise discovered a historic release at the South Carlsbad Compressor Station. The release was discovered during maintenance of the tank battery. Remediation is in the progress A third party corrective action report will be submitted with the "Final C-141."

Incident ID	NAPP2327931302

Was this a major release as defined by 19.15.29.7(A) NMAC?  <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release?
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

## Initial Response

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

<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>Thomas J. Long</u>	Title: <u>Senior Environmental Scientist</u>
Signature: 	Date: <u>10-17-2023</u>
email: <u>tjlong@eprod.com</u>	Telephone: <u>505-599-2286</u>
<b><u>OCD Only</u></b>	
Received by: <u>Shelly Wells</u>	Date: <u>10/17/2023</u>

**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 276358

CONDITIONS

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 276358
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
scwells	None	10/17/2023



**Kelly Lowery**

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**From:** Long, Thomas <tjlong@eprod.com>  
**Sent:** Friday, October 6, 2023 9:43 AM  
**To:** Kelly Lowery  
**Subject:** FW: [EXTERNAL] The Oil Conservation Division (OCD) has accepted the application, Application ID: 273124

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

South Carlsbad CS.

**Thomas J. Long**  
**Senior Environmental Scientist**  
**Enterprise Products Company**  
**614 Reilly Ave.**  
**Farmington, New Mexico 87401**  
**505-599-2286 (office)**  
**505-215-4727 (Cell)**  
[tjlong@eprod.com](mailto:tjlong@eprod.com)



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**From:** OCDOnline@state.nm.us <OCDOnline@state.nm.us>  
**Sent:** Friday, October 6, 2023 8:42 AM  
**To:** Long, Thomas <tjlong@eprod.com>  
**Subject:** [EXTERNAL] The Oil Conservation Division (OCD) has accepted the application, Application ID: 273124

[Use caution with links/attachments]

To whom it may concern (c/o Thomas Long for Enterprise Field Services, LLC),

The OCD has accepted the submitted *Notification of a release* (NOR), for incident ID (n#) nAPP2327931302, with the following conditions:

- **When submitting future reports regarding this release, please submit the calculations used or specific justification for the volumes reported on the initial C-141.**

Please reference nAPP2327931302, on all subsequent C-141 submissions and communications regarding the remediation of this release.

**NOTE:** As of December 2019, NMOCD has discontinued the use of the "RP" number.

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

[ocd.enviro@state.nm.us](mailto:ocd.enviro@state.nm.us)

**New Mexico Energy, Minerals and Natural Resources Department**

1220 South St. Francis Drive

Santa Fe, NM 87505

---

This message (including any attachments) is confidential and intended for a specific individual and purpose. If you are not the intended recipient, please notify the sender immediately and delete this message.



**Kelly Lowery**

---

**From:** Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>  
**Sent:** Tuesday, November 7, 2023 11:38 AM  
**To:** Long, Thomas; Hamlet, Robert, EMNRD; Bratcher, Michael, EMNRD  
**Cc:** Stone, Brian; Kelly Lowery; Hanway, Jeremiah  
**Subject:** RE: [EXTERNAL] South Carlsbad Compressor Station -UL P Section 12 T23S R27E; 32.313302, 104.137647; NMOCD Incident # nAPP2327931302

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

Good morning Thomas,

The OCD has received your notification. Include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Thank you,

*Shelly*

Shelly Wells \* Environmental Specialist-Advanced  
Environmental Bureau  
EMNRD-Oil Conservation Division  
1220 S. St. Francis Drive | Santa Fe, NM 87505  
(505)469-7520 | [Shelly.Wells@emnrd.nm.gov](mailto:Shelly.Wells@emnrd.nm.gov)  
<http://www.emnrd.state.nm.us/OCD/>

---

**From:** Long, Thomas <tjlong@eprod.com>  
**Sent:** Tuesday, November 7, 2023 9:39 AM  
**To:** Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>; Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>  
**Cc:** Stone, Brian <bmstone@eprod.com>; Kelly Lowery <klowery@ensolum.com>; Hanway, Jeremiah <JJHANWAY@eprod.com>  
**Subject:** [EXTERNAL] South Carlsbad Compressor Station -UL P Section 12 T23S R27E; 32.313302, 104.137647; NMOCD Incident # nAPP2327931302

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

All,

This email is a notification that Enterprise will be collecting closure samples at the South Carlsbad Compressor Station on Thursday, November 9, 2023 at 10:00 a.m.

In anticipation of additional excavating completed, Enterprise will also be collecting closure samples on Friday, November 10, 2023 at 9:00 a.m.

If you have any questions, please call or email.

**Thomas J. Long**  
**Senior Environmental Scientist**  
**Enterprise Products Company**  
**614 Reilly Ave.**  
**Farmington, New Mexico 87401**  
**505-599-2286 (office)**  
**505-215-4727 (Cell)**  
[tjlong@eprod.com](mailto:tjlong@eprod.com)



---

This message (including any attachments) is confidential and intended for a specific individual and purpose. If you are not the intended recipient, please notify the sender immediately and delete this message.

**Kelly Lowery**

---

**From:** Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>  
**Sent:** Thursday, December 14, 2023 9:16 AM  
**To:** Long, Thomas  
**Cc:** Stone, Brian; Kelly Lowery; Bratcher, Michael, EMNRD; Wells, Shelly, EMNRD; Velez, Nelson, EMNRD  
**Subject:** South Carlsbad Compressor Station - UL P Section 12 T23S R27E; 32.313302, 104.137647; NMOCD Incident # nAPP2327931302

You don't often get email from robert.hamlet@emnrd.nm.gov. [Learn why this is important](#)

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

RE: Incident #NAPP2327931302

Thomas,

The maximum extension the OCD can grant is 90 days. Your request for an extension to **March 13th, 2023** is approved. Please include this e-mail correspondence in the remediation and/or closure report.

**Robert Hamlet** • Environmental Specialist - Advanced

Environmental Bureau

EMNRD - Oil Conservation Division

506 W. Texas Ave. | Artesia, NM 88210

575.909.0302 | [robert.hamlet@state.nm.us](mailto:robert.hamlet@state.nm.us)

<http://www.emnrd.state.nm.us/OCD/>



---

**From:** Long, Thomas <tjlong@eprod.com>  
**Sent:** Tuesday, December 12, 2023 9:42 AM  
**To:** Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>; Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>  
**Cc:** Stone, Brian <bmstone@eprod.com>; Kelly Lowery <klowery@ensolum.com>; Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>  
**Subject:** RE: [EXTERNAL] South Carlsbad Compressor Station - UL P Section 12 T23S R27E; 32.313302, 104.137647; NMOCD Incident # nAPP2327931302

Shelly,

The email is a time extension request for the South Carlsbad Compressor Station, UL P Section 12 T23S R27E; 32.313302, 104.137647; NMOCD Incident # nAPP2327931302, for continued remediation activities. The initial remediation and closure report submittal deadline is January 6, 2024. Enterprise is actively remediating the October 6, 2023 release. Enterprise requests a 90-day time extension to April 6, 2024 to complete remediation activities and to compile the necessary documentation for submittal to NMOCD. Please acknowledge acceptance of the time extension request. If you have any questions, please call or email.

**Kelly Lowery**

---

**From:** Long, Thomas <tjlong@eprod.com>  
**Sent:** Tuesday, December 12, 2023 10:42 AM  
**To:** Wells, Shelly, EMNRD; Hamlet, Robert, EMNRD; Bratcher, Michael, EMNRD  
**Cc:** Stone, Brian; Kelly Lowery; Velez, Nelson, EMNRD  
**Subject:** RE: [EXTERNAL] South Carlsbad Compressor Station - UL P Section 12 T23S R27E; 32.313302, 104.137647; NMOCD Incident # nAPP2327931302

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

Shelly,

The email is a time extension request for the South Carlsbad Compressor Station, UL P Section 12 T23S R27E; 32.313302, 104.137647; NMOCD Incident # nAPP2327931302, for continued remediation activities. The initial remediation and closure report submittal deadline is January 6, 2024. Enterprise is actively remediating the October 6, 2023 release. Enterprise requests a 90-day time extension to April 6, 2024 to complete remediation activities and to compile the necessary documentation for submittal to NMOCD. Please acknowledge acceptance of the time extension request. If you have any questions, please call or email.

**Thomas J. Long**  
**Senior Environmental Scientist**  
**Enterprise Products Company**  
**614 Reilly Ave.**  
**Farmington, New Mexico 87401**  
**505-599-2286 (office)**  
**505-215-4727 (Cell)**  
[tjlong@eprod.com](mailto:tjlong@eprod.com)



---

**From:** Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>  
**Sent:** Monday, December 4, 2023 8:23 AM  
**To:** Long, Thomas <tjlong@eprod.com>; Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>  
**Cc:** Stone, Brian <bmstone@eprod.com>; Kelly Lowery <klowery@ensolum.com>; Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>  
**Subject:** RE: [EXTERNAL] South Carlsbad Compressor Station -UL P Section 12 T23S R27E; 32.313302, 104.137647; NMOCD Incident # nAPP2327931302

[Use caution with links/attachments]

Hi Thomas,

I'm glad it finally worked. Thank you for your patience through this process.

STATE ENGINEER OFFICE

WELL RECORD

467404

Section 1. GENERAL INFORMATION

(A) Owner of well Robert C. Jones+Kathy Greenwood Owner's Well No. \_\_\_\_\_  
Street or Post Office Address 430 Brantley Rd.  
City and State Carlsbad, NM 88220

Well was drilled under Permit No. C-3053 and is located in the:  
a. SW  $\frac{1}{4}$  SE  $\frac{1}{4}$  SE  $\frac{1}{4}$  of Section 12 Township 23S Range 27E N.M.P.M.  
b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_  
c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
Subdivision, recorded in \_\_\_\_\_ County.  
d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in  
the \_\_\_\_\_ Grant.

(B) Drilling Contractor Taylor Water Well Service License No. WD-1348  
Address 7317 Etcheverry Rd., Carlsbad, NM 88220  
Drilling Began 3/16/04 Completed 3/17/04 Type tools Rotary Size of hole 7 7/8 in.  
Elevation of land surface or \_\_\_\_\_ at well is 3017 ft. Total depth of well 94 ft.  
Completed well is ☒ shallow ☐ artesian. Depth to water upon completion of well 14 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
56	94	38	Sand+Gravel	3-5

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
5	Sch 40	Pvc	+1	94	95	Cap	54	94

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_  
Address \_\_\_\_\_  
Plugging Method \_\_\_\_\_  
Date Well Plugged \_\_\_\_\_  
Plugging approved by: \_\_\_\_\_  
State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1			
2			
3			
4			

Date Received 4-12-04 FOR USE OF STATE ENGINEER ONLY 298410  
Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_  
File No. C-3053 Use Dom Location No. 23-27-12-443

Section 7. REMARKS AND ADDITIONAL INFORMATION

Driller

Released to Imaging: 4/17/2024 9:15:14 AM



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

1. GENERAL AND WELL LOCATION	OSE POD NUMBER (WELL NUMBER) (POD1) ENTERPRISE SOUTH CARLSBAD COMPRESSOR MW #6				OSE FILE NUMBER(S) C-3888			
	WELL OWNER NAME(S) ENTERPRISE PRODUCTS OPERATING LLC				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS P.O. BOX 2521				CITY HOUSTON		STATE TEXAS	ZIP 77252-2521
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 18	SECONDS 49	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
	LONGITUDE 104	08	11	W	* DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE 1 MILE WEST 385 ON CARRASCO ROAD. SE1/4 SE1/4 S12, T23S, R27E								
2. DRILLING & CASING INFORMATION	LICENSE NUMBER WD-1710		NAME OF LICENSED DRILLER MARTIN STRAUB			NAME OF WELL DRILLING COMPANY STRAUB CORPORATION		
	DRILLING STARTED 9-15-15	DRILLING ENDED 9-15-15	DEPTH OF COMPLETED WELL (FT) 35'		BORE HOLE DEPTH (FT) 35'	DEPTH WATER FIRST ENCOUNTERED (FT) NA		
	COMPLETED WELL IS: <input type="radio"/> ARTESIAN <input type="radio"/> DRY HOLE <input checked="" type="radio"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) N/A		
	DRILLING FLUID: <input checked="" type="radio"/> AIR <input type="radio"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="radio"/> ROTARY <input type="radio"/> HAMMER <input type="radio"/> CABLE TOOL <input type="radio"/> OTHER - SPECIFY:							
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	35'	5'	6"	SCH 40 .010 CSREEN	FJ	2"	0.154	.010
	5'	0	6"	SCH 40 2" RISER	FJ	2"	0.154	RISER
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						
	35'	4'	6"	14 BAGS OF 20/40 SAND		TOPLOAD		
	4'	1'	6"	7 BAGS OF 3/8 HOLEPLUG		TOPLOAD		
	1'	0'	6"	3 BAGS OF CONCRETE		TOPLOAD		

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	C-3888	POD NUMBER	1	TRN NUMBER	571013
LOCATION	235.27E.12.4.4.4				Monitor
					PAGE 1 OF 2

	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)	
	FROM	TO					
4. HYDROGEOLOGIC LOG OF WELL	0	8	8'	TAN SILTY CLAY & SAND	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A	
	8'	19'	11'	TAN SILTY CLAY	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A	
	19'	35'	16'	TAN SILTY CLAY & SAND	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A	
	TD	35'			<input type="radio"/> Y <input checked="" type="radio"/> N	N/A	
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
	METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="radio"/> PUMP					TOTAL ESTIMATED WELL YIELD (gpm):	
	<input type="radio"/> AIR LIFT <input type="radio"/> BAILER <input type="radio"/> OTHER - SPECIFY:						

5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.
	MISCELLANEOUS INFORMATION: 8"X12" FLUSH MOUNT 2X2 PAD EDDY COUNTY	
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:	

6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:	
	<u>Martin Straub</u> MARTIN STRAUB SIGNATURE OF DRILLER / PRINT SIGNED NAME	<u>9-28-15</u> DATE

FOR OSE INTERNAL USE

WR-20 WELL RECORD &amp; LOG (Version 06/08/2012)

FILE NUMBER <u>C-3888</u>	POD NUMBER <u>1</u>	TRN NUMBER <u>571013</u>
LOCATION <u>235.27E.12.4.4.4</u>	<u>monitor</u>	

PAGE 2 OF 2





# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

1. GENERAL AND WELL LOCATION	OSE POD NUMBER (WELL NUMBER) <b>(POD2) ENTERPRISE SOUTH CARLSBAD COMPRESSOR MW #7</b>				OSE FILE NUMBER(S) <b>C-3888</b>			
	WELL OWNER NAME(S) <b>ENTERPRISE PRODUCTS OPERATING LLC</b>				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS <b>P.O. BOX 2521</b>				CITY <b>HOUSTON</b>		STATE <b>TEXAS</b>	
					ZIP <b>77252-2521</b>			
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE <b>32</b>	MINUTES <b>18</b>	SECONDS <b>50</b>	<b>N</b>	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
	LONGITUDE <b>104</b>	<b>08</b>	<b>07</b>	<b>W</b>	* DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE <b>1 MILE WEST 385 ON CARRASCO ROAD. SE1/4 SE1/4 S12, T23S, R27E</b>								
2. DRILLING & CASING INFORMATION	LICENSE NUMBER <b>WD-1710</b>		NAME OF LICENSED DRILLER <b>MARTIN STRAUB</b>			NAME OF WELL DRILLING COMPANY <b>STRAUB CORPORATION</b>		
	DRILLING STARTED <b>9-16-15</b>	DRILLING ENDED <b>9-16-15</b>	DEPTH OF COMPLETED WELL (FT) <b>30'</b>		BORE HOLE DEPTH (FT) <b>30'</b>	DEPTH WATER FIRST ENCOUNTERED (FT) <b>NA</b>		
	COMPLETED WELL IS: <input type="radio"/> ARTESIAN <input type="radio"/> DRY HOLE <input checked="" type="radio"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) <b>N/A</b>		
	DRILLING FLUID: <input checked="" type="radio"/> AIR <input type="radio"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="radio"/> ROTARY <input type="radio"/> HAMMER <input type="radio"/> CABLE TOOL <input type="radio"/> OTHER - SPECIFY:							
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	30'	5'	6"	SCH 40 .010 CSREEN	FJ	2"	0.154	.010
	5'	0	6"	SCH 40 2" RISER	FJ	2"	0.154	RISER
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						
	30'	5'	6"	11 BAGS OF 20/40 SAND		TOPLOAD		
	5	1'	6"	5 BAGS OF 3/8 HOLEPLUG		TOPLOAD		
	1'	0'	6"	3 BAGS OF CONCRETE		TOPLOAD		

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER <b>C-3888</b>	POD NUMBER <b>2</b>	TRN NUMBER <b>571013</b>
LOCATION <b>23S.27E.12.4.4.4</b>		<b>monita</b> PAGE 1 OF 2

	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES <small>(attach supplemental sheets to fully describe all units)</small>	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)	
	FROM	TO					
<b>4. HYDROGEOLOGIC LOG OF WELL</b>	0	6'	6'	TAN & BROWN SILTY CLAY & SAND	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	N/A	
	6'	10'	4'	TAN SILTY CLAY	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	N/A	
	10'	24'	14'	TAN YELLOW SILTY CLAY & SAND	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	N/A	
	24'	28'	4'	TAN SILTY CLAY & SAND	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N	N/A	
	28'	30'	2'	TAN SANDSTONE	<input checked="" type="radio"/> Y <input type="radio"/> N		
	TD	30'			<input checked="" type="radio"/> Y <input type="radio"/> N		
					<input checked="" type="radio"/> Y <input type="radio"/> N		
					<input checked="" type="radio"/> Y <input type="radio"/> N		
					<input checked="" type="radio"/> Y <input type="radio"/> N		
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					<input checked="" type="radio"/> Y <input type="radio"/> N		
					<input checked="" type="radio"/> Y <input type="radio"/> N		
					<input checked="" type="radio"/> Y <input type="radio"/> N		
					<input checked="" type="radio"/> Y <input type="radio"/> N		
	METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input checked="" type="radio"/> PUMP <input type="radio"/> AIR LIFT <input type="radio"/> BAILER <input type="radio"/> OTHER – SPECIFY:					TOTAL ESTIMATED WELL YIELD (gpm):	
	<b>5. TEST; RIG SUPERVISION</b>	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.				
MISCELLANEOUS INFORMATION: 8"x12" FLUSH MOUNT 2X2 PAD EDDY COUNTY							
PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:							
<b>6. SIGNATURE</b>	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:						
	<u>Martin Straub MARTIN STRAUB</u>					<u>9-28-15</u>	
	SIGNATURE OF DRILLER / PRINT SIGNEE NAME					DATE	

FOR OSE INTERNAL USE

WR-20 WELL RECORD &amp; LOG (Version 06/08/2012)

FILE NUMBER

C-3888

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POD NUMBER

2

TRN NUMBER

571013

### LOCATION

235.27E.12.4.4.4

monitor

PAGE 2 OF 2



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

1. GENERAL AND WELL LOCATION	OSE POD NUMBER (WELL NUMBER) (POD3) ENTERPRISE SOUTH CARLSBAD COMPRESSOR MW #8				OSE FILE NUMBER(S) C-3888			
	WELL OWNER NAME(S) ENTERPRISE PRODUCTS OPERATING LLC				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS P.O. BOX 2521				CITY HOUSTON		STATE TEXAS	
					ZIP 77252-2521			
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32	MINUTES 18	SECONDS 48	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
	LONGITUDE 104	08	09	W	* DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE 1 MILE WEST 385 ON CARRASCO ROAD. SE1/4 SE1/4 S12, T23S, R27E								
2. DRILLING & CASING INFORMATION	LICENSE NUMBER WD-1710		NAME OF LICENSED DRILLER MARTIN STRAUB			NAME OF WELL DRILLING COMPANY STRAUB CORPORATION		
	DRILLING STARTED 9-16-15		DRILLING ENDED 9-16-15		DEPTH OF COMPLETED WELL (FT) 35'		BORE HOLE DEPTH (FT) 35'	
					DEPTH WATER FIRST ENCOUNTERED (FT) NA			
	COMPLETED WELL IS: <input type="radio"/> ARTESIAN <input type="radio"/> DRY HOLE <input checked="" type="radio"/> SHALLOW (UNCONFINED)						STATIC WATER LEVEL IN COMPLETED WELL (FT) N/A	
	DRILLING FLUID: <input checked="" type="radio"/> AIR <input type="radio"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="radio"/> ROTARY <input type="radio"/> HAMMER <input type="radio"/> CABLE TOOL <input type="radio"/> OTHER - SPECIFY:							
	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	35'	5'	6"	SCH 40 .010 CSREEN	FJ	2"	0.154	.010
	5'	0	6"	SCH 40 2" RISER	FJ	2"	0.154	RISER
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						
	35'	5'	6"	14 BAGS OF 20/40 SAND		TOPLOAD		
	5	1'	6"	7 BAGS OF 3/8 HOLEPLUG		TOPLOAD		
	1'	0'	6"	3 BAGS OF CONCRETE		TOPLOAD		

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	C-3888	POD NUMBER	3	TRN NUMBER	571013
LOCATION	23S.27E.12.4.4.4			Monitor	PAGE 1 OF 2

[illegible]

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 06/08/2012)	
FILE NUMBER	C-3888	POD NUMBER	3
LOCATION	235.27E.12.4.4.4	TRN NUMBER	571013
			PAGE 2 OF 2



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

1. GENERAL AND WELL LOCATION	OSE POD NUMBER (WELL NUMBER) (POD4) ENTERPRISE SOUTH CARLSBAD COMPRESSOR MW #9				OSE FILE NUMBER(S) C-3888			
	WELL OWNER NAME(S) ENTERPRISE PRODUCTS OPERATING LLC				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS P.O. BOX 2521				CITY HOUSTON		STATE TEXAS	
					ZIP 77252-2521			
	WELL LOCATION (FROM GPS)		DEGREES 32		MINUTES 18		SECONDS 47	
		LATITUDE		N				
		LONGITUDE		W				
* ACCURACY REQUIRED: ONE TENTH OF A SECOND								
* DATUM REQUIRED: WGS 84								
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE 1 MILE WEST 385 ON CARRASCO ROAD. SE1/4 SE1/4 S12, T23S, R27E								

2. DRILLING & CASING INFORMATION	LICENSE NUMBER WD-1710		NAME OF LICENSED DRILLER MARTIN STRAUB		NAME OF WELL DRILLING COMPANY STRAUB CORPORATION			
	DRILLING STARTED 9-17-15		DRILLING ENDED 9-17-15		DEPTH OF COMPLETED WELL (FT) 35'		BORE HOLE DEPTH (FT) 35'	
						DEPTH WATER FIRST ENCOUNTERED (FT) NA		
	COMPLETED WELL IS: <input type="radio"/> ARTESIAN <input type="radio"/> DRY HOLE <input checked="" type="radio"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) N/A		
	DRILLING FLUID: <input checked="" type="radio"/> AIR <input type="radio"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="radio"/> ROTARY <input type="radio"/> HAMMER <input type="radio"/> CABLE TOOL <input type="radio"/> OTHER - SPECIFY:							
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	35'	5'	6"	SCH 40 .010 CSREEN	FJ	2"	0.154	.010
	5'	0	6"	SCH 40 2" RISER	FJ	2"	0.154	RISER

3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
	FROM	TO				
	35'	5'	6"	14 BAGS OF 20/40 SAND		TOPLOAD
	5'	1'	6"	4 BAGS OF 3/8 HOLEPLUG		TOPLOAD
	1'	0'	6"	3 BAGS OF CONCRETE		TOPLOAD

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	C-3888	POD NUMBER	4	TRN NUMBER	571013
LOCATION	235 27E 12 44.3			monitor	PAGE 1 OF 2

[illegible]

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 06/08/2012)	
FILE NUMBER	C-3888	POD NUMBER	4
LOCATION	23S. 27E 12. 4.4-3	TRN NUMBER	571013
			PAGE 2 OF 2





# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

1. GENERAL AND WELL LOCATION	OSE POD NUMBER (WELL NUMBER) <b>(POD5) ENTERPRISE SOUTH CARLSBAD COMPRESSOR MW #10</b>				OSE FILE NUMBER(S) <b>C-3888</b>			
	WELL OWNER NAME(S) <b>ENTERPRISE PRODUCTS OPERATING LLC</b>				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS <b>P.O. BOX 2521</b>				CITY <b>HOUSTON</b>		STATE <b>TEXAS</b>	ZIP <b>77252-2521</b>
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE <b>32</b>	MINUTES <b>18</b>	SECONDS <b>48</b>	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
	LONGITUDE <b>104</b>	<b>08</b>	<b>11</b>	W	* DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE <b>1 MILE WEST 385 ON CARRASCO ROAD. SE1/4 SE1/4 S12, T23S, R27E</b>								
2. DRILLING & CASING INFORMATION	LICENSE NUMBER <b>WD-1710</b>		NAME OF LICENSED DRILLER <b>MARTIN STRAUB</b>			NAME OF WELL DRILLING COMPANY <b>STRAUB CORPORATION</b>		
	DRILLING STARTED <b>9-16-15</b>	DRILLING ENDED <b>9-16-15</b>	DEPTH OF COMPLETED WELL (FT) <b>35'</b>		BORE HOLE DEPTH (FT) <b>35'</b>	DEPTH WATER FIRST ENCOUNTERED (FT) <b>NA</b>		
	COMPLETED WELL IS: <input type="radio"/> ARTESIAN <input type="radio"/> DRY HOLE <input checked="" type="radio"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) <b>N/A</b>		
	DRILLING FLUID: <input checked="" type="radio"/> AIR <input type="radio"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="radio"/> ROTARY <input type="radio"/> HAMMER <input type="radio"/> CABLE TOOL <input type="radio"/> OTHER - SPECIFY:							
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	<b>35'</b>	<b>10'</b>	<b>8"</b>	<b>SCH 40 .010 CSREEN</b>	<b>FJ</b>	<b>4"</b>	<b>0.237</b>	<b>.010</b>
	<b>10'</b>	<b>0</b>	<b>8"</b>	<b>SCH 40 4" RISER</b>	<b>FJ</b>	<b>4"</b>	<b>0.237</b>	<b>RISER</b>
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						
	<b>35'</b>	<b>8'</b>	<b>8"</b>	<b>14 BAGS OF 20/40 SAND</b>		<b>TOPLOAD</b>		
	<b>8'</b>	<b>1'</b>	<b>8"</b>	<b>6 BAGS OF 3/8 HOLEPLUG</b>		<b>TOPLOAD</b>		
	<b>1'</b>	<b>0'</b>	<b>8"</b>	<b>3 BAGS OF CONCRETE</b>		<b>TOPLOAD</b>		

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER <b>C-3888</b>	POD NUMBER <b>5</b>	TRN NUMBER <b>571013</b>
LOCATION <b>235.27E-12.4.4.4</b>		PAGE 1 OF 2 <b>monitor</b>

	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)	
	FROM	TO					
<b>4. HYDROGEOLOGIC LOG OF WELL</b>	0	5'	5'	BROWN & TAN SILTY CLAY	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A	
	5'	6'	1'	TAN SILTY CLAY & SAND	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A	
	6'	9	3'	SOFT CALICHE	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A	
	9'	23	14'	TAN SILTY CLAY	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A	
	23'	35'	12'	TAN SILTY CLAY & SAND	<input type="radio"/> Y <input checked="" type="radio"/> N	N/A	
	TD	35'			<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
					<input type="radio"/> Y <input type="radio"/> N		
	METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="radio"/> PUMP					TOTAL ESTIMATED WELL YIELD (gpm):	
	<input type="radio"/> AIR LIFT <input type="radio"/> BAILER <input type="radio"/> OTHER – SPECIFY:						
<b>5. TEST; RIG SUPERVISION</b>	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.					
	MISCELLANEOUS INFORMATION: 8"X12" FLUSH MOUNT 2X2 PAD EDDY COUNTY						
PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:							
<b>6. SIGNATURE</b>	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:						
	SIGNATURE OF DRILLER / PRINT SIGNEE NAME					DATE	





**TABLE 3**  
**GROUNDWATER ANALYTICAL RESULTS**  
South Carlsbad Compressor Station  
Enterprise Field Services LLC  
Eddy County, New Mexico  
Ensolum Project No. 03B1226001

Sample Designation	Date	Total Dissolved Solids (mg/L)	Chlorides (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)	TPH MRO (mg/L)	Total TPH GRO/DRO/MRO (mg/L)
New Mexico Water Quality Control Commission Groundwater Quality Standards		NE	250.0	0.005	1	0.7	0.62	NE	NE	NE	NE
MW-1	1/20/2015	NA	2,900	0.094	<0.002	<0.002	0.370	2.30	1.20	NA	NA
	10/27/2015	NA	2,390	0.339	<0.002	0.074	0.369	4.95	<1.40	NA	4.95
	2/4/2016	NA	1,740	0.966	<0.010	0.198	0.874	7.46	1.43	NA	8.89
	5/3/2016	NA	NA	1.570	0.0187	0.343	1.760	6.99	<1.50	NA	6.99
	8/9/2016	NA	NA	0.387	<0.00184	0.0877	0.439	7.96	1.42 J	NA	9.38
	11/14/2016	Not Sampled Due to Presence of PSH									
	2/23/2017	Not Sampled Due to Presence of PSH									
	5/11/2017	Not Sampled Due to Presence of PSH									
	8/22/2017	Not Sampled Due to Presence of PSH									
	11/17/2017	NA	NA	0.772	0.0206	0.119	0.509	9.79	9.32	<0.911	19.1
	5/31/2018	Not Sampled Due to Presence of PSH									
	9/17/2019	Not Sampled Due to Presence of PSH									
	5/19/2020	Not Sampled Due to Presence of PSH									
	11/10/2020	Not Sampled Due to Presence of PSH									
	5/20/2021	Not Sampled Due to Presence of PSH									
	8/17/2021	Not Sampled Due to Presence of PSH									
	11/23/2021	Not Sampled Due to Presence of PSH									
	3/1/2022	Not Sampled Due to Presence of PSH									
	5/24/2022	Not Sampled Due to Presence of PSH									
	8/22/2022	Not Sampled Due to Presence of PSH									
	11/8/2022	Not Sampled Due to Presence of PSH									
	12/15/2022	P&A									
MW-2	1/20/2015	Not Sampled Due to Presence of PSH									
	10/27/2015	Not Sampled Due to Presence of PSH									
	2/4/2016	Not Sampled Due to Presence of PSH									
	5/2/2016	Not Sampled Due to Presence of PSH									
	8/9/2016	Not Sampled Due to Presence of PSH									
	11/14/2016	Not Sampled Due to Presence of PSH									
	2/23/2017	Not Sampled Due to Presence of PSH									
	5/11/2017	Not Sampled Due to Presence of PSH									
	8/22/2017	Not Sampled Due to Presence of PSH									
	11/16/2017	Not Sampled Due to Presence of PSH									
	5/31/2018	Not Sampled Due to Presence of PSH									
	9/17/2019	Not Sampled Due to Presence of PSH									
	5/19/2020	Not Sampled Due to Presence of PSH									
	11/10/2020	Not Sampled Due to Presence of PSH									
	5/20/2021	Not Sampled Due to Presence of PSH									
	8/17/2021	Not Sampled Due to Presence of PSH									
	11/23/2021	Not Sampled Due to Presence of PSH									
	3/1/2022	Not Sampled Due to Presence of PSH									
	5/24/2022	Not Sampled Due to Presence of PSH									
	8/22/2022	Not Sampled Due to Presence of PSH									
	11/8/2022	Not Sampled Due to Presence of PSH									
	2/15/2023	Not Sampled Due to Presence of PSH									
	8/17/2023	Not Sampled Due to Presence of PSH									
	12/6/2023	Not Sampled Due to Presence of PSH									
MW-3	1/20/2015	NA	1,800	<0.001	<0.001	<0.001	<0.0015	<0.05	<1.00	NA	NA
	10/27/2015		3,470	<0.001	<0.002	<0.001	<0.0010	<1.41	<1.41	NA	<1.41
	2/4/2016		2,350	0.00476	<0.002	0.00385	0.0149	<1.41	<1.41	NA	<1.41
	5/2/2016		NA	<0.002	<0.0015	<0.002	<0.002	<1.50	<1.50	NA	<1.50
	8/8/2016			<0.000408	<0.000637	<0.000657	<0.000630	<0.986	<0.911	NA	<1.50
	11/14/2016			<0.000408	<0.000367	<0.000657	<0.000630	<0.986	<0.911	NA	<1.50
	2/24/2017			<0.000408	<0.000367	<0.000657	<0.000630	<0.986	<0.986	<0.911	<0.911
	5/11/2017			<0.000408	<0.000367	<0.000657	<0.000630	<0.986	<0.911	NA	<0.911
	8/22/2017			<0.000408	0.00151 J	<0.000657	<0.000630	<0.986	<0.911	<0.911	<0.911
	11/16/2017			<0.000408	<0.000367	<0.000657	<0.000630	<0.986	<0.911	<0.911	<0.911
	5/31/2018			<0.000408	<0.000367	<0.000657	<0.000630	<0.986	<0.911	<0.911	<0.911
	9/16/2019			<0.000408	<0.000367	<0.000657	<0.000630	<0.874	1.16 J	<0.808	1.16
	5/19/2020			<0.000408	<0.000367	<0.000657	<0.000630	<0.900	<0.831	<0.831	<0.831
	11/10/2020			<0.000408	0.00102 J	<0.000657	<0.0006300	<0.887	<0.819	<0.819	<0.819
	5/20/2021			<0.000214	<0.000500	<0.000515	<0.000330	<0.926	<0.926	<0.894	<0.926
	8/17/2021			<0.000408	<0.000367	<0.000657	0.000880 J	<0.938	<0.938	<0.905	<0.938
	11/23/2021			<0.000408	0.000418 J	<0.000657	<0.000642	<0.877	<0.877	<0.846	<0.877
	3/1/2022			<0.000408	<0.000367	<0.000657	<0.000642	<0.0877	<0.887	<0.856	<0.887
	5/24/2022			<0.000408	<0.000367	<0.000657	<0.000642	<0.893	<0.893	<0.862	<0.893
	8/22/2022			<0.000408	<0.000367	<0.000657	<0.000642	<0.904	<0.904	<0.872	<0.904
	11/8/2022			<0.000408	<0.000367	<0.000657	<0.000642	<0.904	<0.904	<0.872	<0.904
	2/15/2023			<0.00200	<0.00200	<0.00200	<0.00400	<4.70	<4.70	<4.70	<4.70
	8/17/2023			<0.000408	<0.000367	<0.000657	<0.000642	<0.872	<0.872	<0.841	<0.872
	12/6/2023			<0.000408	0.00102 J	<0.000657	<0.000642	<0.969	<0.969	<0.935	<0.969



TABLE 3  
GROUNDWATER ANALYTICAL RESULTS  
South Carlsbad Compressor Station  
Enterprise Field Services LLC  
Eddy County, New Mexico  
Ensolum Project No. 03B1226001

Sample Designation	Date	Total Dissolved Solids (mg/L)	Chlorides (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)	TPH MRO (mg/L)	Total TPH GRO/DRO/MRO (mg/L)
New Mexico Water Quality Control Commission Groundwater Quality Standards		NE	250.0	0.005	1	0.7	0.62	NE	NE	NE	NE
MW-4	1/20/2015	6,940	2,500	<0.001	<0.001	<0.001	<0.0015	<0.05	<1.00	NA	NA
	10/27/2015		2,040	<0.001	<0.002	<0.001	<0.0010	<1.40	<1.40	NA	<1.40
	2/4/2016		2,230	0.00706	<0.002	0.00485	0.0217	<1.41	<1.41	NA	<1.41
	5/2/2016			<0.002	<0.0015	<0.002	<0.0020	<1.50	<1.50	NA	<1.50
	8/8/2016			<0.000408	<0.000367	<0.000657	<0.000630	<0.986	<0.911	NA	<1.50
	11/14/2016			<0.000408	<0.000367	<0.000657	<0.000630	<0.986	<0.911	NA	<1.50
	2/24/2017			<0.000408	<0.000367	<0.000657	<0.000630	<0.986	<0.986	<0.911	<0.911
	5/11/2017			<0.000408	<0.000367	<0.000657	<0.000630	<0.986	<0.911	NA	<0.911
	8/22/2017			<0.000408	0.00172 J	<0.000657	<0.000630	<0.986	<0.911	<0.911	<0.911
	11/17/2017			<0.000408	<0.000367	<0.000657	<0.000630	<0.986	<0.911	<0.911	<0.911
	5/31/2018			<0.000408	<0.000367	<0.000657	<0.000630	<0.986	<0.911	<0.911	<0.911
	9/16/2019			<0.000408	<0.000367	<0.000657	<0.000630	<0.881	1.16 J	<0.814	1.16
	5/19/2020			<0.000408	<0.000367	<0.000657	<0.000630	<0.924	<0.854	<0.854	<0.854
	11/10/2020			<0.000408	0.000640 J	<0.000657	<0.0006300	<0.892	<0.824	<0.824	<0.824
	5/20/2021			<0.000214	<0.000500	<0.000515	<0.000330	<0.932	<0.932	<0.900	<0.932
	8/17/2021			<0.000408	0.00142 J	<0.000657	<0.000642	<0.944	<0.944	<0.911	<0.944
	11/23/2021			<0.000408	<0.000367	<0.000657	<0.000642	5.19	2.54 J	<0.856	7.73
	3/1/2022			<0.000408	<0.000367	<0.000657	<0.000642	1.10 J	<0.893	<0.862	1.10 J
	5/24/2022			<0.000408	<0.000367	<0.000657	<0.000642	<0.893	<0.893	<0.862	<0.893
	8/22/2022			<0.000408	<0.000367	<0.000657	<0.000642	<0.906	<0.906	<0.875	<0.906
	11/8/2022			<0.000408	<0.000367	<0.000657	<0.000642	<0.904	<0.904	<0.872	<0.904
	2/15/2023			<0.00200	<0.00200	<0.00200	<0.00400	<4.70	<4.70	<4.70	<4.70
	8/17/2023			<0.000408	<0.000367	<0.000657	<0.000642	<1.03	<1.03	<0.993	<1.03
	12/6/2023			<0.000408	<0.000367	<0.000657	<0.000642	<0.947	<0.947	<0.914	<0.947
MW-5	1/20/2015	4,930	1,100	<0.001	<0.001	<0.001	<0.0015	<0.05	<1.00	NA	NA
	10/27/2015		2,190	<0.001	<0.002	<0.001	<0.0010	<1.40	<1.40	NA	<1.40
	2/4/2016		2,230	<0.001	<0.002	<0.001	<0.0010	<1.41	<1.41	NA	<1.41
	5/2/2016			<0.002	<0.0015	<0.002	<0.0020	<1.50	<1.50	NA	<1.50
	8/8/2016			<0.000408	<0.000367	<0.000657	<0.000630	<0.986	<0.911	NA	<1.50
	11/14/2016			<0.000408	<0.000367	<0.000657	<0.000630	<0.986	<0.911	NA	<1.50
	2/23/2017			<0.000408	<0.000367	<0.000657	<0.000630	<0.987	<0.987	<0.911	<0.911
	5/11/2017			<0.000408	<0.000367	<0.000657	<0.000630	<0.986	<0.911	NA	<0.911
	8/22/2017			<0.000408	0.00184 J	<0.000657	<0.000630	<0.986	<0.911	<0.911	<0.911
	11/16/2017			<0.000408	<0.000367	<0.000657	<0.000630	<0.986	<0.911	<0.911	<0.911
	5/31/2018			<0.000408	0.00086	<0.000657	<0.000630	<0.987	<0.911	<0.911	<0.911
	9/17/2019			<0.000408	<0.000367	<0.000657	<0.000630	<0.874	0.829 J	<0.807	0.829
	5/19/2020			<0.000408	0.000470 J	<0.000657	<0.000630	<0.911	<0.842	<0.842	<0.842
	11/11/2020			<0.000408	<0.000367	<0.000657	<0.0006300	<0.884	<0.817	<0.817	<0.817
	5/20/2021			<0.000214	<0.000500	<0.000515	<0.000330	<0.918	<0.918	<0.886	<0.918
	8/17/2021			<0.000408	0.000530 J	<0.000657	<0.000642	<0.926	<0.926	<0.894	<0.926
	11/23/2021			<0.000408	<0.000367	<0.000629	<0.000642	<0.887	<0.887	<0.856	<0.887
	3/1/2022			<0.000408	<0.000367	<0.000657	<0.000642	<0.887	<0.887	<0.856	<0.887
	5/25/2022			<0.000408	<0.000367	<0.000657	<0.000642	<0.887	<0.887	<0.856	<0.887
	8/23/2022			<0.000408	<0.000367	<0.000657	<0.000642	<0.909	<0.909	<0.877	<0.909
	11/8/2022			0.00573	0.00281	<0.000657	<0.000642	<0.901	<0.901	<0.869	<0.901
	2/15/2023			<0.00200	<0.00200	<0.00200	<0.00400	<5.02	<5.02	<5.02	<5.02
	8/15/2023			<0.000408	<0.000367	<0.000657	<0.000642	<0.959	<0.959	<0.926	<0.959
	12/6/2023			<0.000408	<0.000367	<0.000657	<0.000642	<0.988	<0.988	<0.954	<0.988
MW-6	10/27/2015		335	<0.001	<0.002	<0.001	<0.0010	<1.41	<1.41	NA	<1.41
	2/4/2016		339	<0.001	<0.002	<0.001	<0.0010	<1.41	<1.41	NA	<1.41
	5/2/2016			<0.002	<0.0015	<0.002	<0.0020	<1.50	<1.50	NA	<1.50
	8/8/2016			<0.000408	<0.000367	<0.000657	<0.000630	<0.986	<0.911	NA	<1.50
	11/14/2016			<0.000408	<0.000367	<0.000657	<0.000630	<0.986	<0.911	NA	<1.50
	2/23/2017			<0.000408	<0.000367	<0.000657	<0.000630	<0.986	<0.986	<0.911	<0.911
	5/11/2017			<0.000408	<0.000367	<0.000657	<0.000630	<0.986	<0.911	NA	<0.911
	8/22/2017			<0.000408	0.00167 J	<0.000657	<0.000630	<0.986	<0.911	<0.911	<0.911
	11/16/2017			<0.000408	<0.000367	<0.000657	<0.000630	<0.986	<0.911	<0.911	<0.911
	5/31/2018			<0.000408	<0.000367	<0.000657	<0.000630	<0.986	<0.911	<0.911	<0.911
	9/17/2019			<0.000408	<0.000367	<0.000657	<0.000630	<0.865	1.10 J	<0.799	1.10
	5/19/2020			<0.000408	<0.000367	<0.000657	<0.000630	<0.911	<0.842	<0.842	<0.842
	11/11/2020			<0.000408	<0.000367	<0.000657	<0.0006300	<0.888	<0.820	<0.820	<0.820
	5/20/2021			<0.000214	<0.000500	<0.000515	<0.000330	<0.941	<0.941	<0.908	<0.941
	8/17/2021			<0.000408	0.000396 J	<0.000657	<0.000642	<0.923	<0.923	<0.891	<0.923
	11/23/2021			<0.000408	<0.000367	<0.000657	<0.000642	<0.898	<0.898	<0.867	<0.898
	3/1/2022			<0.000408	<0.000367	<0.000657	<0.000642	<0.887	<0.887	<0.856	<0.887
	5/24/2022			<0.000408	<0.000367	<0.000657	<0.000642	<0.887	<0.887	<0.856	<0.887
	8/23/2022			<0.000408	<0.000367	<0.000657	<0.000642	<0.898	<0.898	<0.867	<0.898
	11/8/2022			0.000648 J	0.000649 J	<0.000657	<0.000642	<0.901	<0.901	<0.869	<0.901
	2/15/2023			<0.00200	<0.00200	<0.00200	<0.00400	<5.07	<5.07	<5.07	<5.07
	8/17/2023			<0.000408	<0.000367	<0.000657	<0.000642	<0.988	<0.988	<0.954	<0.988
	12/6/2023			<0.000408	<0.000367	<0.000657	<0.000642	<0.988	<0.988	<0.954	<0.988



TABLE 3  
GROUNDWATER ANALYTICAL RESULTS  
South Carlsbad Compressor Station  
Enterprise Field Services LLC  
Eddy County, New Mexico  
Ensolum Project No. 03B1226001

Sample Designation	Date	Total Dissolved Solids (mg/L)	Chlorides (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)	TPH MRO (mg/L)	Total TPH GRO/DRO/MRO (mg/L)
New Mexico Water Quality Control Commission Groundwater Quality Standards		NE	250.0	0.005	1	0.7	0.62	NE	NE	NE	NE
MW-7	10/27/2015	NA	1,470	<0.001	<0.002	<0.001	<0.0010	<1.41	<1.41	NA	<1.41
	2/4/2016		1,400	<0.001	<0.002	<0.002	<0.0010	<1.40	<1.40	NA	<1.40
	5/2/2016		NA	<0.002	<0.0015	<0.002	<0.0020	<1.50	<1.50	NA	<1.50
	8/8/2016			<0.000408	<0.000367	<0.000657	<0.000630	<0.987	<0.911	NA	<1.50
	11/14/2016			<0.000408	<0.000367	<0.000657	<0.000630	<0.986	<0.911	NA	<1.50
	2/24/2017			<0.000408	<0.000367	<0.000657	<0.000630	<0.986	<0.986	<0.911	<0.911
	5/11/2017			<0.000408	<0.000367	<0.000657	<0.000630	<0.986	<0.911	NA	<0.911
	8/22/2017			<0.000408	0.00342	<0.000657	<0.000630	<0.987	<0.911	<0.911	<0.911
	11/16/2017			<0.000408	<0.000367	<0.000657	<0.000630	<0.987	<0.911	<0.911	<0.911
	5/30/2018			<0.000408	0.000570	<0.000657	<0.000630	<0.986	<0.911	<0.911	<0.911
	9/17/2019			<0.000408	<0.000367	<0.000657	<0.000630	<0.877	1.03 J	<0.810	1.03
	5/19/2020			0.000470 J	<0.000367	<0.000657	0.000650 J	<0.925	<0.855	<0.855	<0.855
	11/11/2020			<0.000408	0.000410 J	<0.000657	<0.0006300	<0.884	<0.817	<0.817	<0.817
	5/20/2021			<0.000214	<0.000500	<0.000515	<0.000330	<0.947	<0.947	<0.914	<0.947
	8/17/2021			<0.000408	<0.000367	<0.000657	<0.000642	<0.947	<0.947	<0.914	<0.947
	11/23/2021			<0.000408	<0.000367	<0.000657	<0.000642	<0.901	<0.901	<0.869	<0.901
	3/1/2022			<0.000408	<0.000367	<0.000657	<0.000642	<0.880	<0.880	<0.849	<0.880
	5/24/2022			<0.000408	<0.000367	<0.000657	<0.000642	<0.880	<0.880	<0.849	<0.880
	8/22/2022			<0.000408	<0.000367	<0.000657	<0.000642	<0.893	<0.893	<0.862	<0.893
	11/8/2022			<0.000408	<0.000367	<0.000657	<0.000642	<0.901	<0.901	<0.869	<0.901
	12/15/2022			P&A							
MW-8	10/27/2015	NA	2,240	<0.001	<0.002	<0.001	<0.0010	<1.41	<1.41	NA	<1.41
	2/4/2016		690	<0.001	<0.002	<0.001	<0.0010	<1.41	<1.41	NA	<1.41
	5/2/2016		NA	<0.002	<0.0015	<0.002	<0.0020	<1.50	<1.50	NA	<1.50
	8/8/2016			<0.000408	<0.000367	<0.000657	<0.000630	<0.987	<0.911	NA	<1.50
	11/14/2016			<0.000408	<0.000367	<0.000657	<0.000630	<0.987	<0.911	NA	<1.50
	2/24/2017			<0.000408	<0.000367	<0.000657	<0.000630	<0.986	<0.986	<0.911	<0.911
	5/11/2017			<0.000408	<0.000367	<0.000657	<0.000630	<0.987	<0.911	NA	<0.911
	8/22/2017			<0.000408	0.00156 J	<0.000657	<0.000630	<0.986	<0.911	<0.911	<0.911
	11/16/2017			<0.000408	<0.000367	<0.000657	<0.000630	<0.986	<0.911	<0.911	<0.911
	5/31/2018			<0.000408	0.000840	<0.000657	<0.000630	<0.986	<0.911	<0.911	<0.911
	9/17/2019			<0.000408	<0.000367	<0.000657	<0.000630	<0.877	<0.810	<0.810	<0.810
	5/19/2020			<0.000408	<0.000367	<0.000657	<0.000630	<0.909	<0.840	<0.840	<0.840
	11/10/2020			<0.000408	0.000410 J	<0.000657	<0.0006300	<0.902	<0.833	<0.833	<0.833
	5/20/2021			<0.000214	<0.000500	<0.000515	<0.000330	<0.929	<0.929	<0.897	<0.929
	8/17/2021			<0.000408	0.000570 J	<0.000657	<0.000642	<0.920	<0.920	<0.888	<0.920
	11/23/2021			<0.000408	<0.000367	<0.000657	<0.000642	<0.898	<0.898	<0.867	<0.898
	3/1/2022			<0.000408	<0.000367	<0.000657	<0.000642	<0.904	<0.904	<0.872	<0.904
	5/24/2022			<0.000408	<0.000367	<0.000657	<0.000642	<0.906	<0.906	<0.875	<0.906
	8/22/2022			<0.000408	<0.000367	<0.000657	<0.000642	<0.885	<0.885	<0.854	<0.885
	11/8/2022			<0.000408	<0.000367	<0.000657	<0.000642	<0.901	<0.901	<0.869	<0.901
	2/15/2023			<0.00200	<0.00200	<0.00200	<0.00400	<4.60	<4.60	<4.60	<4.60
	8/17/2023			<0.000408	<0.000367	<0.000657	<0.000642	<0.995	<0.995	<0.960	<0.995
	12/6/2023			<0.000408	<0.000367	<0.000657	<0.000642	<0.953	<0.953	<0.920	<0.953
MW-9	10/27/2015	NA	1,600	<0.001	<0.002	<0.001	<0.0010	<1.40	<1.40	NA	<1.40
	2/4/2016		1,320	<0.001	<0.001	<0.0010	<0.0010	<1.41	<1.41	NA	<1.41
	5/2/2016		NA	<0.002	<0.0015	<0.002	<0.0020	<1.50	<1.50	NA	<1.50
	8/8/2016			<0.000408	<0.000367	<0.000657	<0.000630	<0.986	<0.911	NA	<1.50
	11/14/2016			<0.000408	<0.000367	<0.000657	<0.000630	<0.986	<0.911	NA	<1.50
	2/24/2017			<0.000408	<0.000367	<0.000657	<0.000630	<0.987	<0.986	<0.911	<0.911
	5/11/2017			<0.000408	<0.000367	<0.000657	<0.000630	<0.986	<0.911	NA	<0.911
	8/22/2017			<0.000408	0.00134 J	<0.000657	<0.000630	<0.986	<0.911	<0.911	<0.911
	11/17/2017			<0.000408	<0.000367	<0.000657	<0.000630	<0.986	<0.911	<0.911	<0.911
	5/30/2018			<0.000408	<0.000367	<0.000657	<0.000630	<0.986	<0.911	<0.911	<0.911
	9/16/2019			<0.000408	<0.000367	<0.000657	<0.000630	<0.886	1.26 J	<0.819	1.26
	5/19/2020			<0.000408	<0.000367	<0.000657	<0.000630	<0.922	<0.852	<0.852	<0.852
	11/11/2020			<0.000408	<0.000367	<0.000657	<0.0006300	<0.916	<0.846	<0.846	<0.846
	5/20/2021			<0.000214	<0.000500	<0.000515	<0.000330	<0.935	<0.935	<0.902	<0.935
	8/17/2021			0.0845	<0.000367	0.000880 J	0.00164 J	<0.932	<0.932	<0.900	<0.932
	11/23/2021			0.0742	<0.000367	<0.000657	<0.000642	<0.904	<0.904	<0.872	<0.904
	3/1/2022			0.0638	<0.000367	<0.000657	<0.000642	<0.885	<0.885	<0.854	<0.885
	5/25/2022			0.00405	<0.000367	<0.000657	<0.000642	<0.906	<0.906	<0.875	<0.906
	8/23/2022			0.0723	<0.000367	<0.000657	<0.000642	<0.887	<0.887	<0.856	<0.887
	11/8/2022			0.0417	<0.000367	<0.000657	<0.000642	<0.898	<0.898	<0.867	<0.898
	2/15/2023			0.00979	<0.00200	<0.00200	<0.00400	<4.79	<4.79	<4.79	<4.79
	8/17/2023			0.0079	0.00368	<0.000657	<0.000642	<1.00	<1.00	<0.966	<1.00
	12/6/2023			<0.000408	<0.000367	<0.000657	<0.000642	<0.988	<0.988	<0.954	<0.988



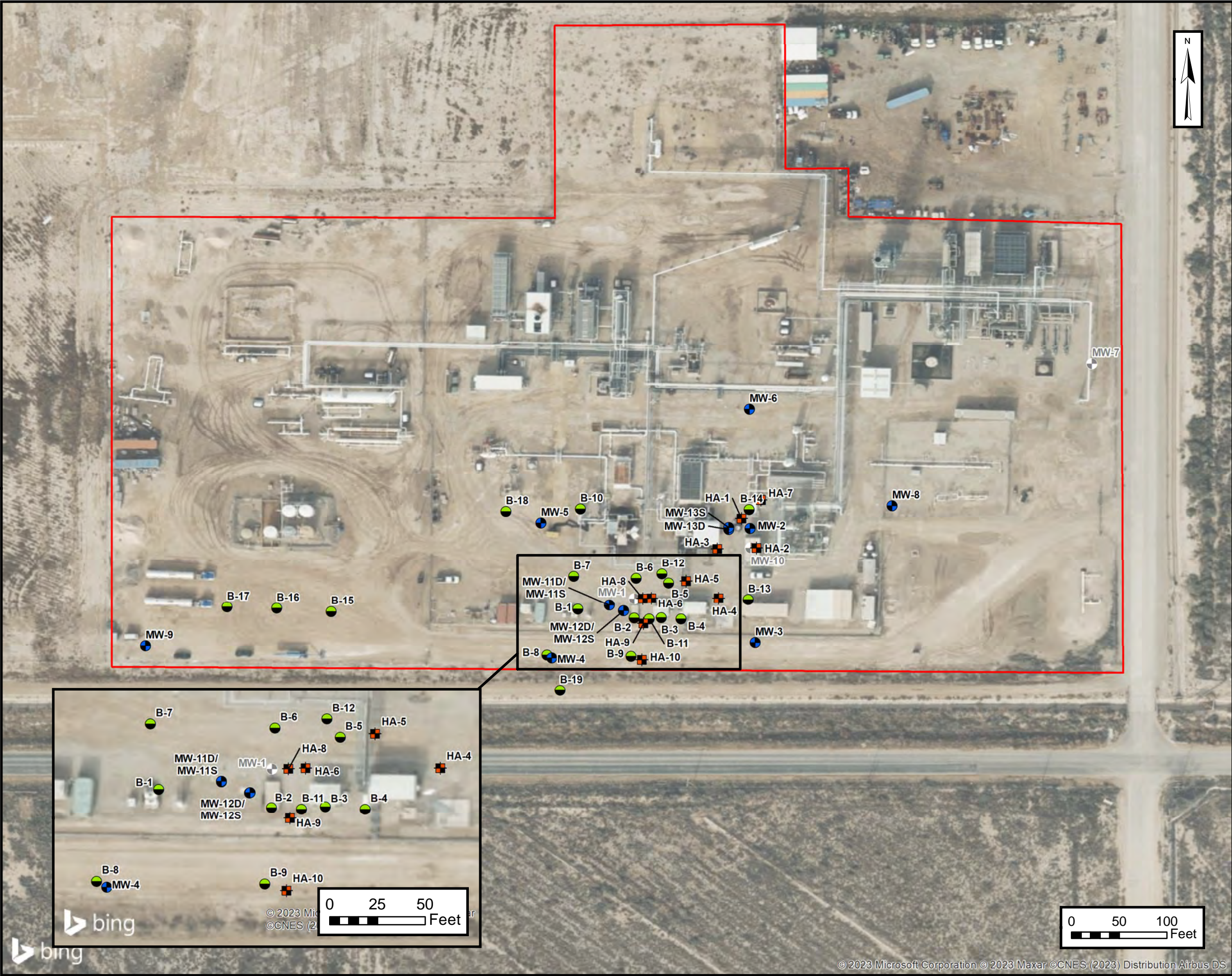


TABLE 3  
GROUNDWATER ANALYTICAL RESULTS  
South Carlsbad Compressor Station  
Enterprise Field Services LLC  
Eddy County, New Mexico  
Ensolum Project No. 03B1226001

Sample Designation	Date	Total Dissolved Solids (mg/L)	Chlorides (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	TPH GRO (mg/L)	TPH DRO (mg/L)	TPH MRO (mg/L)	Total TPH GRO/DRO/MRO (mg/L)
New Mexico Water Quality Control Commission Groundwater Quality Standards		NE	250.0	0.005	1	0.7	0.62	NE	NE	NE	NE
MW-10	10/28/2015	NA	NA	474	<0.001	<0.002	<0.001	<0.0010	<1.41	<1.41	<1.41
	2/4/2016			762	<0.001	<0.002	<0.001	<0.0010	<1.41	<1.41	<1.41
	5/3/2016				<0.002	<0.0015	<0.002	<0.0020	<1.50	<1.50	<1.50
	8/9/2016				<0.000408	<0.000367	<0.000657	<0.000630	<0.986	<0.911	<1.50
	11/15/2016				<0.000408	<0.000367	<0.000657	<0.000630	<0.986	<0.911	<1.50
	2/24/2017				<0.000408	<0.000367	<0.000657	<0.000630	<0.986	<0.986	<0.911
	5/11/2017				<0.000408	<0.000367	<0.000657	<0.000630	<0.986	<0.911	<0.911
	8/22/2017				<0.000408	0.00135 J	<0.000657	<0.000630	<0.986	<0.911	<0.911
	11/17/2017				0.00077	<0.000367	<0.000657	<0.000630	<0.986	<0.911	<0.911
	5/31/2018				<0.000408	<0.000367	<0.000657	<0.000630	<0.986	<0.911	<0.911
	9/17/2019				<0.000408	<0.000367	<0.000657	<0.000630	<0.866	1.17 J	1.17
	5/19/2020				0.000500 J	<0.000367	<0.000657	<0.000630	<0.915	<0.845	<0.845
	11/11/2020				0.00132 J	<0.000367	<0.000657	<0.0006300	0.960 J	<0.825	0.960
	5/20/2021				0.000665 J	<0.000500	<0.000515	<0.000330	<0.926	1.63 J	1.63 J
	8/18/2021				0.00115 J	0.000399 J	<0.000657	<0.000642	<0.941	<0.908	<0.941
	11/23/2021			Not Sampled Due to Presence of PSH							
	3/1/2022			Not Sampled Due to Presence of PSH							
	5/25/2022			0.000911 J	<0.000367	<0.000657	<0.000642	<0.898	<0.898	<0.867	<0.898
	8/22/2022			Not Sampled Due to Presence of PSH							
	11/8/2022			Not Sampled Due to Presence of PSH							
	12/15/2022			P&A							
MW-11S	12/9/2019	NA	NA	0.637	0.393	0.0959	0.520	5.88	5.18	<2.30	11.1
	5/19/2020			0.748	0.0745 J	0.142	0.139	5.37	6.28	<0.847	11.7
	11/11/2020			1.26	0.00207	0.258	0.09568	3.81	2.10 J	<0.837	5.91
	5/20/2021			0.789	0.00472 J	0.219	0.0770	3.43 J	6.92	<0.902	10.4
	8/18/2021			0.908	0.0466	0.198	0.123	4.99	6.53	<0.900	11.5
	11/23/2021			0.866	0.00553 J	0.314	0.203	3.54 J	7.05	<0.867	10.6
	3/1/2022			0.807	<0.00367	0.219	0.187	2.67 J	5.28	<0.859	7.95
	5/25/2022			0.790	0.157 J	0.319	0.625	2.92 J	4.47 J	<0.856	7.39
	8/23/2022			0.864	<0.00367	0.253	0.455	6.66	5.28	<0.867	11.9
	11/8/2022			1.07	0.00378 J	0.236	0.534	12.5	8.97	<0.869	21.5
	2/15/2023			0.848	0.00838 J	0.275	0.713	15.1	11.8	<5.12	26.9
	8/18/2023			0.974	0.0309	<0.000657	1.2	8.66	11.7	<1.03	20.36
	12/6/2023			0.847	<0.00367	0.180	0.230	4.29 J	6.96	<0.950	11.3
				0.0155	<0.00200	<0.00200	0.00780	<2.29	<2.29	<2.29	<2.29
MW-11D	5/19/2020	NA	NA	0.00197 J	0.000660 J	<0.000657	0.00113 J	<0.902	<0.833	<0.833	<0.833
	11/11/2020			0.0544	0.000760 J	<0.000657	0.001410 J	<0.895	<0.827	<0.827	<0.827
	5/20/2021			0.0352	<0.000500	<0.000515	<0.000330	<0.929	<0.929	<0.897	<0.929
	8/18/2021			0.000720 J	0.000776 J	<0.000657	<0.000642	<0.947	<0.947	<0.914	<0.947
	11/23/2021			0.00983	<0.000367	<0.000657	<0.000642	0.886 J	<0.885	<0.854	0.886 J
	3/1/2022			0.0123	<0.000367	<0.000657	<0.000642	<0.882	<0.882	<0.851	<0.882
	5/25/2022			0.00188 J	<0.000367	<0.000657	<0.000642	<0.909	<0.909	<0.877	<0.909
	8/23/2022			0.000427 J	<0.000367	<0.000657	<0.000642	<0.893	<0.893	<0.862	<0.893
	11/8/2022			0.0076	<0.000367	<0.000657	<0.000642	<0.898	<0.898	<0.867	<0.898
	2/15/2023			0.0122	<0.00200	<0.00200	<0.00400	<5.02	<5.02	<5.02	<5.02
	8/18/2023			0.000523 J	<0.000367	<0.000657	<0.000642	<0.991	<0.991	<0.957	<0.991
	12/6/2023			<0.000408	<0.000367	<0.000657	<0.000642	<0.985	<0.985	<0.950	<0.985
				0.527	0.115	0.125	0.625	4.00 J	2.12 J	<0.849	6.12
				0.848	0.118	0.176	0.787	6.14	2.48 J	<0.888	8.62
MW-12S	11/23/2021	NA	NA	1.34	0.0254	0.392	1.01	5.05	4.94	<0.851	9.99
	3/1/2022			0.800	<0.000367	0.019	0.00875	1.91 J	5.58	<0.849	7.49
	5/25/2022			1.34	0.264	0.470	0.242	2.74 J	2.32 J	<0.875	5.06
	8/23/2022			1.09	<0.000367	0.273	0.111	5.56	4.42 J	<0.859	9.98
	11/8/2022			1.42	0.00574 J	0.342	0.0561	5.86	5.44	<0.869	11.3
	2/15/2023			1.47	<0.00200	0.410	0.0708	4.74 J	5.34	<4.81	10.1
	8/18/2023			<0.000408	0.00228	<0.000657	0.0786	3.95 J	6.51	<1.00	10.5
	12/6/2023			1.57	<0.000367	0.225	0.0339	2.15 J	4.87	<0.929	7.02
				0.252	0.00267	<0.000657	0.0135	<0.906	1.11 J	<0.875	1.11
				0.232	0.00147 J	0.000711 J	0.00915	<0.920	<0.920	<0.888	<0.920
MW-12D	11/23/2021	NA	NA	0.182	0.000658 J	<0.000657	0.000943 J	<0.882	<0.882	<0.851	<0.882
	3/1/2022			0.178	<0.000367	<0.000657	<0.000642	<0.882	<0.882	<0.851	<0.882
	5/25/2022			0.0276	0.000890 J	<0.000657	0.00216 J	<0.890	<0.890	<0.859	<0.890
	8/23/2022			0.00694	<0.000367	<0.000657	<0.000642	<0.887	<0.887	<0.856	<0.887
	11/8/2022			0.00216	<0.000367	<0.000657	<0.000642	<0.901	<0.901	<0.869	<0.901
	2/15/2023			0.0038	<0.00200	<0.00200	<0.00400	<5.21	<5.21	<5.21	<5.21
	8/18/2023			<0.000408	<0.000367	<0.000657	<0.000642	<0.969	<0.969	<0.935	<0.969
	12/6/2023			<0.000408	0.000718 J	<0.000657	<0.000642	<0.988	<0.988	<0.954	<0.988
				Not Sampled Due to Presence of PSH							
				Not Sampled Due to Presence of PSH							
MW-13S	11/23/2021			Not Sampled Due to Presence of PSH							
	3/1/2022			Not Sampled Due to Presence of PSH							
	5/24/2022			Not Sampled Due to Presence of PSH							
	8/22/2022			Not Sampled Due to Presence of PSH							
	11/8/2022			Not Sampled Due to Presence of PSH							
	2/15/2023			Not Sampled Due to Presence of PSH							
	8/17/2023			Not Sampled Due to Presence of PSH							
	12/6/2023			Not Sampled Due to Presence of PSH							
MW-13D	6/29/2021	NA	NA	0.00446	0.00142 J	0.00123 J	0.00660	<0.869	<0.869	<0.839	<0.869
	8/18/2021			0.00189 J	<0.000367	<0.000657	<0.000642	<0.956	<0.956	<0.923	<0.956
	11/23/2021			<0.000408	<0.000367	<0.000657	<0.000642	<0.898	<0.898	<0.867	<0.898
	3/1/2022			<0.000408	<0.000367	<0.000657	<0.000642	<0.890	<0.890	<0.859	<0.890
	5/25/2022			0.00226	0.000493 J	<0.000657	<0.000642	<0.901	<0.901	<0.869	<0.901
	8/23/2022			<0.000408	<0.000367	<0.000657	<0.000642	<0.887	<0.887	<0.856	<0.887
	11/8/2022			<0.000408	<0.000367	<0.000657	<0.000642	<0.895	<0.895	<0.864	<0.895
	2/15/2023			0.000672 J	<0.00200	<0.00200	<0.00400	22.2	38.3	<4.98	60.5
	8/18/2023			<0.000408	<0.000367	<0.000657	<0.000642	<0.969	<0.969	<0.935	<0.969
	12/6/2023			<0.000408	<0.000367	<0.000657	<0.000642	<0.950	<0.950	<0.917	<0.950

Concentrations in **bold** and shaded yellow exceed





**LEGEND:**

- Site Outline
- Monitoring Well Location
- Plugged & Abandoned Monitor Well Location
- Soil Boring Location
- Hand Auger Location



ENSOLUM  
Environmental, Engineering and  
Hydrogeologic Consultants

**SITE MAP**

ENTERPRISE PRODUCTS OPERATING LLC  
SOUTH CARLSBAD COMPRESSOR STATION

Carrasco Road and CR 710, Eddy County, New Mexico  
32313436° N, 104.136360° W

**FIGURE**  
**3**

Ensolum Project No : 03B1226001





## APPENDIX C

### Photographic Documentation

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View of initial excavation activities, facing north (11/10/2023).



View of initial excavation activities, facing south (11/10/2023).



Project: South Carlsbad CS Tank Leak  
Entity: Enterprise Field Services, LLC  
Project #: 03B1226315



View of continued excavation activities, facing northwest (12/14/2023).



View of continued excavation activities, facing southeast (12/14/2023).



Project: South Carlsbad CS Tank Leak  
Entity: Enterprise Field Services, LLC  
Project #: 03B1226315



View of backfilled excavation, facing east (01/10/2024).



View of backfilled excavation, facing southwest (01/10/2024).



## APPENDIX D

### Table

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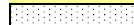
**TABLE 1**  
**EXCAVATION SOIL SAMPLE ANALYTICAL RESULTS**  
 South Carlsbad Compressor Station  
 Enterprise Field Services LLC  
 Eddy County, New Mexico  
 Ensolum Project No. 03B1226315

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
Composite Excavation Floor Soil Sample Analytical Results												
FS01	11/09/2023	10	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	512
FS02	11/09/2023	10	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	12.9	12.1	25.0	768
	12/08/2023	11	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	512
FS03	11/09/2023	10	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	25.6	12.8	38.4	256
FS04	11/09/2023	10	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	45.7	<10.0	45.7	128
FS05	11/09/2023	10	0.615	5.30	12.0	52.4	70.3	1,790	985	136	2,911	320
	12/08/2023	11	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	64.0
FS06	11/09/2023	10	0.074	0.077	0.160	0.596	0.907	<10.0	22.3	<10.0	22.3	576
FS07	11/09/2023	10	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	23.6	<10.0	23.6	304
FS08	11/09/2023	10	<0.050	<0.050	<0.050	<0.150	<0.300	12.1	118	<10.0	130	256
	12/08/2023	11	0.186	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	48.0
FS09	11/09/2023	10	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	94.7	<10.0	94.7	368
FS10	11/09/2023	10	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	35.4	<10.0	35.4	384
FS11	11/09/2023	10	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	592
FS12	11/09/2023	10	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	18.9	<10.0	18.9	384
FS13	11/09/2023	10	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	19.5	10.3	29.8	384
FS14	11/09/2023	10	<0.050	<0.050	0.076	0.299	0.375	<10.0	57.8	10.9	68.7	368
FS15	11/09/2023	10	<0.050	0.167	0.138	0.704	1.01	16.6	109	41.2	167	416
	12/08/2023	11	0.351	0.068	<0.050	0.175	0.594	<10.0	<10.0	<10.0	<10.0	192
FS16	11/10/2023	10	0.285	1.56	0.879	4.51	7.24	12.0	<10.0	<10.0	12.0	208
FS17	11/10/2023	10	0.193	0.660	0.353	2.05	3.25	10.3	<10.0	<10.0	10.3	368
FS18	11/10/2023	10	14.5	39.8	11.5	65.5	131	994	140	<10.0	1,134	352
	12/08/2023	11	1.72	2.52	0.775	3.58	8.60	405	40.7	<10.0	446	592
	12/14/2023	12	0.874	2.71	1.52	7.19	12.3	37.9	16.7	<10.0	54.6	384
FS19	11/10/2023	10	0.065	0.620	0.854	5.23	6.77	<10.0	<10.0	<10.0	<10.0	912
	12/08/2023	11	0.861	1.30	0.502	2.40	5.06	41.5	13.3	<10.0	54.8	256
FS20	11/09/2023	10	0.615	2.34	1.49	7.70	12.1	267	114	16.5	398	432
	12/08/2023	11	0.599	1.10	0.448	2.21	4.36	17.4	21.4	<10.0	38.8	752
	12/14/2023	12	<0.050	0.096	0.050	0.218	0.364	<10.0	<10.0	<10.0	<10.0	768
	12/19/2023	14	0.059	0.173	0.129	0.692	1.05	14.4	30.2	<10.0	44.6	592
FS21	11/10/2023	10	0.557	1.23	0.473	2.69	4.95	23.6	<10.0	<10.0	23.6	320
FS22	11/10/2023	10	11.8	28.8	6.32	35.6	82.5	161	22.5	<10.0	184	256
	01/02/2024	10	0.090	0.329	0.164	0.79	1.37	20.3	23.3	19.0	62.6	288
FS23	11/10/2023	10	1.58	2.06	0.869	4.38	8.89	58.1	25.3	<10.0	83.4	256
FS24	11/10/2023	10	1.62	1.81	0.824	4.29	8.54	40.3	<10.0	<10.0	40.3	400
FS25	11/10/2023	10	0.560	0.993	0.297	1.75	3.60	30.8	13.7	<10.0	44.5	384
FS26	12/14/2023	10	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	416
FS27	12/14/2023	10	<0.050	0.072	0.066	0.236	0.374	<10.0	11.1	<10.0	11.1	432
FS28	01/02/2024	10	<0.050	0.064	<0.050	<0.150	<0.300	<10.0	<10.0	10.2	10.2	352
FS29	01/02/2024	10	0.055	0.071	<0.050	0.154	<0.300	<10.0	<10.0	<10.0	<10.0	368
FS30	01/02/2024	10	0.157	0.411	0.168	0.782	1.52	20.7	10.8	<10.0	31.5	272

**TABLE 1**  
**EXCAVATION SOIL SAMPLE ANALYTICAL RESULTS**  
 South Carlsbad Compressor Station  
 Enterprise Field Services LLC  
 Eddy County, New Mexico  
 Ensolum Project No. 03B1226315

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
Composite Excavation Sidewall Soil Sample Analytical Results												
SW01	11/09/2023	0 - 10	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	352
SW02	11/09/2023	0 - 10	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	448
SW03	11/09/2023	0 - 10	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	400
SW04	11/09/2023	0 - 10	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	320
SW05	11/09/2023	0 - 10	0.066	0.198	0.233	1.12	1.62	26.4	53.9	<10.0	80.3	224
SW06*	11/09/2023	0 - 10	0.054	0.063	0.285	0.833	1.24	19.7	289	58.5	367	496
SW07	11/09/2023	0 - 10	0.265	1.46	0.469	1.91	4.11	16.5	13.7	<10.0	30.2	192
SW08*	11/09/2023	0 - 10	4.10	22.4	3.99	19.1	49.6	89.2	41.6	<10.0	131	224
SW09*	11/10/2023	0 - 10	<0.050	<0.050	0.147	0.567	0.714	40.0	143	33.6	217	240
	12/19/2023	0 - 10	0.116	0.497	0.717	4.20	5.53	109	159	17.8	286	592
SW10	11/10/2023	0 - 10	<0.050	0.162	0.173	1.65	1.99	<10.0	<10.0	<10.0	<10.0	272
SW11	11/10/2023	0 - 10	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	32.0
SW12	11/10/2023	0 - 10	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	96.0
SW13	11/10/2023	0 - 10	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	80.0
SW14	11/10/2023	0 - 10	0.269	1.43	0.443	1.71	3.86	15.1	29.8	<10.0	44.9	1,280
	12/08/2023	0 - 10	0.428	1.03	0.336	1.74	3.53	26.2	<10.0	<10.0	26.2	176
SW15	11/10/2023	0 - 10	0.100	0.183	0.275	0.684	1.24	11.6	252	97.9	362	1,600
	12/08/2023	0 - 10	0.107	0.620	0.460	2.55	3.73	38.0	27.0	<10.0	65.0	1,040
	12/19/2023	0 - 10	<0.050	0.131	0.070	0.357	0.558	28.1	42.2	13.8	84.1	704
	01/02/2024	0 - 10	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	416
SW16	11/09/2023	0 - 10	0.058	0.244	<0.050	0.192	0.494	<10.0	<10.0	<10.0	<10.0	320
SW17	11/09/2023	0 - 10	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	128
SW18	11/09/2023	0 - 10	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	672
	12/08/2023	0 - 10	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	128
SW19	12/14/2023	0 - 10	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	320
SW20	12/14/2023	0 - 10	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	400
SW21	12/19/2023	0 - 10	0.099	0.541	0.494	2.82	3.95	44.3	340	202	586	1,010
	01/02/2024	0 - 10	<0.050	<0.050	<0.050	0.296	<0.300	<10.0	<10.0	<10.0	<10.0	592

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

\* - Cannot Excavate Further Due to Structural Integrity Issues of Surrounding Tanks and Equipment

bgs - below ground surface

mg/kg - milligrams per kilogram

NE - Not Established

BTEX - Benzene, Toluene, Ethylbenzene, and Xylenes

GRO - Gasoline Range Organics

DRO - Diesel Range Organics

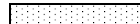
MRO - Motor Oil/Lube Oil Range Organics

TPH - Total Petroleum Hydrocarbon

**TABLE 2**  
**DELINEATION & BACKGROUND SOIL SAMPLE ANALYTICAL RESULTS**

South Carlsbad Compressor Station  
Enterprise Field Services LLC  
Eddy County, New Mexico  
Ensolum Project No. 03B1226315

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
Background Chloride Delineation Limit (Per NMAC 19.15.29.11 (A)(5)(c))			NA					NA				8,443
Delineation Soil Sample Analytical Results												
Northeast	11/10/2023	0 - 0.25	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	7,100
North	11/10/2023	0 - 0.25	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	2,800
Northwest	11/10/2023	0 - 0.25	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	1,280
West	11/10/2023	0 - 0.25	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	28.0	<10.0	28.0	4,480
Southwest	11/10/2023	0 - 0.25	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	4,560
South	11/10/2023	0 - 0.25	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	2,520
Southeast	11/10/2023	0 - 0.25	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	1,550
Background Soil Sample Analytical Results												
BG01	12/14/2023*	0 - 0.25	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	656
	12/19/2023	0 - 0.25	NS					NS				3,920
BG02	12/14/2023*	0 - 0.25	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	752
	12/19/2023	0 - 0.25	NS					NS				4,640
Deferment Delineation Soil Sample Analytical Results												
North	01/24/2024	3	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	112
	01/24/2024	6	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	144
	01/24/2024	9	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	5,600
East	01/24/2024	3	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	208
	01/24/2024	6	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	832
	01/24/2024	8	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	5,760
South	01/24/2024	3	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	304
	01/24/2024	6	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	368
	01/24/2024	9.5	<0.050	<0.050	<0.050	<0.150	<0.300	<10.0	<10.0	<10.0	<10.0	1,120

 Additional Excavation and/or Re-Sample

\* - Samples were omitted from use due to distance from Site being greater than 100 feet, per New Mexico Administrative Code 19.15.29.11 (A)(5)(c)

bgs - below ground surface

mg/kg - milligrams per kilogram

NE - Not Established

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

## 95th Upper Tolerance Limit Calculation

BG-01	=	3,920
BG-02	=	4,640
Northeast	=	7,100
North	=	2,800
Northwest	=	1,280
West	=	4,480
Southwest	=	4,560
South	=	2,520
Southeast	=	1,550
North (Deferment)	=	112
North (Deferment)	=	144
North (Deferment)	=	5,600
East (Deferment)	=	208
East (Deferment)	=	832
East (Deferment)	=	5,760
South (Deferment)	=	304
South (Deferment)	=	368
South (Deferment)	=	1,120

2286.874698 = Standard Deviation  
 18 = Sample Size (i.e. 18 samples collected within a 1/4 acre area).  
 2.543 = One-sided tolerance factor  
 2627.667 = Arithmetic Mean  
**8443.189** = 95% UTL

$$UTL = x + kS$$

Where: x = Mean

k = One-sided tolerance factor

S = Standard Deviation



## APPENDIX E

### Laboratory Analytical Reports & Chain-of-Custody Documentation

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

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November 10, 2023

KELLY LOWERY

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: SOUTH CARLSBAD CS TANK LEAK

Enclosed are the results of analyses for samples received by the laboratory on 11/09/23 16:22.

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 fluid and cursive, with the first name "Celey" and last name "Keene" clearly distinguishable.

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM  
 KELLY LOWERY  
 3122 NATIONAL PARKS HWY  
 CARLSBAD NM, 88220  
 Fax To:

Received: 11/09/2023  
 Reported: 11/10/2023  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERPRISE - EDDY CO.

Sampling Date: 11/09/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Dionica Hinojos

**Sample ID: FS 01 10FT (H236165-01)**

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/10/2023	ND	2.06	103	2.00	0.844	
Toluene*	<0.050	0.050	11/10/2023	ND	2.17	109	2.00	1.72	
Ethylbenzene*	<0.050	0.050	11/10/2023	ND	2.16	108	2.00	0.335	
Total Xylenes*	<0.150	0.150	11/10/2023	ND	6.53	109	6.00	0.190	
Total BTEX	<0.300	0.300	11/10/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 118 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	512	16.0	11/10/2023	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	11/09/2023	ND	173	86.4	200	0.520	
DRO >C10-C28*	<10.0	10.0	11/09/2023	ND	188	94.2	200	0.810	
EXT DRO >C28-C36	<10.0	10.0	11/09/2023	ND					

Surrogate: 1-Chlorooctane 128 % 48.2-134

Surrogate: 1-Chlorooctadecane 147 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM  
KELLY LOWERY  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 11/09/2023  
Reported: 11/10/2023  
Project Name: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Location: ENTERPRISE - EDDY CO.

Sampling Date: 11/09/2023  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Dionica Hinojos

**Sample ID: FS 02 10FT (H236165-02)**

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/10/2023	ND	2.06	103	2.00	0.844	
Toluene*	<0.050	0.050	11/10/2023	ND	2.17	109	2.00	1.72	
Ethylbenzene*	<0.050	0.050	11/10/2023	ND	2.16	108	2.00	0.335	
Total Xylenes*	<0.150	0.150	11/10/2023	ND	6.53	109	6.00	0.190	
Total BTEX	<0.300	0.300	11/10/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 117 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	768	16.0	11/10/2023	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	11/09/2023	ND	173	86.4	200	0.520	
DRO >C10-C28*	12.9	10.0	11/09/2023	ND	188	94.2	200	0.810	
EXT DRO >C28-C36	12.1	10.0	11/09/2023	ND					

Surrogate: 1-Chlorooctane 107 % 48.2-134

Surrogate: 1-Chlorooctadecane 122 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM  
KELLY LOWERY  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 11/09/2023  
Reported: 11/10/2023  
Project Name: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Location: ENTERPRISE - EDDY CO.

Sampling Date: 11/09/2023  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Dionica Hinojos

**Sample ID: FS 03 10FT (H236165-03)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/10/2023	ND	2.06	103	2.00	0.844		
Toluene*	<0.050	0.050	11/10/2023	ND	2.17	109	2.00	1.72		
Ethylbenzene*	<0.050	0.050	11/10/2023	ND	2.16	108	2.00	0.335		
Total Xylenes*	<0.150	0.150	11/10/2023	ND	6.53	109	6.00	0.190		
Total BTEX	<0.300	0.300	11/10/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 117 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	256	16.0	11/10/2023	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	11/09/2023	ND	173	86.4	200	0.520	
DRO >C10-C28*	25.6	10.0	11/09/2023	ND	188	94.2	200	0.810	
EXT DRO >C28-C36	12.8	10.0	11/09/2023	ND					

Surrogate: 1-Chlorooctane 116 % 48.2-134

Surrogate: 1-Chlorooctadecane 129 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM  
KELLY LOWERY  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 11/09/2023  
Reported: 11/10/2023  
Project Name: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Location: ENTERPRISE - EDDY CO.

Sampling Date: 11/09/2023  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Dionica Hinojos

**Sample ID: FS 04 10FT (H236165-04)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/10/2023	ND	2.06	103	2.00	0.844		
Toluene*	<0.050	0.050	11/10/2023	ND	2.17	109	2.00	1.72		
Ethylbenzene*	<0.050	0.050	11/10/2023	ND	2.16	108	2.00	0.335		
Total Xylenes*	<0.150	0.150	11/10/2023	ND	6.53	109	6.00	0.190		
Total BTEX	<0.300	0.300	11/10/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 120 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	11/10/2023	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	11/10/2023	ND	173	86.4	200	0.520	
DRO >C10-C28*	45.7	10.0	11/10/2023	ND	188	94.2	200	0.810	
EXT DRO >C28-C36	<10.0	10.0	11/10/2023	ND					

Surrogate: 1-Chlorooctane 96.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 88.3 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

ENSOLUM  
KELLY LOWERY  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 11/09/2023  
Reported: 11/10/2023  
Project Name: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Location: ENTERPRISE - EDDY CO.

Sampling Date: 11/09/2023  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Dionica Hinojos

**Sample ID: FS 05 10FT (H236165-05)**

BTEx 8021B		mg/kg	Analyzed By: JH					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>0.615</b>	0.500	11/10/2023	ND	2.06	103	2.00	0.844	
<b>Toluene*</b>	<b>5.30</b>	0.500	11/10/2023	ND	2.17	109	2.00	1.72	
<b>Ethylbenzene*</b>	<b>12.0</b>	0.500	11/10/2023	ND	2.16	108	2.00	0.335	GC-NC1
<b>Total Xylenes*</b>	<b>52.4</b>	1.50	11/10/2023	ND	6.53	109	6.00	0.190	
<b>Total BTEX</b>	<b>70.3</b>	3.00	11/10/2023	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID) 182 % 71.5-134

Chloride, SM4500Cl-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>320</b>	16.0	11/10/2023	ND	416	104	400	0.00	

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>1790</b>	10.0	11/09/2023	ND	173	86.4	200	0.520	
<b>DRO &gt;C10-C28*</b>	<b>985</b>	10.0	11/09/2023	ND	188	94.2	200	0.810	
<b>EXT DRO &gt;C28-C36</b>	<b>136</b>	10.0	11/09/2023	ND					

Surrogate: 1-Chlorooctane 184 % 48.2-134

Surrogate: 1-Chlorooctadecane 153 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
 KELLY LOWERY  
 3122 NATIONAL PARKS HWY  
 CARLSBAD NM, 88220  
 Fax To:

Received: 11/09/2023  
 Reported: 11/10/2023  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERPRISE - EDDY CO.

Sampling Date: 11/09/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Dionica Hinojos

**Sample ID: FS 06 10FT (H236165-06)**

BTX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>0.074</b>	0.050	11/10/2023	ND	2.06	103	2.00	0.844	
<b>Toluene*</b>	<b>0.077</b>	0.050	11/10/2023	ND	2.17	109	2.00	1.72	
<b>Ethylbenzene*</b>	<b>0.160</b>	0.050	11/10/2023	ND	2.16	108	2.00	0.335	GC-NC1
<b>Total Xylenes*</b>	<b>0.596</b>	0.150	11/10/2023	ND	6.53	109	6.00	0.190	
<b>Total BTX</b>	<b>0.907</b>	0.300	11/10/2023	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID) 124 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>576</b>	16.0	11/10/2023	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	11/10/2023	ND	173	86.4	200	0.520	
<b>DRO &gt;C10-C28*</b>	<b>22.3</b>	10.0	11/10/2023	ND	188	94.2	200	0.810	
EXT DRO >C28-C36	<10.0	10.0	11/10/2023	ND					

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 95.1 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM  
 KELLY LOWERY  
 3122 NATIONAL PARKS HWY  
 CARLSBAD NM, 88220  
 Fax To:

Received: 11/09/2023  
 Reported: 11/10/2023  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERPRISE - EDDY CO.

Sampling Date: 11/09/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Dionica Hinojos

**Sample ID: FS 07 10FT (H236165-07)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/10/2023	ND	2.06	103	2.00	0.844		
Toluene*	<0.050	0.050	11/10/2023	ND	2.17	109	2.00	1.72		
Ethylbenzene*	<0.050	0.050	11/10/2023	ND	2.16	108	2.00	0.335		
Total Xylenes*	<0.150	0.150	11/10/2023	ND	6.53	109	6.00	0.190		
Total BTEx	<0.300	0.300	11/10/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 117 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	304	16.0	11/10/2023	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	11/10/2023	ND	173	86.4	200	0.520	
DRO >C10-C28*	23.6	10.0	11/10/2023	ND	188	94.2	200	0.810	
EXT DRO >C28-C36	<10.0	10.0	11/10/2023	ND					

Surrogate: 1-Chlorooctane 89.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 96.8 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM  
 KELLY LOWERY  
 3122 NATIONAL PARKS HWY  
 CARLSBAD NM, 88220  
 Fax To:

Received: 11/09/2023  
 Reported: 11/10/2023  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERPRISE - EDDY CO.

Sampling Date: 11/09/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Dionica Hinojos

**Sample ID: FS 08 10FT (H236165-08)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/10/2023	ND	2.06	103	2.00	0.844		
Toluene*	<0.050	0.050	11/10/2023	ND	2.17	109	2.00	1.72		
Ethylbenzene*	<0.050	0.050	11/10/2023	ND	2.16	108	2.00	0.335		
Total Xylenes*	<0.150	0.150	11/10/2023	ND	6.53	109	6.00	0.190		
Total BTEX	<0.300	0.300	11/10/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 121 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	11/10/2023	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*	12.1	10.0	11/10/2023	ND	173	86.4	200	0.520	
DRO >C10-C28*	118	10.0	11/10/2023	ND	188	94.2	200	0.810	
EXT DRO >C28-C36	<10.0	10.0	11/10/2023	ND					

Surrogate: 1-Chlorooctane 83.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 93.3 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
KELLY LOWERY  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 11/09/2023  
Reported: 11/10/2023  
Project Name: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Location: ENTERPRISE - EDDY CO.

Sampling Date: 11/09/2023  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Dionica Hinojos

**Sample ID: FS 09 10FT (H236165-09)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/10/2023	ND	2.06	103	2.00	0.844		
Toluene*	<0.050	0.050	11/10/2023	ND	2.17	109	2.00	1.72		
Ethylbenzene*	<0.050	0.050	11/10/2023	ND	2.16	108	2.00	0.335		
Total Xylenes*	<0.150	0.150	11/10/2023	ND	6.53	109	6.00	0.190		
Total BTEX	<0.300	0.300	11/10/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 119 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	368	16.0	11/10/2023	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	11/10/2023	ND	173	86.4	200	0.520	
DRO >C10-C28*	94.7	10.0	11/10/2023	ND	188	94.2	200	0.810	
EXT DRO >C28-C36	<10.0	10.0	11/10/2023	ND					

Surrogate: 1-Chlorooctane 74.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 77.1 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
KELLY LOWERY  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 11/09/2023  
Reported: 11/10/2023  
Project Name: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Location: ENTERPRISE - EDDY CO.

Sampling Date: 11/09/2023  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Dionica Hinojos

**Sample ID: FS 10 10FT (H236165-10)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/10/2023	ND	2.06	103	2.00	0.844		
Toluene*	<0.050	0.050	11/10/2023	ND	2.17	109	2.00	1.72		
Ethylbenzene*	<0.050	0.050	11/10/2023	ND	2.16	108	2.00	0.335		
Total Xylenes*	<0.150	0.150	11/10/2023	ND	6.53	109	6.00	0.190		
Total BTEx	<0.300	0.300	11/10/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 119 % 71.5-134

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	11/10/2023	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	11/10/2023	ND	173	86.4	200	0.520	
DRO >C10-C28*	35.4	10.0	11/10/2023	ND	188	94.2	200	0.810	
EXT DRO >C28-C36	<10.0	10.0	11/10/2023	ND					

Surrogate: 1-Chlorooctane 85.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 84.9 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

ENSOLUM  
 KELLY LOWERY  
 3122 NATIONAL PARKS HWY  
 CARLSBAD NM, 88220  
 Fax To:

Received: 11/09/2023  
 Reported: 11/10/2023  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERPRISE - EDDY CO.

Sampling Date: 11/09/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Dionica Hinojos

**Sample ID: FS 11 10FT (H236165-11)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/10/2023	ND	2.17	109	2.00	0.794		
Toluene*	<0.050	0.050	11/10/2023	ND	2.17	109	2.00	0.692		
Ethylbenzene*	<0.050	0.050	11/10/2023	ND	2.14	107	2.00	0.955		
Total Xylenes*	<0.150	0.150	11/10/2023	ND	6.65	111	6.00	0.763		
Total BTEX	<0.300	0.300	11/10/2023	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	592	16.0	11/10/2023	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	11/10/2023	ND	173	86.4	200	0.520	
DRO >C10-C28*	<10.0	10.0	11/10/2023	ND	188	94.2	200	0.810	
EXT DRO >C28-C36	<10.0	10.0	11/10/2023	ND					

Surrogate: 1-Chlorooctane 85.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 88.0 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
 KELLY LOWERY  
 3122 NATIONAL PARKS HWY  
 CARLSBAD NM, 88220  
 Fax To:

Received: 11/09/2023  
 Reported: 11/10/2023  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERPRISE - EDDY CO.

Sampling Date: 11/09/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Dionica Hinojos

**Sample ID: FS 12 10FT (H236165-12)**

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/10/2023	ND	2.17	109	2.00	0.794		
Toluene*	<0.050	0.050	11/10/2023	ND	2.17	109	2.00	0.692		
Ethylbenzene*	<0.050	0.050	11/10/2023	ND	2.14	107	2.00	0.955		
Total Xylenes*	<0.150	0.150	11/10/2023	ND	6.65	111	6.00	0.763		
Total BTX	<0.300	0.300	11/10/2023	ND						

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

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	11/10/2023	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	11/10/2023	ND	173	86.4	200	0.520	
DRO >C10-C28*	18.9	10.0	11/10/2023	ND	188	94.2	200	0.810	
EXT DRO >C28-C36	<10.0	10.0	11/10/2023	ND					

Surrogate: 1-Chlorooctane 100 % 48.2-134

Surrogate: 1-Chlorooctadecane 101 % 49.1-148

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**Analytical Results For:**

ENSOLUM  
KELLY LOWERY  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 11/09/2023  
Reported: 11/10/2023  
Project Name: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Location: ENTERPRISE - EDDY CO.

Sampling Date: 11/09/2023  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Dionica Hinojos

**Sample ID: FS 13 10FT (H236165-13)**

BTX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/10/2023	ND	2.17	109	2.00	0.794		
Toluene*	<0.050	0.050	11/10/2023	ND	2.17	109	2.00	0.692		
Ethylbenzene*	<0.050	0.050	11/10/2023	ND	2.14	107	2.00	0.955		
Total Xylenes*	<0.150	0.150	11/10/2023	ND	6.65	111	6.00	0.763		
Total BTX	<0.300	0.300	11/10/2023	ND						

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

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	11/10/2023	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	11/10/2023	ND	173	86.4	200	0.520	
DRO >C10-C28*	19.5	10.0	11/10/2023	ND	188	94.2	200	0.810	
EXT DRO >C28-C36	10.3	10.0	11/10/2023	ND					

Surrogate: 1-Chlorooctane 116 % 48.2-134

Surrogate: 1-Chlorooctadecane 129 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
 KELLY LOWERY  
 3122 NATIONAL PARKS HWY  
 CARLSBAD NM, 88220  
 Fax To:

Received: 11/09/2023  
 Reported: 11/10/2023  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERPRISE - EDDY CO.

Sampling Date: 11/09/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Dionica Hinojos

**Sample ID: FS 14 10FT (H236165-14)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/10/2023	ND	2.17	109	2.00	0.794	
Toluene*	<0.050	0.050	11/10/2023	ND	2.17	109	2.00	0.692	
Ethylbenzene*	0.076	0.050	11/10/2023	ND	2.14	107	2.00	0.955	GC-NC1
Total Xylenes*	0.299	0.150	11/10/2023	ND	6.65	111	6.00	0.763	
Total BTEX	0.375	0.300	11/10/2023	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID) 113 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	368	16.0	11/10/2023	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	11/10/2023	ND	173	86.4	200	0.520	
DRO >C10-C28*	57.8	10.0	11/10/2023	ND	188	94.2	200	0.810	
EXT DRO >C28-C36	10.9	10.0	11/10/2023	ND					

Surrogate: 1-Chlorooctane 129 % 48.2-134

Surrogate: 1-Chlorooctadecane 146 % 49.1-148

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**Analytical Results For:**

ENSOLUM  
KELLY LOWERY  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 11/09/2023  
Reported: 11/10/2023  
Project Name: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Location: ENTERPRISE - EDDY CO.

Sampling Date: 11/09/2023  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Dionica Hinojos

**Sample ID: FS 15 10FT (H236165-15)**

BTEx 8021B		mg/kg	Analyzed By: JH							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/10/2023	ND	2.17	109	2.00	0.794		
Toluene*	<b>0.167</b>	0.050	11/10/2023	ND	2.17	109	2.00	0.692		
Ethylbenzene*	<b>0.138</b>	0.050	11/10/2023	ND	2.14	107	2.00	0.955	GC-NC1	
Total Xylenes*	<b>0.704</b>	0.150	11/10/2023	ND	6.65	111	6.00	0.763		
Total BTEX	<b>1.01</b>	0.300	11/10/2023	ND						GC-NC1

Surrogate: 4-Bromofluorobenzene (PID) 113 % 71.5-134

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<b>416</b>	16.0	11/10/2023	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*	<b>16.6</b>	10.0	11/10/2023	ND	173	86.4	200	0.520		
DRO >C10-C28*	<b>109</b>	10.0	11/10/2023	ND	188	94.2	200	0.810		
EXT DRO >C28-C36	<b>41.2</b>	10.0	11/10/2023	ND						

Surrogate: 1-Chlorooctane 136 % 48.2-134

Surrogate: 1-Chlorooctadecane 156 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM  
 KELLY LOWERY  
 3122 NATIONAL PARKS HWY  
 CARLSBAD NM, 88220  
 Fax To:

Received: 11/09/2023  
 Reported: 11/10/2023  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERPRISE - EDDY CO.

Sampling Date: 11/09/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Dionica Hinojos

**Sample ID: FS 20 10FT (H236165-16)**

BTEx 8021B		mg/kg	Analyzed By: JH					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>0.615</b>	0.050	11/10/2023	ND	2.17	109	2.00	0.794	
<b>Toluene*</b>	<b>2.34</b>	0.050	11/10/2023	ND	2.17	109	2.00	0.692	
<b>Ethylbenzene*</b>	<b>1.49</b>	0.050	11/10/2023	ND	2.14	107	2.00	0.955	GC-NC1
<b>Total Xylenes*</b>	<b>7.70</b>	0.150	11/10/2023	ND	6.65	111	6.00	0.763	
<b>Total BTEX</b>	<b>12.1</b>	0.300	11/10/2023	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID) 155 % 71.5-134

Chloride, SM4500Cl-B		mg/kg	Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>432</b>	16.0	11/10/2023	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>267</b>	10.0	11/10/2023	ND	173	86.4	200	0.520	
<b>DRO &gt;C10-C28*</b>	<b>114</b>	10.0	11/10/2023	ND	188	94.2	200	0.810	
<b>EXT DRO &gt;C28-C36</b>	<b>16.5</b>	10.0	11/10/2023	ND					

Surrogate: 1-Chlorooctane 136 % 48.2-134

Surrogate: 1-Chlorooctadecane 147 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

ENSOLUM  
 KELLY LOWERY  
 3122 NATIONAL PARKS HWY  
 CARLSBAD NM, 88220  
 Fax To:

Received: 11/09/2023  
 Reported: 11/10/2023  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERPRISE - EDDY CO.

Sampling Date: 11/09/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Dionica Hinojos

**Sample ID: SW 01 0- 10FT (H236165-17)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/10/2023	ND	2.17	109	2.00	0.794		
Toluene*	<0.050	0.050	11/10/2023	ND	2.17	109	2.00	0.692		
Ethylbenzene*	<0.050	0.050	11/10/2023	ND	2.14	107	2.00	0.955		
Total Xylenes*	<0.150	0.150	11/10/2023	ND	6.65	111	6.00	0.763		
Total BTEX	<0.300	0.300	11/10/2023	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	352	16.0	11/10/2023	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	11/10/2023	ND	173	86.4	200	0.520	
DRO >C10-C28*	<10.0	10.0	11/10/2023	ND	188	94.2	200	0.810	
EXT DRO >C28-C36	<10.0	10.0	11/10/2023	ND					

Surrogate: 1-Chlorooctane 109 % 48.2-134

Surrogate: 1-Chlorooctadecane 121 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
 KELLY LOWERY  
 3122 NATIONAL PARKS HWY  
 CARLSBAD NM, 88220  
 Fax To:

Received: 11/09/2023  
 Reported: 11/10/2023  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERPRISE - EDDY CO.

Sampling Date: 11/09/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Dionica Hinojos

**Sample ID: SW 02 0-10FT (H236165-18)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/10/2023	ND	2.17	109	2.00	0.794		
Toluene*	<0.050	0.050	11/10/2023	ND	2.17	109	2.00	0.692		
Ethylbenzene*	<0.050	0.050	11/10/2023	ND	2.14	107	2.00	0.955		
Total Xylenes*	<0.150	0.150	11/10/2023	ND	6.65	111	6.00	0.763		
Total BTEX	<0.300	0.300	11/10/2023	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	448	16.0	11/10/2023	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	11/10/2023	ND	173	86.4	200	0.520	
DRO >C10-C28*	<10.0	10.0	11/10/2023	ND	188	94.2	200	0.810	
EXT DRO >C28-C36	<10.0	10.0	11/10/2023	ND					

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 112 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
KELLY LOWERY  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 11/09/2023  
Reported: 11/10/2023  
Project Name: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Location: ENTERPRISE - EDDY CO.

Sampling Date: 11/09/2023  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Dionica Hinojos

**Sample ID: SW 03 0- 10FT (H236165-19)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/10/2023	ND	2.17	109	2.00	0.794		
Toluene*	<0.050	0.050	11/10/2023	ND	2.17	109	2.00	0.692		
Ethylbenzene*	<0.050	0.050	11/10/2023	ND	2.14	107	2.00	0.955		
Total Xylenes*	<0.150	0.150	11/10/2023	ND	6.65	111	6.00	0.763		
Total BTEX	<0.300	0.300	11/10/2023	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	400	16.0	11/10/2023	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	11/10/2023	ND	173	86.4	200	0.520	
DRO >C10-C28*	<10.0	10.0	11/10/2023	ND	188	94.2	200	0.810	
EXT DRO >C28-C36	<10.0	10.0	11/10/2023	ND					

Surrogate: 1-Chlorooctane 110 % 48.2-134

Surrogate: 1-Chlorooctadecane 114 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
 KELLY LOWERY  
 3122 NATIONAL PARKS HWY  
 CARLSBAD NM, 88220  
 Fax To:

Received: 11/09/2023  
 Reported: 11/10/2023  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERPRISE - EDDY CO.

Sampling Date: 11/09/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Dionica Hinojos

**Sample ID: SW 04 0- 10FT (H236165-20)**

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/10/2023	ND	2.17	109	2.00	0.794	
Toluene*	<0.050	0.050	11/10/2023	ND	2.17	109	2.00	0.692	
Ethylbenzene*	<0.050	0.050	11/10/2023	ND	2.14	107	2.00	0.955	
Total Xylenes*	<0.150	0.150	11/10/2023	ND	6.65	111	6.00	0.763	
Total BTEx	<0.300	0.300	11/10/2023	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	320	16.0	11/10/2023	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	11/10/2023	ND	173	86.4	200	0.520	
DRO >C10-C28*	<10.0	10.0	11/10/2023	ND	188	94.2	200	0.810	
EXT DRO >C28-C36	<10.0	10.0	11/10/2023	ND					

Surrogate: 1-Chlorooctane 125 % 48.2-134

Surrogate: 1-Chlorooctadecane 141 % 49.1-148

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**Analytical Results For:**

ENSOLUM  
KELLY LOWERY  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 11/09/2023  
Reported: 11/10/2023  
Project Name: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Location: ENTERPRISE - EDDY CO.

Sampling Date: 11/09/2023  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Dionica Hinojos

**Sample ID: SW 05 0- 10FT (H236165-21)**

BTEX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.066	0.050	11/10/2023	ND	2.01	101	2.00	3.53	
Toluene*	0.198	0.050	11/10/2023	ND	2.10	105	2.00	4.41	
Ethylbenzene*	0.233	0.050	11/10/2023	ND	2.11	106	2.00	5.26	GC-NC1
Total Xylenes*	1.12	0.150	11/10/2023	ND	6.28	105	6.00	4.76	
Total BTEX	1.62	0.300	11/10/2023	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID) 125 % 71.5-134

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	11/10/2023	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*	26.4	10.0	11/10/2023	ND	192	96.0	200	0.0511	
DRO >C10-C28*	53.9	10.0	11/10/2023	ND	193	96.3	200	0.499	
EXT DRO >C28-C36	<10.0	10.0	11/10/2023	ND					

Surrogate: 1-Chlorooctane 122 % 48.2-134

Surrogate: 1-Chlorooctadecane 124 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

ENSOLUM  
 KELLY LOWERY  
 3122 NATIONAL PARKS HWY  
 CARLSBAD NM, 88220  
 Fax To:

Received: 11/09/2023  
 Reported: 11/10/2023  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERPRISE - EDDY CO.

Sampling Date: 11/09/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Dionica Hinojos

**Sample ID: SW 06 0- 10FT (H236165-22)**

BTEx 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.054	0.050	11/10/2023	ND	2.01	101	2.00	3.53	
Toluene*	0.063	0.050	11/10/2023	ND	2.10	105	2.00	4.41	
Ethylbenzene*	0.285	0.050	11/10/2023	ND	2.11	106	2.00	5.26	GC-NC1
Total Xylenes*	0.833	0.150	11/10/2023	ND	6.28	105	6.00	4.76	
Total BTEX	1.24	0.300	11/10/2023	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID) 125 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	496	16.0	11/10/2023	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*	19.7	10.0	11/10/2023	ND	192	96.0	200	0.0511	
DRO >C10-C28*	289	10.0	11/10/2023	ND	193	96.3	200	0.499	
EXT DRO >C28-C36	58.5	10.0	11/10/2023	ND					

Surrogate: 1-Chlorooctane 126 % 48.2-134

Surrogate: 1-Chlorooctadecane 132 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
KELLY LOWERY  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 11/09/2023  
Reported: 11/10/2023  
Project Name: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Location: ENTERPRISE - EDDY CO.

Sampling Date: 11/09/2023  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Dionica Hinojos

**Sample ID: SW 07 0- 10FT (H236165-23)**

BTEX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.265	0.050	11/10/2023	ND	2.01	101	2.00	3.53	
Toluene*	1.46	0.050	11/10/2023	ND	2.10	105	2.00	4.41	
Ethylbenzene*	0.469	0.050	11/10/2023	ND	2.11	106	2.00	5.26	GC-NC1
Total Xylenes*	1.91	0.150	11/10/2023	ND	6.28	105	6.00	4.76	
Total BTEX	4.11	0.300	11/10/2023	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID) 119 % 71.5-134

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	11/10/2023	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*	16.5	10.0	11/10/2023	ND	192	96.0	200	0.0511	
DRO >C10-C28*	13.7	10.0	11/10/2023	ND	193	96.3	200	0.499	
EXT DRO >C28-C36	<10.0	10.0	11/10/2023	ND					

Surrogate: 1-Chlorooctane 121 % 48.2-134

Surrogate: 1-Chlorooctadecane 123 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM  
KELLY LOWERY  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 11/09/2023  
Reported: 11/10/2023  
Project Name: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Location: ENTERPRISE - EDDY CO.

Sampling Date: 11/09/2023  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Dionica Hinojos

**Sample ID: SW 08 0- 10FT (H236165-24)**

BTEx 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Benzene*</b>	<b>4.10</b>	0.200	11/10/2023	ND	2.01	101	2.00	3.53		
<b>Toluene*</b>	<b>22.4</b>	0.200	11/10/2023	ND	2.10	105	2.00	4.41		
<b>Ethylbenzene*</b>	<b>3.99</b>	0.200	11/10/2023	ND	2.11	106	2.00	5.26	GC-NC1	
<b>Total Xylenes*</b>	<b>19.1</b>	0.600	11/10/2023	ND	6.28	105	6.00	4.76		
<b>Total BTEX</b>	<b>49.6</b>	1.20	11/10/2023	ND						GC-NC1

Surrogate: 4-Bromofluorobenzene (PID) 118 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>224</b>	16.0	11/10/2023	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	
<b>GRO C6-C10*</b>	<b>89.2</b>	10.0	11/10/2023	ND	192	96.0	200	0.0511		
<b>DRO &gt;C10-C28*</b>	<b>41.6</b>	10.0	11/10/2023	ND	193	96.3	200	0.499		
EXT DRO >C28-C36	<10.0	10.0	11/10/2023	ND						

Surrogate: 1-Chlorooctane 122 % 48.2-134

Surrogate: 1-Chlorooctadecane 121 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM  
KELLY LOWERY  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 11/09/2023  
Reported: 11/10/2023  
Project Name: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Location: ENTERPRISE - EDDY CO.

Sampling Date: 11/09/2023  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Dionica Hinojos

**Sample ID: SW 16 0- 10FT (H236165-25)**

BTEX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.058	0.050	11/10/2023	ND	2.01	101	2.00	3.53	
Toluene*	0.244	0.050	11/10/2023	ND	2.10	105	2.00	4.41	
Ethylbenzene*	<0.050	0.050	11/10/2023	ND	2.11	106	2.00	5.26	
Total Xylenes*	0.192	0.150	11/10/2023	ND	6.28	105	6.00	4.76	
Total BTEX	0.494	0.300	11/10/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 123 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	320	16.0	11/10/2023	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	11/10/2023	ND	192	96.0	200	0.0511	
DRO >C10-C28*	<10.0	10.0	11/10/2023	ND	193	96.3	200	0.499	
EXT DRO >C28-C36	<10.0	10.0	11/10/2023	ND					

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 96.8 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM  
KELLY LOWERY  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 11/09/2023  
Reported: 11/10/2023  
Project Name: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Location: ENTERPRISE - EDDY CO.

Sampling Date: 11/09/2023  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Dionica Hinojos

**Sample ID: SW 17 0- 10FT (H236165-26)**

BTEx 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/10/2023	ND	2.01	101	2.00	3.53		
Toluene*	<0.050	0.050	11/10/2023	ND	2.10	105	2.00	4.41		
Ethylbenzene*	<0.050	0.050	11/10/2023	ND	2.11	106	2.00	5.26		
Total Xylenes*	<0.150	0.150	11/10/2023	ND	6.28	105	6.00	4.76		
Total BTEX	<0.300	0.300	11/10/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 117 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	11/10/2023	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	11/10/2023	ND	192	96.0	200	0.0511	
DRO >C10-C28*	<10.0	10.0	11/10/2023	ND	193	96.3	200	0.499	
EXT DRO >C28-C36	<10.0	10.0	11/10/2023	ND					

Surrogate: 1-Chlorooctane 130 % 48.2-134

Surrogate: 1-Chlorooctadecane 131 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM  
KELLY LOWERY  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 11/09/2023  
Reported: 11/10/2023  
Project Name: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Location: ENTERPRISE - EDDY CO.

Sampling Date: 11/09/2023  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Dionica Hinojos

**Sample ID: SW 18 0- 10FT (H236165-27)**

BTEX 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/10/2023	ND	2.01	101	2.00	3.53		
Toluene*	<0.050	0.050	11/10/2023	ND	2.10	105	2.00	4.41		
Ethylbenzene*	<0.050	0.050	11/10/2023	ND	2.11	106	2.00	5.26		
Total Xylenes*	<0.150	0.150	11/10/2023	ND	6.28	105	6.00	4.76		
Total BTEX	<0.300	0.300	11/10/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 114 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	672	16.0	11/10/2023	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	11/10/2023	ND	192	96.0	200	0.0511	
DRO >C10-C28*	<10.0	10.0	11/10/2023	ND	193	96.3	200	0.499	
EXT DRO >C28-C36	<10.0	10.0	11/10/2023	ND					

Surrogate: 1-Chlorooctane 130 % 48.2-134

Surrogate: 1-Chlorooctadecane 131 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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---

### Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QM-07	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
GC-NC1	8260 confirmation analysis was performed; initial GC results were not supported by GC/MS analysis and are biased high with interfering compounds.
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

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A handwritten signature in black ink, appearing to read "Celey D. Keene", is written over a horizontal line.

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Ensolum, LLC

Project Manager: Kelly Lowery

Address: 601 N. Marland St. STE 400

City: Midland

State: TX Zip: 79701

Phone #: 214-733-3165

Email: klowery@ensolum.com

Project #: 03B1226395 Project Owner:

Project Name: Smith Carbide CS Tank Leak

Project Location: Eddy County

Sample Name: Korte Shindler

FOR LAB USE ONLY

Company: Enterprise Field Services,  
Attn: Thomas Long

City: Address:

State: Zip: Phone #: 505-215-4727

Email: tlong@eprod.com

P.O. #: PRESERV. SAMPLING

BILL TO

ANALYSIS REQUEST

Lab I.D.	Sample I.D.	Sample Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME						
					GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :			ICE / COOL	OTHER :				
1029105	4501	10	C	1							2023	1109	BTEX	80215				
1029105	4502	10	C	1							2023	1109	TPH	80215M				
1029105	4503	10	C	1							2023	1109	Chloride	4500				
1029105	4504	10	C	1							2023	1109						
1029105	4505	10	C	1							2023	1109						
1029105	4506	10	C	1							2023	1109						
1029105	4507	10	C	1							2023	1109						
1029105	4508	10	C	1							2023	1109						
1029105	4509	10	C	1							2023	1109						
1029105	4510	10	C	1							2023	1109						

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Relinquished By: *[Signature]* Date: 11-9-23 Received By: *[Signature]* Date: 11-9-23

Relinquished By: *[Signature]* Date: 11-9-23 Received By: *[Signature]* Date: 11-9-23

Delivered By: (Circle One)  
Sampler - UPS - Bus - Other:

Observed Temp. °C  
Corrected Temp. °C

Sample Condition  
Cool Intact  
☒ Yes ☐ No

CHECKED BY:  
(Initials)

Turnaround Time: Rush ☒ Standard ☐  
Thermometer ID: #413  
Correction Factor: 0.5°C

Observed Temp. °C  
Corrected Temp. °C

FORM-006 R 3.2 10/07/21

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Ensolum, LLC

Project Manager: Kelly Lowery

Address: 601 N. Marland St. STE 400

City: Midland State: TX Zip: 79701

Phone #: 214-733-3165 Email: klowery@ensolum.com

Project #: 02B1226335 Project Owner:

Project Name: South Carlsbad CS Tank Leak

Project Location: Fiddy Lowery State: Zip:

Sample Name: Kaoru Shimada Phone #: 505-215-4727

FOR LAB USE ONLY Email: tjlong@deprod.com

BILL TO

ANALYSIS REQUEST

P.O. #:

Company: Enterprise Field Services,

Attn: Thomas Long

Address:

City:

State:

Zip:

Phone #: 505-215-4727

Email: tjlong@deprod.com

Lab I.D.

Sample I.D.

Sample Depth (feet)

(G)RAB OR (C)OMP.

# CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER :

ACID/BASE:

ICE / COOL

OTHER :

DATE

TIME

BTEx 8021B

TPH 8015M

Chloride 4500

1034165

12 ES 11

12 ES 12

13 ES 13

14 ES 14

15 ES 15

16 ES 16

17 ES 17

18 ES 18

19 ES 19

20 ES 20

21 ES 21

22 ES 22

23 ES 23

24 ES 24

25 ES 25

26 ES 26

27 ES 27

28 ES 28

29 ES 29

30 ES 30

31 ES 31

32 ES 32

33 ES 33

34 ES 34

35 ES 35

36 ES 36

37 ES 37

38 ES 38

39 ES 39

40 ES 40

41 ES 41

42 ES 42

43 ES 43

44 ES 44

45 ES 45

46 ES 46

47 ES 47

48 ES 48

49 ES 49

50 ES 50

51 ES 51

52 ES 52

53 ES 53

54 ES 54

1034165

12 ES 11

12 ES 12

13 ES 13

14 ES 14

15 ES 15

16 ES 16

17 ES 17

18 ES 18

19 ES 19

20 ES 20

21 ES 21

22 ES 22

23 ES 23

24 ES 24

25 ES 25

26 ES 26

27 ES 27

28 ES 28

29 ES 29

30 ES 30

31 ES 31

32 ES 32

33 ES 33

34 ES 34

35 ES 35

36 ES 36

37 ES 37

38 ES 38

39 ES 39

40 ES 40

41 ES 41

42 ES 42

43 ES 43

44 ES 44

45 ES 45

46 ES 46

47 ES 47

48 ES 48

49 ES 49

50 ES 50

51 ES 51

52 ES 52

53 ES 53

54 ES 54

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Relinquished By:

Date: 11-9-23

Time: 10:20

Relinquished By:

Date: 11-9-23

Time: 10:20

Relinquished By:

Date: 11-9-23

Time: 10:20

Relinquished By:

Date: 11-9-23

Time: 10:20

Relinquished By:

Date: 11-9-23

Time: 10:20

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Date: 11-9-23

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Date: 11-9-23

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Date: 11-9-23

Time: 10:20

Relinquished By:

Date: 11-9-23

Time: 10:20

Relinquished By:

Date: 11-9-23

Time: 10:20

Relinquished By:

Date: 11-9-23

Time: 10:20

Relinquished By:

Date: 11-9-23

Time: 10:20

Relinquished By:

Date: 11-9-23

Time: 10:20

Relinquished By:

Date: 11-9-23

Time: 10:20

Relinquished By:

Date: 11-9-23

Time: 10:20

Delivered By: (Circle One)  
Sampler - UPS - Bus - Other:

Observed Temp. °C 1.1°C  
Corrected Temp. °C

Sample Condition  
Cool ☒ Intact  
Yes ☒ No ☐

CHECKED BY: (Initials)  
DA

Turnaround Time: 24 hours  
Standard ☒ Rush ☐  
Cool ☒ Intact ☐  
Observed Temp. °C

Thermometer ID #445  
Correction Factor -0.3°C

Yes ☐ No ☐  
Corrected Temp. °C

Yes ☐ No ☐  
Corrected Temp. °C

Yes ☐ No ☐  
Corrected Temp. °C

Yes ☐ No ☐  
Corrected Temp. °C

Yes ☐ No ☐  
Corrected Temp. °C

Yes ☐ No ☐  
Corrected Temp. °C

Yes ☐ No ☐  
Corrected Temp. °C

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Ensolum, LLC

Project Manager: Kelly Lowery

Address: 601 N. Marland St. STE 400

City: Midland State: TX Zip: 79701

Phone #: 214-733-3165 Email: klowery@ensolum.com

Project #: 03B1226375 Project Owner:

Project Name: South Carlsbad CS Tank Leak

Project Location: Leaky County

Sample Name: Karna Shipman

FOR LAB USE ONLY

Lab I.D. Sample I.D. Sample Depth (feet)

Sample Depth (feet)

(G)RAB OR (C)OMP.

# CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER :

ACID/BASE:

ICE / COOL

OTHER :

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

FORM-006 R 3.2 10/07/21

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

BILL TO

ANALYSIS REQUEST

P.O. #:

Company: Enterprise Field Services,

Attn: Thomas Long

Address:

City:

State: Zip:

Phone #: 505-215-4727

Email: tjlong@eprod.com

MATRIX PRESERV. SAMPLING

OTHER :

ACID/BASE:

ICE / COOL

OTHER :

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

Sample Condition

Cool Intact

Yes No

Yes No

Yes No

Yes No

Yes No

Yes No

Yes No

Yes No

Yes No

Yes No

CHECKED BY:

(Initials)

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

DATE

TIME

Verbal Result: ☐ Yes ☒ No

Add'l Phone #:

All Results are emailed. Please provide Email address:

klowery@ensolum.com / tjlong@eprod.com

REMARKS: Paykey/AFE/NonAFE:

24 hours

Standard ☐ Bacteria (only) Sample Condition

Turnaround Time: ☒ Rush ☐ Cool Intact ☐ Observed Temp. °C

Thermometer ID #113

Correction Factor -0.3°C

11-9-23

11-9-23

11-9-23

11-9-23

11-9-23

11-9-23

11-9-23

11-9-23

Yes ☐ No ☐

Yes ☐ No ☐

Corrected Temp. °C



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

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]

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

---

November 15, 2023

KELLY LOWERY

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: SOUTH CARLSBAD CS TANK LEAK

Enclosed are the results of analyses for samples received by the laboratory on 11/10/23 16:50.

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  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Manager: KELLY LOWERY  
Fax To:

Reported:  
15-Nov-23 09:53

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
NORTHEAST 0-0.25	H236186-01	Soil	10-Nov-23 15:20	10-Nov-23 16:50
NORTH 0-0.25	H236186-02	Soil	10-Nov-23 15:18	10-Nov-23 16:50
NORTHWEST 0-0.25	H236186-03	Soil	10-Nov-23 15:16	10-Nov-23 16:50
WEST 0-0.25	H236186-04	Soil	10-Nov-23 15:14	10-Nov-23 16:50
SOUTHWEST 0-0.25	H236186-05	Soil	10-Nov-23 15:13	10-Nov-23 16:50
SOUTH 0-0.25	H236186-06	Soil	10-Nov-23 15:09	10-Nov-23 16:50
SOUTHEAST 0-0.25	H236186-07	Soil	10-Nov-23 15:06	10-Nov-23 16:50
FS 16 10	H236186-08	Soil	10-Nov-23 09:06	10-Nov-23 16:50
FS 17 10	H236186-09	Soil	10-Nov-23 09:07	10-Nov-23 16:50
FS 18 10	H236186-10	Soil	10-Nov-23 09:13	10-Nov-23 16:50
FS 21 10	H236186-11	Soil	10-Nov-23 13:53	10-Nov-23 16:50
FS 22 10	H236186-12	Soil	10-Nov-23 13:52	10-Nov-23 16:50
FS 23 10	H236186-13	Soil	10-Nov-23 13:21	10-Nov-23 16:50
FS 24 10	H236186-14	Soil	10-Nov-23 12:27	10-Nov-23 16:50
FS 25 10	H236186-15	Soil	10-Nov-23 09:34	10-Nov-23 16:50
FS 19 10	H236186-16	Soil	10-Nov-23 14:45	10-Nov-23 16:50
SW 10 0-10	H236186-17	Soil	10-Nov-23 09:24	10-Nov-23 16:50
SW 11 0-10	H236186-18	Soil	10-Nov-23 09:23	10-Nov-23 16:50
SW 12 0-10	H236186-19	Soil	10-Nov-23 13:49	10-Nov-23 16:50
SW 13 0-10	H236186-20	Soil	10-Nov-23 13:47	10-Nov-23 16:50
SW 14 0-10	H236186-21	Soil	10-Nov-23 11:01	10-Nov-23 16:50
SW 15 0-10	H236186-22	Soil	10-Nov-23 09:56	10-Nov-23 16:50
SW 9 0-10	H236186-23	Soil	10-Nov-23 14:46	10-Nov-23 16:50

11/15/23 - Client changed the sample ID on -16 (see COC). This is the revised report and will replace the one sent on 11/13/23.

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Manager: KELLY LOWERY  
Fax To:

Reported:  
15-Nov-23 09:53

**NORTHEAST 0-0.25****H236186-01 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	7100		16.0	mg/kg	4	3111309	HM	13-Nov-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	3111301	JH	13-Nov-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3111301	JH	13-Nov-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3111301	JH	13-Nov-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3111301	JH	13-Nov-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3111301	JH	13-Nov-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			118 %	71.5-134		3111301	JH	13-Nov-23	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	3111304	MS	13-Nov-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3111304	MS	13-Nov-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3111304	MS	13-Nov-23	8015B	

Surrogate: 1-Chlorooctane			76.3 %	48.2-134		3111304	MS	13-Nov-23	8015B	
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Surrogate: 1-Chlorooctadecane			71.0 %	49.1-148		3111304	MS	13-Nov-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Manager: KELLY LOWERY  
Fax To:

Reported:  
15-Nov-23 09:53

**NORTH 0-0.25**  
**H236186-02 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>2800</b>		16.0	mg/kg	4	3111309	HM	13-Nov-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	3111301	JH	13-Nov-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3111301	JH	13-Nov-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3111301	JH	13-Nov-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3111301	JH	13-Nov-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3111301	JH	13-Nov-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			118 %		71.5-134	3111301	JH	13-Nov-23	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	3111304	MS	13-Nov-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3111304	MS	13-Nov-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3111304	MS	13-Nov-23	8015B	

Surrogate: 1-Chlorooctane			77.1 %		48.2-134	3111304	MS	13-Nov-23	8015B	
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Surrogate: 1-Chlorooctadecane			69.0 %		49.1-148	3111304	MS	13-Nov-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Manager: KELLY LOWERY  
Fax To:

Reported:  
15-Nov-23 09:53

**NORTHWEST 0-0.25****H236186-03 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	1280		16.0	mg/kg	4	3111309	HM	13-Nov-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	3111301	JH	13-Nov-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3111301	JH	13-Nov-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3111301	JH	13-Nov-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3111301	JH	13-Nov-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3111301	JH	13-Nov-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			119 %		71.5-134	3111301	JH	13-Nov-23	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	3111304	MS	13-Nov-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3111304	MS	13-Nov-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3111304	MS	13-Nov-23	8015B	

Surrogate: 1-Chlorooctane			82.4 %		48.2-134	3111304	MS	13-Nov-23	8015B	
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Surrogate: 1-Chlorooctadecane			73.4 %		49.1-148	3111304	MS	13-Nov-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Manager: KELLY LOWERY  
Fax To:

Reported:  
15-Nov-23 09:53

**WEST 0-0.25****H236186-04 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>4480</b>		16.0	mg/kg	4	3111309	HM	13-Nov-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	3111301	JH	13-Nov-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3111301	JH	13-Nov-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3111301	JH	13-Nov-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3111301	JH	13-Nov-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3111301	JH	13-Nov-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			119 %	71.5-134		3111301	JH	13-Nov-23	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	3111304	MS	13-Nov-23	8015B	
<b>DRO &gt;C10-C28*</b>	<b>28.0</b>		10.0	mg/kg	1	3111304	MS	13-Nov-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3111304	MS	13-Nov-23	8015B	

Surrogate: 1-Chlorooctane			79.6 %	48.2-134		3111304	MS	13-Nov-23	8015B	
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Surrogate: 1-Chlorooctadecane			72.9 %	49.1-148		3111304	MS	13-Nov-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Manager: KELLY LOWERY  
Fax To:

Reported:  
15-Nov-23 09:53

**SOUTHWEST 0-0.25****H236186-05 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	4560		16.0	mg/kg	4	3111309	HM	13-Nov-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	3111301	JH	13-Nov-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3111301	JH	13-Nov-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3111301	JH	13-Nov-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3111301	JH	13-Nov-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3111301	JH	13-Nov-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			120 %		71.5-134	3111301	JH	13-Nov-23	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	3111304	MS	13-Nov-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3111304	MS	13-Nov-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3111304	MS	13-Nov-23	8015B	

Surrogate: 1-Chlorooctane			73.3 %		48.2-134	3111304	MS	13-Nov-23	8015B	
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Surrogate: 1-Chlorooctadecane			65.2 %		49.1-148	3111304	MS	13-Nov-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Manager: KELLY LOWERY  
Fax To:

Reported:  
15-Nov-23 09:53

**SOUTH 0-0.25**  
**H236186-06 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	2520		16.0	mg/kg	4	3111309	HM	13-Nov-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	3111301	JH	13-Nov-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3111301	JH	13-Nov-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3111301	JH	13-Nov-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3111301	JH	13-Nov-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3111301	JH	13-Nov-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			124 %		71.5-134	3111301	JH	13-Nov-23	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	3111304	MS	13-Nov-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3111304	MS	13-Nov-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3111304	MS	13-Nov-23	8015B	

Surrogate: 1-Chlorooctane			80.8 %		48.2-134	3111304	MS	13-Nov-23	8015B	
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Surrogate: 1-Chlorooctadecane			71.6 %		49.1-148	3111304	MS	13-Nov-23	8015B	
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Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Manager: KELLY LOWERY  
Fax To:

Reported:  
15-Nov-23 09:53

**SOUTHEAST 0-0.25****H236186-07 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>1550</b>		16.0	mg/kg	4	3111309	HM	13-Nov-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050	0.050	mg/kg	50	3111301	JH	13-Nov-23	8021B	
Toluene*	<0.050	0.050	mg/kg	50	3111301	JH	13-Nov-23	8021B	
Ethylbenzene*	<0.050	0.050	mg/kg	50	3111301	JH	13-Nov-23	8021B	
Total Xylenes*	<0.150	0.150	mg/kg	50	3111301	JH	13-Nov-23	8021B	
Total BTEX	<0.300	0.300	mg/kg	50	3111301	JH	13-Nov-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)	119 %	71.5-134	3111301	JH	13-Nov-23	8021B
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0	10.0	mg/kg	1	3111304	MS	13-Nov-23	8015B
DRO >C10-C28*	<10.0	10.0	mg/kg	1	3111304	MS	13-Nov-23	8015B
EXT DRO >C28-C36	<10.0	10.0	mg/kg	1	3111304	MS	13-Nov-23	8015B

Surrogate: 1-Chlorooctane	77.9 %	48.2-134	3111304	MS	13-Nov-23	8015B
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Surrogate: 1-Chlorooctadecane	70.6 %	49.1-148	3111304	MS	13-Nov-23	8015B
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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Manager: KELLY LOWERY  
Fax To:

Reported:  
15-Nov-23 09:53

**FS 16 10**  
**H236186-08 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>208</b>		16.0	mg/kg	4	3111309	HM	13-Nov-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021****S-04**

<b>Benzene*</b>	<b>0.285</b>		0.050	mg/kg	50	3111301	JH	13-Nov-23	8021B	
<b>Toluene*</b>	<b>1.56</b>		0.050	mg/kg	50	3111301	JH	13-Nov-23	8021B	
<b>Ethylbenzene*</b>	<b>0.879</b>		0.050	mg/kg	50	3111301	JH	13-Nov-23	8021B	
<b>Total Xylenes*</b>	<b>4.51</b>		0.150	mg/kg	50	3111301	JH	13-Nov-23	8021B	
<b>Total BTEX</b>	<b>7.24</b>		0.300	mg/kg	50	3111301	JH	13-Nov-23	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			143 %		71.5-134	3111301	JH	13-Nov-23	8021B	
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**Petroleum Hydrocarbons by GC FID**

<b>GRO C6-C10*</b>	<b>12.0</b>		10.0	mg/kg	1	3111304	MS	13-Nov-23	8015B	
<b>DRO &gt;C10-C28*</b>	<b>&lt;10.0</b>		10.0	mg/kg	1	3111304	MS	13-Nov-23	8015B	
<b>EXT DRO &gt;C28-C36</b>	<b>&lt;10.0</b>		10.0	mg/kg	1	3111304	MS	13-Nov-23	8015B	

<i>Surrogate: 1-Chlorooctane</i>			73.4 %		48.2-134	3111304	MS	13-Nov-23	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			63.9 %		49.1-148	3111304	MS	13-Nov-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Manager: KELLY LOWERY  
Fax To:

Reported:  
15-Nov-23 09:53

**FS 17 10**  
**H236186-09 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>368</b>		16.0	mg/kg	4	3111309	HM	13-Nov-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

<b>Benzene*</b>	<b>0.193</b>		0.050	mg/kg	50	3111302	JH	13-Nov-23	8021B	
<b>Toluene*</b>	<b>0.660</b>		0.050	mg/kg	50	3111302	JH	13-Nov-23	8021B	
<b>Ethylbenzene*</b>	<b>0.353</b>		0.050	mg/kg	50	3111302	JH	13-Nov-23	8021B	
<b>Total Xylenes*</b>	<b>2.05</b>		0.150	mg/kg	50	3111302	JH	13-Nov-23	8021B	
<b>Total BTEX</b>	<b>3.25</b>		0.300	mg/kg	50	3111302	JH	13-Nov-23	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			117 %	71.5-134		3111302	JH	13-Nov-23	8021B	
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**Petroleum Hydrocarbons by GC FID**

<b>GRO C6-C10*</b>	<b>10.3</b>		10.0	mg/kg	1	3111304	MS	13-Nov-23	8015B	
<b>DRO &gt;C10-C28*</b>	<b>&lt;10.0</b>		10.0	mg/kg	1	3111304	MS	13-Nov-23	8015B	
<b>EXT DRO &gt;C28-C36</b>	<b>&lt;10.0</b>		10.0	mg/kg	1	3111304	MS	13-Nov-23	8015B	

<i>Surrogate: 1-Chlorooctane</i>			74.5 %	48.2-134		3111304	MS	13-Nov-23	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			65.0 %	49.1-148		3111304	MS	13-Nov-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Manager: KELLY LOWERY  
Fax To:

Reported:  
15-Nov-23 09:53

**FS 18 10**  
**H236186-10 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>352</b>		16.0	mg/kg	4	3111309	HM	13-Nov-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

<b>Benzene*</b>	<b>14.5</b>		5.00	mg/kg	5000	3111302	JH	13-Nov-23	8021B	
<b>Toluene*</b>	<b>39.8</b>		5.00	mg/kg	5000	3111302	JH	13-Nov-23	8021B	
<b>Ethylbenzene*</b>	<b>11.5</b>		5.00	mg/kg	5000	3111302	JH	13-Nov-23	8021B	
<b>Total Xylenes*</b>	<b>65.5</b>		15.0	mg/kg	5000	3111302	JH	13-Nov-23	8021B	
<b>Total BTEX</b>	<b>131</b>		30.0	mg/kg	5000	3111302	JH	13-Nov-23	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			102 %		71.5-134	3111302	JH	13-Nov-23	8021B	
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**Petroleum Hydrocarbons by GC FID**

<b>GRO C6-C10*</b>	<b>994</b>		10.0	mg/kg	1	3111304	MS	13-Nov-23	8015B	
<b>DRO &gt;C10-C28*</b>	<b>140</b>		10.0	mg/kg	1	3111304	MS	13-Nov-23	8015B	
<b>EXT DRO &gt;C28-C36</b>	<b>&lt;10.0</b>		10.0	mg/kg	1	3111304	MS	13-Nov-23	8015B	

<i>Surrogate: 1-Chlorooctane</i>			98.3 %		48.2-134	3111304	MS	13-Nov-23	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			65.7 %		49.1-148	3111304	MS	13-Nov-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Manager: KELLY LOWERY  
Fax To:

Reported:  
15-Nov-23 09:53

**FS 21 10**  
**H236186-11 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>320</b>		16.0	mg/kg	4	3111309	HM	13-Nov-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

<b>Benzene*</b>	<b>0.557</b>		0.050	mg/kg	50	3111302	JH	13-Nov-23	8021B	
<b>Toluene*</b>	<b>1.23</b>		0.050	mg/kg	50	3111302	JH	13-Nov-23	8021B	
<b>Ethylbenzene*</b>	<b>0.473</b>		0.050	mg/kg	50	3111302	JH	13-Nov-23	8021B	
<b>Total Xylenes*</b>	<b>2.69</b>		0.150	mg/kg	50	3111302	JH	13-Nov-23	8021B	
<b>Total BTEX</b>	<b>4.95</b>		0.300	mg/kg	50	3111302	JH	13-Nov-23	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			117 %	71.5-134		3111302	JH	13-Nov-23	8021B	
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**Petroleum Hydrocarbons by GC FID**

<b>GRO C6-C10*</b>	<b>23.6</b>		10.0	mg/kg	1	3111304	MS	13-Nov-23	8015B	
<b>DRO &gt;C10-C28*</b>	<b>&lt;10.0</b>		10.0	mg/kg	1	3111304	MS	13-Nov-23	8015B	
<b>EXT DRO &gt;C28-C36</b>	<b>&lt;10.0</b>		10.0	mg/kg	1	3111304	MS	13-Nov-23	8015B	

<i>Surrogate: 1-Chlorooctane</i>			79.6 %	48.2-134		3111304	MS	13-Nov-23	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			69.7 %	49.1-148		3111304	MS	13-Nov-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Manager: KELLY LOWERY  
Fax To:

Reported:  
15-Nov-23 09:53

**FS 22 10**  
**H236186-12 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>256</b>		16.0	mg/kg	4	3111309	HM	13-Nov-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

<b>Benzene*</b>	<b>11.8</b>		2.00	mg/kg	2000	3111302	JH	13-Nov-23	8021B	
<b>Toluene*</b>	<b>28.8</b>		2.00	mg/kg	2000	3111302	JH	13-Nov-23	8021B	
<b>Ethylbenzene*</b>	<b>6.32</b>		2.00	mg/kg	2000	3111302	JH	13-Nov-23	8021B	
<b>Total Xylenes*</b>	<b>35.6</b>		6.00	mg/kg	2000	3111302	JH	13-Nov-23	8021B	
<b>Total BTEX</b>	<b>82.5</b>		12.0	mg/kg	2000	3111302	JH	13-Nov-23	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			101 %	71.5-134		3111302	JH	13-Nov-23	8021B	
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**Petroleum Hydrocarbons by GC FID**

<b>GRO C6-C10*</b>	<b>161</b>		10.0	mg/kg	1	3111304	MS	13-Nov-23	8015B	
<b>DRO &gt;C10-C28*</b>	<b>22.5</b>		10.0	mg/kg	1	3111304	MS	13-Nov-23	8015B	
<b>EXT DRO &gt;C28-C36</b>	<b>&lt;10.0</b>		10.0	mg/kg	1	3111304	MS	13-Nov-23	8015B	

<i>Surrogate: 1-Chlorooctane</i>			83.6 %	48.2-134		3111304	MS	13-Nov-23	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			70.7 %	49.1-148		3111304	MS	13-Nov-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Manager: KELLY LOWERY  
Fax To:

Reported:  
15-Nov-23 09:53

**FS 23 10**  
**H236186-13 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	256		16.0	mg/kg	4	3111309	HM	13-Nov-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	1.58		0.050	mg/kg	50	3111302	JH	13-Nov-23	8021B	
Toluene*	2.06		0.050	mg/kg	50	3111302	JH	13-Nov-23	8021B	
Ethylbenzene*	0.869		0.050	mg/kg	50	3111302	JH	13-Nov-23	8021B	
Total Xylenes*	4.38		0.150	mg/kg	50	3111302	JH	13-Nov-23	8021B	
Total BTEX	8.89		0.300	mg/kg	50	3111302	JH	13-Nov-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			128 %		71.5-134	3111302	JH	13-Nov-23	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	58.1		10.0	mg/kg	1	3111305	MS	13-Nov-23	8015B	
DRO >C10-C28*	25.3		10.0	mg/kg	1	3111305	MS	13-Nov-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3111305	MS	13-Nov-23	8015B	

Surrogate: 1-Chlorooctane			99.1 %		48.2-134	3111305	MS	13-Nov-23	8015B	
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Surrogate: 1-Chlorooctadecane			90.6 %		49.1-148	3111305	MS	13-Nov-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Manager: KELLY LOWERY  
Fax To:

Reported:  
15-Nov-23 09:53

**FS 24 10**  
**H236186-14 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>400</b>		16.0	mg/kg	4	3111309	HM	13-Nov-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

<b>Benzene*</b>	<b>1.62</b>		0.050	mg/kg	50	3111302	JH	13-Nov-23	8021B	
<b>Toluene*</b>	<b>1.81</b>		0.050	mg/kg	50	3111302	JH	13-Nov-23	8021B	
<b>Ethylbenzene*</b>	<b>0.824</b>		0.050	mg/kg	50	3111302	JH	13-Nov-23	8021B	
<b>Total Xylenes*</b>	<b>4.29</b>		0.150	mg/kg	50	3111302	JH	13-Nov-23	8021B	
<b>Total BTEX</b>	<b>8.54</b>		0.300	mg/kg	50	3111302	JH	13-Nov-23	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			121 %		71.5-134	3111302	JH	13-Nov-23	8021B	
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**Petroleum Hydrocarbons by GC FID**

<b>GRO C6-C10*</b>	<b>40.3</b>		10.0	mg/kg	1	3111305	MS	13-Nov-23	8015B	
<b>DRO &gt;C10-C28*</b>	<b>&lt;10.0</b>		10.0	mg/kg	1	3111305	MS	13-Nov-23	8015B	
<b>EXT DRO &gt;C28-C36</b>	<b>&lt;10.0</b>		10.0	mg/kg	1	3111305	MS	13-Nov-23	8015B	

<i>Surrogate: 1-Chlorooctane</i>			94.0 %		48.2-134	3111305	MS	13-Nov-23	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			88.0 %		49.1-148	3111305	MS	13-Nov-23	8015B	
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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Manager: KELLY LOWERY  
Fax To:

Reported:  
15-Nov-23 09:53

**FS 25 10**  
**H236186-15 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>384</b>		16.0	mg/kg	4	3111309	HM	13-Nov-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

<b>Benzene*</b>	<b>0.560</b>		0.050	mg/kg	50	3111302	JH	13-Nov-23	8021B	
<b>Toluene*</b>	<b>0.993</b>		0.050	mg/kg	50	3111302	JH	13-Nov-23	8021B	
<b>Ethylbenzene*</b>	<b>0.297</b>		0.050	mg/kg	50	3111302	JH	13-Nov-23	8021B	
<b>Total Xylenes*</b>	<b>1.75</b>		0.150	mg/kg	50	3111302	JH	13-Nov-23	8021B	
<b>Total BTEX</b>	<b>3.60</b>		0.300	mg/kg	50	3111302	JH	13-Nov-23	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			111 %	71.5-134		3111302	JH	13-Nov-23	8021B	
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**Petroleum Hydrocarbons by GC FID**

<b>GRO C6-C10*</b>	<b>30.8</b>		10.0	mg/kg	1	3111305	MS	13-Nov-23	8015B	
<b>DRO &gt;C10-C28*</b>	<b>13.7</b>		10.0	mg/kg	1	3111305	MS	13-Nov-23	8015B	
<b>EXT DRO &gt;C28-C36</b>	<b>&lt;10.0</b>		10.0	mg/kg	1	3111305	MS	13-Nov-23	8015B	

<i>Surrogate: 1-Chlorooctane</i>			94.4 %	48.2-134		3111305	MS	13-Nov-23	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			90.1 %	49.1-148		3111305	MS	13-Nov-23	8015B	
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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Manager: KELLY LOWERY  
Fax To:

Reported:  
15-Nov-23 09:53

**FS 19 10**  
**H236186-16 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>912</b>		16.0	mg/kg	4	3111309	HM	13-Nov-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021****S-04**

<b>Benzene*</b>	<b>0.065</b>		0.050	mg/kg	50	3111302	JH	13-Nov-23	8021B	
<b>Toluene*</b>	<b>0.620</b>		0.050	mg/kg	50	3111302	JH	13-Nov-23	8021B	
<b>Ethylbenzene*</b>	<b>0.854</b>		0.050	mg/kg	50	3111302	JH	13-Nov-23	8021B	
<b>Total Xylenes*</b>	<b>5.23</b>		0.150	mg/kg	50	3111302	JH	13-Nov-23	8021B	
<b>Total BTEX</b>	<b>6.77</b>		0.300	mg/kg	50	3111302	JH	13-Nov-23	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			143 %		71.5-134	3111302	JH	13-Nov-23	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	3111305	MS	13-Nov-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3111305	MS	13-Nov-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3111305	MS	13-Nov-23	8015B	

<i>Surrogate: 1-Chlorooctane</i>			92.0 %		48.2-134	3111305	MS	13-Nov-23	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			85.3 %		49.1-148	3111305	MS	13-Nov-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Manager: KELLY LOWERY  
Fax To:

Reported:  
15-Nov-23 09:53

**SW 10 0-10**  
**H236186-17 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>272</b>		16.0	mg/kg	4	3111309	HM	13-Nov-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	3111303	JH/	13-Nov-23	8021B	
Toluene*	<b>0.162</b>		0.050	mg/kg	50	3111303	JH/	13-Nov-23	8021B	
Ethylbenzene*	<b>0.173</b>		0.050	mg/kg	50	3111303	JH/	13-Nov-23	8021B	
Total Xylenes*	<b>1.65</b>		0.150	mg/kg	50	3111303	JH/	13-Nov-23	8021B	
Total BTEX	<b>1.99</b>		0.300	mg/kg	50	3111303	JH/	13-Nov-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)		128 %		71.5-134		3111303	JH/	13-Nov-23	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	3111305	MS	13-Nov-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3111305	MS	13-Nov-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3111305	MS	13-Nov-23	8015B	

Surrogate: 1-Chlorooctane		85.5 %		48.2-134		3111305	MS	13-Nov-23	8015B	
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Surrogate: 1-Chlorooctadecane		80.1 %		49.1-148		3111305	MS	13-Nov-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Manager: KELLY LOWERY  
Fax To:

Reported:  
15-Nov-23 09:53

**SW 11 0-10**  
**H236186-18 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

Chloride	32.0		16.0	mg/kg	4	3111309	HM	13-Nov-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	3111303	JH/	13-Nov-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3111303	JH/	13-Nov-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3111303	JH/	13-Nov-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3111303	JH/	13-Nov-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3111303	JH/	13-Nov-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			118 %		71.5-134	3111303	JH/	13-Nov-23	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	3111305	MS	13-Nov-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3111305	MS	13-Nov-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3111305	MS	13-Nov-23	8015B	

Surrogate: 1-Chlorooctane			87.6 %		48.2-134	3111305	MS	13-Nov-23	8015B	
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Surrogate: 1-Chlorooctadecane			82.4 %		49.1-148	3111305	MS	13-Nov-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Manager: KELLY LOWERY  
Fax To:

Reported:  
15-Nov-23 09:53

**SW 12 0-10**  
**H236186-19 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>96.0</b>		16.0	mg/kg	4	3111309	HM	13-Nov-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	3111303	JH/	13-Nov-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3111303	JH/	13-Nov-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3111303	JH/	13-Nov-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3111303	JH/	13-Nov-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3111303	JH/	13-Nov-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)		116 %		71.5-134		3111303	JH/	13-Nov-23	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	3111305	MS	13-Nov-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3111305	MS	13-Nov-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3111305	MS	13-Nov-23	8015B	

Surrogate: 1-Chlorooctane		88.0 %		48.2-134		3111305	MS	13-Nov-23	8015B	
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Surrogate: 1-Chlorooctadecane		81.8 %		49.1-148		3111305	MS	13-Nov-23	8015B	
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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Manager: KELLY LOWERY  
Fax To:

Reported:  
15-Nov-23 09:53

**SW 13 0-10**  
**H236186-20 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>80.0</b>		16.0	mg/kg	4	3111310	AC	13-Nov-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	3111303	JH/	13-Nov-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3111303	JH/	13-Nov-23	8021B	
Ethylbenzene*	<0.050		0.050	mg/kg	50	3111303	JH/	13-Nov-23	8021B	
Total Xylenes*	<0.150		0.150	mg/kg	50	3111303	JH/	13-Nov-23	8021B	
Total BTEX	<0.300		0.300	mg/kg	50	3111303	JH/	13-Nov-23	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			116 %		71.5-134	3111303	JH/	13-Nov-23	8021B	
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**Petroleum Hydrocarbons by GC FID**

GRO C6-C10*	<10.0		10.0	mg/kg	1	3111305	MS	13-Nov-23	8015B	
DRO >C10-C28*	<10.0		10.0	mg/kg	1	3111305	MS	13-Nov-23	8015B	
EXT DRO >C28-C36	<10.0		10.0	mg/kg	1	3111305	MS	13-Nov-23	8015B	

<i>Surrogate: 1-Chlorooctane</i>			89.6 %		48.2-134	3111305	MS	13-Nov-23	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			84.1 %		49.1-148	3111305	MS	13-Nov-23	8015B	
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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Manager: KELLY LOWERY  
Fax To:

Reported:  
15-Nov-23 09:53

**SW 14 0-10**  
**H236186-21 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>1280</b>		16.0	mg/kg	4	3111310	AC	13-Nov-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

<b>Benzene*</b>	<b>0.269</b>		0.050	mg/kg	50	3111303	JH/	13-Nov-23	8021B	
<b>Toluene*</b>	<b>1.43</b>		0.050	mg/kg	50	3111303	JH/	13-Nov-23	8021B	
<b>Ethylbenzene*</b>	<b>0.443</b>		0.050	mg/kg	50	3111303	JH/	13-Nov-23	8021B	
<b>Total Xylenes*</b>	<b>1.71</b>		0.150	mg/kg	50	3111303	JH/	13-Nov-23	8021B	
<b>Total BTEX</b>	<b>3.86</b>		0.300	mg/kg	50	3111303	JH/	13-Nov-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID) 123 % 71.5-134 3111303 JH/ 13-Nov-23 8021B

**Petroleum Hydrocarbons by GC FID**

<b>GRO C6-C10*</b>	<b>15.1</b>		10.0	mg/kg	1	3111305	MS	13-Nov-23	8015B	
<b>DRO &gt;C10-C28*</b>	<b>29.8</b>		10.0	mg/kg	1	3111305	MS	13-Nov-23	8015B	
<b>EXT DRO &gt;C28-C36</b>	<b>&lt;10.0</b>		10.0	mg/kg	1	3111305	MS	13-Nov-23	8015B	

Surrogate: 1-Chlorooctane 92.4 % 48.2-134 3111305 MS 13-Nov-23 8015B

Surrogate: 1-Chlorooctadecane 90.0 % 49.1-148 3111305 MS 13-Nov-23 8015B

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Manager: KELLY LOWERY  
Fax To:

Reported:  
15-Nov-23 09:53

**SW 15 0-10**  
**H236186-22 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>1600</b>		16.0	mg/kg	4	3111310	AC	13-Nov-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

<b>Benzene*</b>	<b>0.100</b>		0.050	mg/kg	50	3111303	JH/	13-Nov-23	8021B	
<b>Toluene*</b>	<b>0.183</b>		0.050	mg/kg	50	3111303	JH/	13-Nov-23	8021B	
<b>Ethylbenzene*</b>	<b>0.275</b>		0.050	mg/kg	50	3111303	JH/	13-Nov-23	8021B	
<b>Total Xylenes*</b>	<b>0.684</b>		0.150	mg/kg	50	3111303	JH/	13-Nov-23	8021B	
<b>Total BTEX</b>	<b>1.24</b>		0.300	mg/kg	50	3111303	JH/	13-Nov-23	8021B	

<i>Surrogate: 4-Bromofluorobenzene (PID)</i>			119 %	71.5-134		3111303	JH/	13-Nov-23	8021B	
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**Petroleum Hydrocarbons by GC FID**

<b>GRO C6-C10*</b>	<b>11.6</b>		10.0	mg/kg	1	3111305	MS	13-Nov-23	8015B	
<b>DRO &gt;C10-C28*</b>	<b>252</b>		10.0	mg/kg	1	3111305	MS	13-Nov-23	8015B	
<b>EXT DRO &gt;C28-C36</b>	<b>97.9</b>		10.0	mg/kg	1	3111305	MS	13-Nov-23	8015B	

<i>Surrogate: 1-Chlorooctane</i>			85.0 %	48.2-134		3111305	MS	13-Nov-23	8015B	
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<i>Surrogate: 1-Chlorooctadecane</i>			84.6 %	49.1-148		3111305	MS	13-Nov-23	8015B	
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Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Manager: KELLY LOWERY  
Fax To:

Reported:  
15-Nov-23 09:53

**SW 9 0-10**  
**H236186-23 (Soil)**

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
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**Cardinal Laboratories****Inorganic Compounds**

<b>Chloride</b>	<b>240</b>		16.0	mg/kg	4	3111310	AC	13-Nov-23	4500-Cl-B	
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**Volatile Organic Compounds by EPA Method 8021**

Benzene*	<0.050		0.050	mg/kg	50	3111303	JH/	13-Nov-23	8021B	
Toluene*	<0.050		0.050	mg/kg	50	3111303	JH/	13-Nov-23	8021B	
Ethylbenzene*	<b>0.147</b>		0.050	mg/kg	50	3111303	JH/	13-Nov-23	8021B	
<b>Total Xylenes*</b>	<b>0.567</b>		0.150	mg/kg	50	3111303	JH/	13-Nov-23	8021B	
<b>Total BTEX</b>	<b>0.714</b>		0.300	mg/kg	50	3111303	JH/	13-Nov-23	8021B	

Surrogate: 4-Bromofluorobenzene (PID)			128 %		71.5-134	3111303	JH/	13-Nov-23	8021B	
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**Petroleum Hydrocarbons by GC FID**

<b>GRO C6-C10*</b>	<b>40.0</b>		10.0	mg/kg	1	3111305	MS	13-Nov-23	8015B	
<b>DRO &gt;C10-C28*</b>	<b>143</b>		10.0	mg/kg	1	3111305	MS	13-Nov-23	8015B	
<b>EXT DRO &gt;C28-C36</b>	<b>33.6</b>		10.0	mg/kg	1	3111305	MS	13-Nov-23	8015B	

Surrogate: 1-Chlorooctane			90.5 %		48.2-134	3111305	MS	13-Nov-23	8015B	
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Surrogate: 1-Chlorooctadecane			83.7 %		49.1-148	3111305	MS	13-Nov-23	8015B	
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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Manager: KELLY LOWERY  
Fax To:

Reported:  
15-Nov-23 09:53

**Inorganic Compounds - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
<b>Batch 3111309 - 1:4 DI Water</b>										
<b>Blank (3111309-BLK1)</b>				Prepared & Analyzed: 13-Nov-23						
Chloride	ND	16.0	mg/kg							
<b>LCS (3111309-BS1)</b>				Prepared & Analyzed: 13-Nov-23						
Chloride	416	16.0	mg/kg	400		104	80-120			
<b>LCS Dup (3111309-BSD1)</b>				Prepared & Analyzed: 13-Nov-23						
Chloride	464	16.0	mg/kg	400		116	80-120	10.9	20	
<b>Batch 3111310 - 1:4 DI Water</b>										
<b>Blank (3111310-BLK1)</b>				Prepared & Analyzed: 13-Nov-23						
Chloride	ND	16.0	mg/kg							
<b>LCS (3111310-BS1)</b>				Prepared & Analyzed: 13-Nov-23						
Chloride	416	16.0	mg/kg	400		104	80-120			
<b>LCS Dup (3111310-BSD1)</b>				Prepared & Analyzed: 13-Nov-23						
Chloride	432	16.0	mg/kg	400		108	80-120	3.77	20	

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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Manager: KELLY LOWERY  
Fax To:

Reported:  
15-Nov-23 09:53

**Volatile Organic Compounds by EPA Method 8021 - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 3111301 - Volatiles****Blank (3111301-BLK1)**

Prepared &amp; Analyzed: 13-Nov-23

Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.0597		mg/kg	0.0500		119	71.5-134			

**LCS (3111301-BS1)**

Prepared &amp; Analyzed: 13-Nov-23

Benzene	2.07	0.050	mg/kg	2.00		104	82.8-130			
Toluene	2.16	0.050	mg/kg	2.00		108	86-128			
Ethylbenzene	2.14	0.050	mg/kg	2.00		107	85.9-128			
m,p-Xylene	4.34	0.100	mg/kg	4.00		109	89-129			
o-Xylene	2.09	0.050	mg/kg	2.00		104	86.1-125			
Total Xylenes	6.43	0.150	mg/kg	6.00		107	88.2-128			
Surrogate: 4-Bromofluorobenzene (PID)	0.0563		mg/kg	0.0500		113	71.5-134			

**LCS Dup (3111301-BS1)**

Prepared &amp; Analyzed: 13-Nov-23

Benzene	2.03	0.050	mg/kg	2.00		102	82.8-130	1.77	15.8	
Toluene	2.12	0.050	mg/kg	2.00		106	86-128	1.85	15.9	
Ethylbenzene	2.14	0.050	mg/kg	2.00		107	85.9-128	0.0112	16	
m,p-Xylene	4.36	0.100	mg/kg	4.00		109	89-129	0.396	16.2	
o-Xylene	2.12	0.050	mg/kg	2.00		106	86.1-125	1.70	16.7	
Total Xylenes	6.48	0.150	mg/kg	6.00		108	88.2-128	0.822	16.3	
Surrogate: 4-Bromofluorobenzene (PID)	0.0564		mg/kg	0.0500		113	71.5-134			

**Batch 3111302 - Volatiles****Blank (3111302-BLK1)**

Prepared &amp; Analyzed: 13-Nov-23

Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							

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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Manager: KELLY LOWERY  
Fax To:

Reported:  
15-Nov-23 09:53

**Volatile Organic Compounds by EPA Method 8021 - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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**Batch 3111302 - Volatiles****Blank (3111302-BLK1)**

Prepared &amp; Analyzed: 13-Nov-23

Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.0507		mg/kg	0.0500		101	71.5-134			

**LCS (3111302-BS1)**

Prepared &amp; Analyzed: 13-Nov-23

Benzene	1.98	0.050	mg/kg	2.00		99.1	82.8-130			
Toluene	1.96	0.050	mg/kg	2.00		98.2	86-128			
Ethylbenzene	1.92	0.050	mg/kg	2.00		96.0	85.9-128			
m,p-Xylene	4.22	0.100	mg/kg	4.00		105	89-129			
o-Xylene	1.89	0.050	mg/kg	2.00		94.5	86.1-125			
Total Xylenes	6.11	0.150	mg/kg	6.00		102	88.2-128			
Surrogate: 4-Bromofluorobenzene (PID)	0.0497		mg/kg	0.0500		99.3	71.5-134			

**LCS Dup (3111302-BSD1)**

Prepared &amp; Analyzed: 13-Nov-23

Benzene	2.20	0.050	mg/kg	2.00		110	82.8-130	10.3	15.8	
Toluene	2.19	0.050	mg/kg	2.00		109	86-128	10.7	15.9	
Ethylbenzene	2.16	0.050	mg/kg	2.00		108	85.9-128	11.7	16	
m,p-Xylene	4.59	0.100	mg/kg	4.00		115	89-129	8.47	16.2	
o-Xylene	2.12	0.050	mg/kg	2.00		106	86.1-125	11.4	16.7	
Total Xylenes	6.71	0.150	mg/kg	6.00		112	88.2-128	9.38	16.3	
Surrogate: 4-Bromofluorobenzene (PID)	0.0492		mg/kg	0.0500		98.5	71.5-134			

**Batch 3111303 - Volatiles****Blank (3111303-BLK1)**

Prepared &amp; Analyzed: 13-Nov-23

Benzene	ND	0.050	mg/kg							
Toluene	ND	0.050	mg/kg							
Ethylbenzene	ND	0.050	mg/kg							
Total Xylenes	ND	0.150	mg/kg							
Total BTEX	ND	0.300	mg/kg							
Surrogate: 4-Bromofluorobenzene (PID)	0.0549		mg/kg	0.0500		110	71.5-134			

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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Manager: KELLY LOWERY  
Fax To:

Reported:  
15-Nov-23 09:53

**Volatile Organic Compounds by EPA Method 8021 - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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**Batch 3111303 - Volatiles****LCS (3111303-BS1)**

Prepared &amp; Analyzed: 13-Nov-23

Benzene	2.01	0.050	mg/kg	2.00		101	82.8-130		
Toluene	2.04	0.050	mg/kg	2.00		102	86-128		
Ethylbenzene	2.03	0.050	mg/kg	2.00		101	85.9-128		
m,p-Xylene	4.03	0.100	mg/kg	4.00		101	89-129		
o-Xylene	1.98	0.050	mg/kg	2.00		99.1	86.1-125		
Total Xylenes	6.01	0.150	mg/kg	6.00		100	88.2-128		

Surrogate: 4-Bromofluorobenzene (PID)

0.0525

mg/kg

0.0500

105

71.5-134

**LCS Dup (3111303-BSD1)**

Prepared &amp; Analyzed: 13-Nov-23

Benzene	1.83	0.050	mg/kg	2.00		91.7	82.8-130	9.19	15.8
Toluene	1.84	0.050	mg/kg	2.00		92.2	86-128	10.1	15.9
Ethylbenzene	1.83	0.050	mg/kg	2.00		91.4	85.9-128	10.4	16
m,p-Xylene	3.65	0.100	mg/kg	4.00		91.1	89-129	10.1	16.2
o-Xylene	1.79	0.050	mg/kg	2.00		89.6	86.1-125	10.1	16.7
Total Xylenes	5.44	0.150	mg/kg	6.00		90.6	88.2-128	10.1	16.3

Surrogate: 4-Bromofluorobenzene (PID)

0.0510

mg/kg

0.0500

102

71.5-134

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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Manager: KELLY LOWERY  
Fax To:

Reported:  
15-Nov-23 09:53

**Petroleum Hydrocarbons by GC FID - Quality Control****Cardinal Laboratories**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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**Batch 3111304 - General Prep - Organics****Blank (3111304-BLK1)**

Prepared &amp; Analyzed: 13-Nov-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	35.7		mg/kg	50.0		71.4	48.2-134		
Surrogate: 1-Chlorooctadecane	30.9		mg/kg	50.0		61.8	49.1-148		

**LCS (3111304-BS1)**

Prepared &amp; Analyzed: 13-Nov-23

GRO C6-C10	199	10.0	mg/kg	200		99.5	66.4-123		
DRO >C10-C28	178	10.0	mg/kg	200		89.0	66.5-118		
Total TPH C6-C28	377	10.0	mg/kg	400		94.2	77.6-123		
Surrogate: 1-Chlorooctane	40.2		mg/kg	50.0		80.3	48.2-134		
Surrogate: 1-Chlorooctadecane	37.0		mg/kg	50.0		74.1	49.1-148		

**LCS Dup (3111304-BSD1)**

Prepared &amp; Analyzed: 13-Nov-23

GRO C6-C10	197	10.0	mg/kg	200		98.4	66.4-123	1.11	17.7
DRO >C10-C28	178	10.0	mg/kg	200		89.2	66.5-118	0.231	21
Total TPH C6-C28	375	10.0	mg/kg	400		93.8	77.6-123	0.476	18.5
Surrogate: 1-Chlorooctane	39.3		mg/kg	50.0		78.7	48.2-134		
Surrogate: 1-Chlorooctadecane	36.4		mg/kg	50.0		72.7	49.1-148		

**Batch 3111305 - General Prep - Organics****Blank (3111305-BLK1)**

Prepared &amp; Analyzed: 13-Nov-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	41.1		mg/kg	50.0		82.3	48.2-134		
Surrogate: 1-Chlorooctadecane	38.9		mg/kg	50.0		77.9	49.1-148		

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**Analytical Results For:**

ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220

Project: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Manager: KELLY LOWERY  
Fax To:

Reported:  
15-Nov-23 09:53

**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
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**Batch 3111305 - General Prep - Organics****LCS (3111305-BS1)**

Prepared &amp; Analyzed: 13-Nov-23

GRO C6-C10	200	10.0	mg/kg	200		100	66.4-123			
DRO >C10-C28	184	10.0	mg/kg	200		92.0	66.5-118			
Total TPH C6-C28	384	10.0	mg/kg	400		96.1	77.6-123			
Surrogate: 1-Chlorooctane	45.5		mg/kg	50.0		91.1	48.2-134			
Surrogate: 1-Chlorooctadecane	45.4		mg/kg	50.0		90.9	49.1-148			

**LCS Dup (3111305-BSD1)**

Prepared &amp; Analyzed: 13-Nov-23

GRO C6-C10	205	10.0	mg/kg	200		102	66.4-123	2.22	17.7	
DRO >C10-C28	187	10.0	mg/kg	200		93.5	66.5-118	1.61	21	
Total TPH C6-C28	392	10.0	mg/kg	400		98.0	77.6-123	1.93	18.5	
Surrogate: 1-Chlorooctane	45.9		mg/kg	50.0		91.8	48.2-134			
Surrogate: 1-Chlorooctadecane	45.3		mg/kg	50.0		90.7	49.1-148			

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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---

### Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
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

---

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager



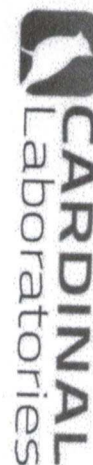




## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]





## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

[illegible]



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

---

December 11, 2023

KELLY LOWERY

ENSOLUM, LLC

705 W WADLEY AVE.

MIDLAND, TX 79705

RE: SOUTH CARLSBAD CS TANK LEAK

Enclosed are the results of analyses for samples received by the laboratory on 12/08/23 10:40.

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 fluid and cursive, with the first name "Celey" and last name "Keene" clearly distinguishable.

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 KELLY LOWERY  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 12/08/2023  
 Reported: 12/11/2023  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERRPRISE - EDDY CO NM

Sampling Date: 12/08/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Dionica Hinojos

**Sample ID: FS 02 11' (H236583-01)**

BTX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/08/2023	ND	2.25	113	2.00	8.76	
Toluene*	<0.050	0.050	12/08/2023	ND	2.14	107	2.00	8.05	
Ethylbenzene*	<0.050	0.050	12/08/2023	ND	2.19	109	2.00	6.93	
Total Xylenes*	<0.150	0.150	12/08/2023	ND	6.49	108	6.00	6.12	
Total BTX	<0.300	0.300	12/08/2023	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	512	16.0	12/08/2023	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	12/08/2023	ND	198	99.2	200	0.423	
DRO >C10-C28*	<10.0	10.0	12/08/2023	ND	193	96.6	200	0.560	
EXT DRO >C28-C36	<10.0	10.0	12/08/2023	ND					

Surrogate: 1-Chlorooctane 94.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 110 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM, LLC  
 KELLY LOWERY  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 12/08/2023  
 Reported: 12/11/2023  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERRPRISE - EDDY CO NM

Sampling Date: 12/08/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Dionica Hinojos

**Sample ID: FS 05 11' (H236583-02)**

BTEx 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/08/2023	ND	2.25	113	2.00	8.76	
Toluene*	<0.050	0.050	12/08/2023	ND	2.14	107	2.00	8.05	
Ethylbenzene*	<0.050	0.050	12/08/2023	ND	2.19	109	2.00	6.93	
Total Xylenes*	<0.150	0.150	12/08/2023	ND	6.49	108	6.00	6.12	
Total BTEX	<0.300	0.300	12/08/2023	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	64.0	16.0	12/08/2023	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	12/08/2023	ND	198	99.2	200	0.423	
DRO >C10-C28*	<10.0	10.0	12/08/2023	ND	193	96.6	200	0.560	
EXT DRO >C28-C36	<10.0	10.0	12/08/2023	ND					

Surrogate: 1-Chlorooctane 95.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 107 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 KELLY LOWERY  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 12/08/2023  
 Reported: 12/11/2023  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERRPRISE - EDDY CO NM

Sampling Date: 12/08/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Dionica Hinojos

**Sample ID: FS 08 11' (H236583-03)**

BTEx 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.186	0.050	12/08/2023	ND	2.25	113	2.00	8.76	
Toluene*	<0.050	0.050	12/08/2023	ND	2.14	107	2.00	8.05	
Ethylbenzene*	<0.050	0.050	12/08/2023	ND	2.19	109	2.00	6.93	
Total Xylenes*	<0.150	0.150	12/08/2023	ND	6.49	108	6.00	6.12	
Total BTEX	<0.300	0.300	12/08/2023	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	12/08/2023	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	12/08/2023	ND	198	99.2	200	0.423	
DRO >C10-C28*	<10.0	10.0	12/08/2023	ND	193	96.6	200	0.560	
EXT DRO >C28-C36	<10.0	10.0	12/08/2023	ND					

Surrogate: 1-Chlorooctane 100 % 48.2-134

Surrogate: 1-Chlorooctadecane 112 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

ENSOLUM, LLC  
 KELLY LOWERY  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 12/08/2023  
 Reported: 12/11/2023  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERRPRISE - EDDY CO NM

Sampling Date: 12/08/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Dionica Hinojos

**Sample ID: FS 15 11' (H236583-04)**

BTEX 8021B		mg/kg	Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.351	0.050	12/08/2023	ND	2.25	113	2.00	8.76	
Toluene*	0.068	0.050	12/08/2023	ND	2.14	107	2.00	8.05	
Ethylbenzene*	<0.050	0.050	12/08/2023	ND	2.19	109	2.00	6.93	
Total Xylenes*	0.175	0.150	12/08/2023	ND	6.49	108	6.00	6.12	
Total BTEX	0.594	0.300	12/08/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 95.4 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	192	16.0	12/08/2023	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	12/08/2023	ND	198	99.2	200	0.423	
DRO >C10-C28*	<10.0	10.0	12/08/2023	ND	193	96.6	200	0.560	
EXT DRO >C28-C36	<10.0	10.0	12/08/2023	ND					

Surrogate: 1-Chlorooctane 106 % 48.2-134

Surrogate: 1-Chlorooctadecane 118 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM, LLC  
 KELLY LOWERY  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 12/08/2023  
 Reported: 12/11/2023  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERRPRISE - EDDY CO NM

Sampling Date: 12/08/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Dionica Hinojos

**Sample ID: FS 18 11' (H236583-05)**

BTEX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	1.72	0.050	12/08/2023	ND	2.25	113	2.00	8.76	
Toluene*	2.52	0.050	12/08/2023	ND	2.14	107	2.00	8.05	
Ethylbenzene*	0.775	0.050	12/08/2023	ND	2.19	109	2.00	6.93	
Total Xylenes*	3.58	0.150	12/08/2023	ND	6.49	108	6.00	6.12	
Total BTEX	8.60	0.300	12/08/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 112 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	592	16.0	12/08/2023	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*	405	10.0	12/08/2023	ND	198	99.2	200	0.423	
DRO >C10-C28*	40.7	10.0	12/08/2023	ND	193	96.6	200	0.560	
EXT DRO >C28-C36	<10.0	10.0	12/08/2023	ND					

Surrogate: 1-Chlorooctane 108 % 48.2-134

Surrogate: 1-Chlorooctadecane 118 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM, LLC  
 KELLY LOWERY  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 12/08/2023  
 Reported: 12/11/2023  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERRPRISE - EDDY CO NM

Sampling Date: 12/08/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Dionica Hinojos

**Sample ID: FS 19 11' (H236583-06)**

BTEx 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.861	0.050	12/08/2023	ND	2.25	113	2.00	8.76	
Toluene*	1.30	0.050	12/08/2023	ND	2.14	107	2.00	8.05	
Ethylbenzene*	0.502	0.050	12/08/2023	ND	2.19	109	2.00	6.93	
Total Xylenes*	2.40	0.150	12/08/2023	ND	6.49	108	6.00	6.12	
Total BTEX	5.06	0.300	12/08/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	12/08/2023	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*	41.5	10.0	12/08/2023	ND	198	99.2	200	0.423	
DRO >C10-C28*	13.3	10.0	12/08/2023	ND	193	96.6	200	0.560	
EXT DRO >C28-C36	<10.0	10.0	12/08/2023	ND					

Surrogate: 1-Chlorooctane 111 % 48.2-134

Surrogate: 1-Chlorooctadecane 131 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM, LLC  
 KELLY LOWERY  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 12/08/2023  
 Reported: 12/11/2023  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERRPRISE - EDDY CO NM

Sampling Date: 12/08/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Dionica Hinojos

**Sample ID: FS 20 11' (H236583-07)**

BTEx 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.599	0.050	12/08/2023	ND	2.25	113	2.00	8.76	
Toluene*	1.10	0.050	12/08/2023	ND	2.14	107	2.00	8.05	
Ethylbenzene*	0.448	0.050	12/08/2023	ND	2.19	109	2.00	6.93	
Total Xylenes*	2.21	0.150	12/08/2023	ND	6.49	108	6.00	6.12	
Total BTEX	4.36	0.300	12/08/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	752	16.0	12/08/2023	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*	17.4	10.0	12/08/2023	ND	198	99.2	200	0.423	
DRO >C10-C28*	21.4	10.0	12/08/2023	ND	193	96.6	200	0.560	
EXT DRO >C28-C36	<10.0	10.0	12/08/2023	ND					

Surrogate: 1-Chlorooctane 124 % 48.2-134

Surrogate: 1-Chlorooctadecane 144 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 KELLY LOWERY  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 12/08/2023  
 Reported: 12/11/2023  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERRPRISE - EDDY CO NM

Sampling Date: 12/08/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Dionica Hinojos

**Sample ID: SW 14 0-10' (H236583-08)**

BTEx 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.428	0.050	12/08/2023	ND	2.25	113	2.00	8.76	
Toluene*	1.03	0.050	12/08/2023	ND	2.14	107	2.00	8.05	
Ethylbenzene*	0.336	0.050	12/08/2023	ND	2.19	109	2.00	6.93	
Total Xylenes*	1.74	0.150	12/08/2023	ND	6.49	108	6.00	6.12	
Total BTEX	3.53	0.300	12/08/2023	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	176	16.0	12/08/2023	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*	26.2	10.0	12/08/2023	ND	198	99.2	200	0.423	
DRO >C10-C28*	<10.0	10.0	12/08/2023	ND	193	96.6	200	0.560	
EXT DRO >C28-C36	<10.0	10.0	12/08/2023	ND					

Surrogate: 1-Chlorooctane 119 % 48.2-134

Surrogate: 1-Chlorooctadecane 133 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM, LLC  
 KELLY LOWERY  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 12/08/2023  
 Reported: 12/11/2023  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERRPRISE - EDDY CO NM

Sampling Date: 12/08/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Dionica Hinojos

**Sample ID: SW 15 0-10' (H236583-09)**

BTEX 8021B		mg/kg	Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.107	0.050	12/08/2023	ND	2.25	113	2.00	8.76	
Toluene*	0.620	0.050	12/08/2023	ND	2.14	107	2.00	8.05	
Ethylbenzene*	0.460	0.050	12/08/2023	ND	2.19	109	2.00	6.93	
Total Xylenes*	2.55	0.150	12/08/2023	ND	6.49	108	6.00	6.12	
Total BTEX	3.73	0.300	12/08/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 116 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1040	16.0	12/08/2023	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*	38.0	10.0	12/08/2023	ND	198	99.2	200	0.423	
DRO >C10-C28*	27.0	10.0	12/08/2023	ND	193	96.6	200	0.560	
EXT DRO >C28-C36	<10.0	10.0	12/08/2023	ND					

Surrogate: 1-Chlorooctane 123 % 48.2-134

Surrogate: 1-Chlorooctadecane 135 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

ENSOLUM, LLC  
 KELLY LOWERY  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 12/08/2023  
 Reported: 12/11/2023  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERRPRISE - EDDY CO NM

Sampling Date: 12/08/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Dionica Hinojos

**Sample ID: SW 18 0-10' (H236583-10)**

BTEx 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/08/2023	ND	2.25	113	2.00	8.76	
Toluene*	<0.050	0.050	12/08/2023	ND	2.14	107	2.00	8.05	
Ethylbenzene*	<0.050	0.050	12/08/2023	ND	2.19	109	2.00	6.93	
Total Xylenes*	<0.150	0.150	12/08/2023	ND	6.49	108	6.00	6.12	
Total BTEX	<0.300	0.300	12/08/2023	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	12/08/2023	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	12/08/2023	ND	198	99.2	200	0.423	
DRO >C10-C28*	<10.0	10.0	12/08/2023	ND	193	96.6	200	0.560	
EXT DRO >C28-C36	<10.0	10.0	12/08/2023	ND					

Surrogate: 1-Chlorooctane 91.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 102 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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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

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager





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December 15, 2023

KELLY LOWERY

ENSOLUM

3122 NATIONAL PARKS HWY

CARLSBAD, NM 88220

RE: SOUTH CARLSBAD CS TANK LEAK

Enclosed are the results of analyses for samples received by the laboratory on 12/14/23 15:42.

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, flowing style.

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM  
 KELLY LOWERY  
 3122 NATIONAL PARKS HWY  
 CARLSBAD NM, 88220  
 Fax To:

Received:	12/14/2023	Sampling Date:	12/14/2023
Reported:	12/15/2023	Sampling Type:	Soil
Project Name:	SOUTH CARLSBAD CS TANK LEAK	Sampling Condition:	Cool & Intact
Project Number:	03B1226315	Sample Received By:	Shalyn Rodriguez
Project Location:	ENTERPRISE - EDDY CO.		

**Sample ID: FS 18 12' (H236681-01)**

BTX 8021B		mg/kg		Analyzed By: JH/				S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>0.874</b>	0.050	12/14/2023	ND	1.60	79.9	2.00	19.6	
<b>Toluene*</b>	<b>2.71</b>	0.050	12/14/2023	ND	1.66	83.1	2.00	19.5	
<b>Ethylbenzene*</b>	<b>1.52</b>	0.050	12/14/2023	ND	1.66	83.1	2.00	20.2	
<b>Total Xylenes*</b>	<b>7.19</b>	0.150	12/14/2023	ND	5.02	83.7	6.00	20.4	
<b>Total BTX</b>	<b>12.3</b>	0.300	12/14/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 151 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>384</b>	16.0	12/15/2023	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
<b>GRO C6-C10*</b>	<b>37.9</b>	10.0	12/15/2023	ND	201	101	200	1.52	
<b>DRO &gt;C10-C28*</b>	<b>16.7</b>	10.0	12/15/2023	ND	189	94.3	200	3.20	
EXT DRO >C28-C36	<10.0	10.0	12/15/2023	ND					

Surrogate: 1-Chlorooctane 73.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 66.0 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
 KELLY LOWERY  
 3122 NATIONAL PARKS HWY  
 CARLSBAD NM, 88220  
 Fax To:

Received: 12/14/2023  
 Reported: 12/15/2023  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERPRISE - EDDY CO.

Sampling Date: 12/14/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: FS 20 12' (H236681-02)**

BTEx 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/14/2023	ND	1.60	79.9	2.00	19.6	
Toluene*	0.096	0.050	12/14/2023	ND	1.66	83.1	2.00	19.5	
Ethylbenzene*	0.050	0.050	12/14/2023	ND	1.66	83.1	2.00	20.2	
Total Xylenes*	0.218	0.150	12/14/2023	ND	5.02	83.7	6.00	20.4	
Total BTEX	0.364	0.300	12/14/2023	ND					

Surrogate: 4-Bromofluorobenzene (PID) 118 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	768	16.0	12/15/2023	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	12/15/2023	ND	201	101	200	1.52	
DRO >C10-C28*	<10.0	10.0	12/15/2023	ND	189	94.3	200	3.20	
EXT DRO >C28-C36	<10.0	10.0	12/15/2023	ND					

Surrogate: 1-Chlorooctane 78.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 69.4 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

ENSOLUM  
KELLY LOWERY  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 12/14/2023  
Reported: 12/15/2023  
Project Name: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Location: ENTERPRISE - EDDY CO.

Sampling Date: 12/14/2023  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: FS 26 10' (H236681-03)**

BTX 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/14/2023	ND	1.60	79.9	2.00	19.6		
Toluene*	<0.050	0.050	12/14/2023	ND	1.66	83.1	2.00	19.5		
Ethylbenzene*	<0.050	0.050	12/14/2023	ND	1.66	83.1	2.00	20.2		
Total Xylenes*	<0.150	0.150	12/14/2023	ND	5.02	83.7	6.00	20.4		
Total BTX	<0.300	0.300	12/14/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 116 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	416	16.0	12/15/2023	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	12/15/2023	ND	201	101	200	1.52	
DRO >C10-C28*	<10.0	10.0	12/15/2023	ND	189	94.3	200	3.20	
EXT DRO >C28-C36	<10.0	10.0	12/15/2023	ND					

Surrogate: 1-Chlorooctane 69.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 61.3 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
KELLY LOWERY  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 12/14/2023  
Reported: 12/15/2023  
Project Name: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Location: ENTERPRISE - EDDY CO.

Sampling Date: 12/14/2023  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: FS 27 10' (H236681-04)**

BTEx 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/14/2023	ND	1.60	79.9	2.00	19.6		
Toluene*	0.072	0.050	12/14/2023	ND	1.66	83.1	2.00	19.5		
Ethylbenzene*	0.066	0.050	12/14/2023	ND	1.66	83.1	2.00	20.2		
Total Xylenes*	0.236	0.150	12/14/2023	ND	5.02	83.7	6.00	20.4		
Total BTEx	0.374	0.300	12/14/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 118 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	432	16.0	12/15/2023	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	12/15/2023	ND	201	101	200	1.52	
DRO >C10-C28*	11.1	10.0	12/15/2023	ND	189	94.3	200	3.20	
EXT DRO >C28-C36	<10.0	10.0	12/15/2023	ND					

Surrogate: 1-Chlorooctane 78.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 69.5 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
KELLY LOWERY  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 12/14/2023  
Reported: 12/15/2023  
Project Name: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Location: ENTERPRISE - EDDY CO.

Sampling Date: 12/14/2023  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: SW 19 0-10' (H236681-05)**

BTX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/14/2023	ND	2.21	111	2.00	0.605	
Toluene*	<0.050	0.050	12/14/2023	ND	2.18	109	2.00	0.231	
Ethylbenzene*	<0.050	0.050	12/14/2023	ND	2.16	108	2.00	0.156	
Total Xylenes*	<0.150	0.150	12/14/2023	ND	6.79	113	6.00	0.678	
Total BTX	<0.300	0.300	12/14/2023	ND					

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	320	16.0	12/15/2023	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	12/15/2023	ND	201	101	200	1.52	
DRO >C10-C28*	<10.0	10.0	12/15/2023	ND	189	94.3	200	3.20	
EXT DRO >C28-C36	<10.0	10.0	12/15/2023	ND					

Surrogate: 1-Chlorooctane 71.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 63.7 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM  
 KELLY LOWERY  
 3122 NATIONAL PARKS HWY  
 CARLSBAD NM, 88220  
 Fax To:

Received: 12/14/2023  
 Reported: 12/15/2023  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERPRISE - EDDY CO.

Sampling Date: 12/14/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: SW 20 0-10' (H236681-06)**

BTEx 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/14/2023	ND	2.21	111	2.00	0.605		
Toluene*	<0.050	0.050	12/14/2023	ND	2.18	109	2.00	0.231		
Ethylbenzene*	<0.050	0.050	12/14/2023	ND	2.16	108	2.00	0.156		
Total Xylenes*	<0.150	0.150	12/14/2023	ND	6.79	113	6.00	0.678		
Total BTEX	<0.300	0.300	12/14/2023	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	400	16.0	12/15/2023	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	12/15/2023	ND	201	101	200	1.52	
DRO >C10-C28*	<10.0	10.0	12/15/2023	ND	189	94.3	200	3.20	
EXT DRO >C28-C36	<10.0	10.0	12/15/2023	ND					

Surrogate: 1-Chlorooctane 73.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 64.2 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
KELLY LOWERY  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 12/14/2023  
Reported: 12/15/2023  
Project Name: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Location: ENTERPRISE - EDDY CO.

Sampling Date: 12/14/2023  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: BG 01 0-0.25 (H236681-07)**

BTEx 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/14/2023	ND	2.21	111	2.00	0.605		
Toluene*	<0.050	0.050	12/14/2023	ND	2.18	109	2.00	0.231		
Ethylbenzene*	<0.050	0.050	12/14/2023	ND	2.16	108	2.00	0.156		
Total Xylenes*	<0.150	0.150	12/14/2023	ND	6.79	113	6.00	0.678		
Total BTEx	<0.300	0.300	12/14/2023	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	656	16.0	12/15/2023	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	12/15/2023	ND	201	101	200	1.52	
DRO >C10-C28*	<10.0	10.0	12/15/2023	ND	189	94.3	200	3.20	
EXT DRO >C28-C36	<10.0	10.0	12/15/2023	ND					

Surrogate: 1-Chlorooctane 70.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 61.7 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM  
KELLY LOWERY  
3122 NATIONAL PARKS HWY  
CARLSBAD NM, 88220  
Fax To:

Received: 12/14/2023  
Reported: 12/15/2023  
Project Name: SOUTH CARLSBAD CS TANK LEAK  
Project Number: 03B1226315  
Project Location: ENTERPRISE - EDDY CO.

Sampling Date: 12/14/2023  
Sampling Type: Soil  
Sampling Condition: Cool & Intact  
Sample Received By: Shalyn Rodriguez

**Sample ID: BG 02 0-0.25 (H236681-08)**

BTEx 8021B		mg/kg		Analyzed By: JH/						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/14/2023	ND	2.21	111	2.00	0.605		
Toluene*	<0.050	0.050	12/14/2023	ND	2.18	109	2.00	0.231		
Ethylbenzene*	<0.050	0.050	12/14/2023	ND	2.16	108	2.00	0.156		
Total Xylenes*	<0.150	0.150	12/14/2023	ND	6.79	113	6.00	0.678		
Total BTEx	<0.300	0.300	12/14/2023	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	752	16.0	12/15/2023	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	12/15/2023	ND	201	101	200	1.52	
DRO >C10-C28*	<10.0	10.0	12/15/2023	ND	189	94.3	200	3.20	
EXT DRO >C28-C36	<10.0	10.0	12/15/2023	ND					

Surrogate: 1-Chlorooctane 70.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 61.2 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager





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### Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QR-04	The RPD for the BS/BSD was outside of historical limits.
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

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Ensolum, LLC				<b>BILL TO</b>				ANALYSIS REQUEST				
Project Manager: Kelly Lowery				P.O. #:								
Address: 601 N. Marland St. STE 400				Company: Enterprise Field Services,								
City: Midland State: TX Zip: 79701				Attn: Thomas Long								
Phone #: 214-733-3165 Email: klowery@ensolum.com				Address:								
Project #: 038126315 Project Owner:				City:								
Project Name: South Marsh Creek Tank Leak				State: Zip:								
Project Location: Eddy County				Phone #: 505-215-4727								
Sample Name: SK				Email: tjlong@eprod.com								
FOR LAB USE ONLY				PRESERV. SAMPLING								
Lab I.D. #036080	Sample I.D.	Sample Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX			DATE	TIME	TPH (8021B)		
1	15 18	12		1	GROUNDWATER	WASTEWATER	SOIL	12/11/23	847	X		
2	15 20	10		1					858	X		
3	15 26	10		1					1120	X		
4	15 27	10		1					1145	X		
7	15 19	0-10		1					1149	X		
6	15 28	0-10		1					1130	X		
7	15 01	0-0.25		1					1419	X		
7	15 02	0-0.25		1					1412	X		
NFE												
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Relinquished By: [Signature]				Received By: [Signature]				Verbal Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
Relinquished By: [Signature]				Received By: [Signature]				All Results are emailed. Please provide Email address: klowery@ensolum.com / tjlong@eprod.com				
Delivered By: (Circle One) Sampler - UPS - Bus - Other:				Observed Temp. °C Corrected Temp. °C				Turnaround Time: <input checked="" type="checkbox"/> Rush <input type="checkbox"/> Standard <input type="checkbox"/> 24hour				
Sample Condition: <input checked="" type="checkbox"/> Cool <input type="checkbox"/> Impact <input type="checkbox"/> No <input type="checkbox"/> No				CHECKED BY: (Initials)				Thermometer ID: #113 Correction Factor: -0.5°C #1140				



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---

December 20, 2023

KELLY LOWERY

ENSOLUM, LLC

705 W WADLEY AVE.

MIDLAND, TX 79705

RE: SOUTH CARLSBAD CS TANK LEAK

Enclosed are the results of analyses for samples received by the laboratory on 12/19/23 15:20.

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, flowing style.

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 KELLY LOWERY  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 12/19/2023  
 Reported: 12/20/2023  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERRPRISE - EDDY CO NM

Sampling Date: 12/19/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: FS 20 14 (H236743-01)**

BTX 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>0.059</b>	0.050	12/19/2023	ND	2.38	119	2.00	2.42	GC-NC1
<b>Toluene*</b>	<b>0.173</b>	0.050	12/19/2023	ND	2.34	117	2.00	1.73	GC-NC1
<b>Ethylbenzene*</b>	<b>0.129</b>	0.050	12/19/2023	ND	2.41	121	2.00	2.83	GC-NC1
<b>Total Xylenes*</b>	<b>0.692</b>	0.150	12/19/2023	ND	7.29	122	6.00	3.14	GC-NC1
<b>Total BTX</b>	<b>1.05</b>	0.300	12/19/2023	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID) 112 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>592</b>	16.0	12/20/2023	ND	400	100	400	7.69	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>14.4</b>	10.0	12/20/2023	ND	175	87.4	200	1.10	
<b>DRO &gt;C10-C28*</b>	<b>30.2</b>	10.0	12/20/2023	ND	170	85.0	200	1.08	
EXT DRO >C28-C36	<10.0	10.0	12/20/2023	ND					

Surrogate: 1-Chlorooctane 84.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 87.9 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM, LLC  
 KELLY LOWERY  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 12/19/2023  
 Reported: 12/20/2023  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERRPRISE - EDDY CO NM

Sampling Date: 12/19/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SW 09 0-10 (H236743-02)**

BTEx 8021B		mg/kg	Analyzed By: JH/					S-04	
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>0.116</b>	0.050	12/19/2023	ND	2.38	119	2.00	2.42	GC-NC1
<b>Toluene*</b>	<b>0.497</b>	0.050	12/19/2023	ND	2.34	117	2.00	1.73	GC-NC1
<b>Ethylbenzene*</b>	<b>0.717</b>	0.050	12/19/2023	ND	2.41	121	2.00	2.83	GC-NC1
<b>Total Xylenes*</b>	<b>4.20</b>	0.150	12/19/2023	ND	7.29	122	6.00	3.14	GC-NC1
<b>Total BTEX</b>	<b>5.53</b>	0.300	12/19/2023	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID) 165 % 71.5-134

Chloride, SM4500Cl-B		mg/kg	Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>592</b>	16.0	12/20/2023	ND	400	100	400	7.69	

TPH 8015M		mg/kg	Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>109</b>	10.0	12/20/2023	ND	175	87.4	200	1.10	
<b>DRO &gt;C10-C28*</b>	<b>159</b>	10.0	12/20/2023	ND	170	85.0	200	1.08	
<b>EXT DRO &gt;C28-C36</b>	<b>17.8</b>	10.0	12/20/2023	ND					

Surrogate: 1-Chlorooctane 90.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 87.7 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM, LLC  
 KELLY LOWERY  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 12/19/2023  
 Reported: 12/20/2023  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERRPRISE - EDDY CO NM

Sampling Date: 12/19/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SW 15 0-10 (H236743-03)**

BTEx 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/20/2023	ND	2.38	119	2.00	2.42	
Toluene*	0.131	0.050	12/20/2023	ND	2.34	117	2.00	1.73	GC-NC1
Ethylbenzene*	0.070	0.050	12/20/2023	ND	2.41	121	2.00	2.83	GC-NC1
Total Xylenes*	0.357	0.150	12/20/2023	ND	7.29	122	6.00	3.14	GC-NC1
Total BTEX	0.558	0.300	12/20/2023	ND					GC-NC1

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	704	16.0	12/20/2023	ND	400	100	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*	28.1	10.0	12/20/2023	ND	185	92.4	200	0.174	
DRO >C10-C28*	42.2	10.0	12/20/2023	ND	193	96.6	200	5.21	
EXT DRO >C28-C36	13.8	10.0	12/20/2023	ND					

Surrogate: 1-Chlorooctane 77.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 84.9 % 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  
 KELLY LOWERY  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 12/19/2023  
 Reported: 12/20/2023  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERRPRISE - EDDY CO NM

Sampling Date: 12/19/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: SW 21 0-10 (H236743-04)**

BTEx 8021B		mg/kg		Analyzed By: JH/					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>0.099</b>	0.050	12/20/2023	ND	2.38	119	2.00	2.42	GC-NC1
<b>Toluene*</b>	<b>0.541</b>	0.050	12/20/2023	ND	2.34	117	2.00	1.73	GC-NC1
<b>Ethylbenzene*</b>	<b>0.494</b>	0.050	12/20/2023	ND	2.41	121	2.00	2.83	GC-NC1
<b>Total Xylenes*</b>	<b>2.82</b>	0.150	12/20/2023	ND	7.29	122	6.00	3.14	GC-NC1
<b>Total BTEX</b>	<b>3.95</b>	0.300	12/20/2023	ND					GC-NC1

Surrogate: 4-Bromofluorobenzene (PID) 123 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>1010</b>	16.0	12/20/2023	ND	400	100	400	7.69	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>44.3</b>	10.0	12/20/2023	ND	148	74.2	200	8.77	
<b>DRO &gt;C10-C28*</b>	<b>340</b>	10.0	12/20/2023	ND	155	77.7	200	6.07	
<b>EXT DRO &gt;C28-C36</b>	<b>202</b>	10.0	12/20/2023	ND					

Surrogate: 1-Chlorooctane 100 % 48.2-134

Surrogate: 1-Chlorooctadecane 135 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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### Notes and Definitions

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

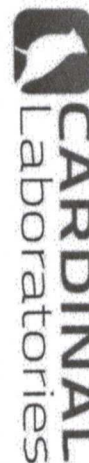
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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

[illegible]



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

---

December 20, 2023

KELLY LOWERY

ENSOLUM, LLC

705 W WADLEY AVE.

MIDLAND, TX 79705

RE: SOUTH CARLSBAD CS TANK LEAK

Enclosed are the results of analyses for samples received by the laboratory on 12/19/23 15:20.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. 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, flowing style.

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 KELLY LOWERY  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received:	12/19/2023	Sampling Date:	12/19/2023
Reported:	12/20/2023	Sampling Type:	Soil
Project Name:	SOUTH CARLSBAD CS TANK LEAK	Sampling Condition:	Cool & Intact
Project Number:	03B1226315	Sample Received By:	Tamara Oldaker
Project Location:	ENTERRPRISE - EDDY CO NM		

**Sample ID: BG 01 0-0.25 (H236744-01)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3920	16.0	12/20/2023	ND	432	108	400	0.00	

**Sample ID: BG 02 0-0.25 (H236744-02)**

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	12/20/2023	ND	432	108	400	0.00	

Cardinal Laboratories

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Celey D. Keene, Lab Director/Quality Manager



---

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---

### 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

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

---

Celey D. Keene, Lab Director/Quality Manager





CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Ensolum, LLC

BILL TO

ANALYSIS REQUEST

Project Manager: Kelly Lowery

P.O. #:

Address: 601 N. Marland St. STE 400

Company: Enterprise Field Services,

City: Midland

State: TX Zip: 79701

Attn: Thomas Long

Phone #: 214-733-3165

Email: klowery@ensolum.com

Address:

Project #: 03B1226315

Project Owner:

City:

Project Name: South Garfield CS Tank Leak

State:

Zip:

Project Location: Eddy County

Phone #: 505-215-4727

Sample Name: SK

Email: fjloug@eprod.com

FOR LAB USE ONLY

Lab I.D.

Sample I.D.

Sample Depth (feet)

(G)RAB OR (C)OMP.

# CONTAINERS

GROUNDWATER

WASTEWATER

SOIL

OIL

SLUDGE

OTHER :

ACID/BASE:

ICE / COOL

OTHER :

DATE

TIME

TPH (8021B)

BTEX (8015M)

Chloride (4500)

1 B601

0-0.25

0-0.25

1

X

X

X

X

X

X

X

X

X

X

X

X

X

2 B502

0-0.25

0-0.25

1

X

X

X

X

X

X

X

X

X

X

X

X

X

NFE

SK

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Relinquished By:

Date: 12-19-23

Time: 1520

Received By:

Date: 12-19-23

Time: 1520

Received By:

Date: 12-19-23

Time: 1520

Remarks: Paykey/AFENomate:

Verbal Result: ☐ Yes ☒ No

Add'l Phone #:

All Results are emailed. Please provide Email address:

klowery@ensolum.com / fjloug@eprod.com

REMARKS: Paykey/AFENomate:

Verbal Result: ☐ Yes ☒ No

Add'l Phone #:

Relinquished By:

Date: 12-19-23

Time: 1520

Received By:

Date: 12-19-23

Time: 1520

Received By:

Date: 12-19-23

Time: 1520

Remarks: Paykey/AFENomate:

Verbal Result: ☐ Yes ☒ No

Add'l Phone #:

All Results are emailed. Please provide Email address:

klowery@ensolum.com / fjloug@eprod.com

REMARKS: Paykey/AFENomate:

Verbal Result: ☐ Yes ☒ No

Add'l Phone #:

Delivered By: (Circle One)  
Sampler - UPS - Bus - Other:

Observed Temp. °C

Corrected Temp. °C

Sample Condition  
Cool ☒ Index ☒  
No ☐ No ☐

CHECKED BY: (Initials)

Thermal Time: ☒ Standard ☐ Batch (only) Sample Condition

Thermometer ID #115 #140

Correction Factor -0.5°C

Thermometer ID #115 #140

Correction Factor -0.5°C

Thermometer ID #115 #140

Correction Factor -0.5°C

Thermometer ID #115 #140

Correction Factor -0.5°C

FORM-006 R.3.2 10/07/21

† Cardinal cannot accept verbal changes. Please email changes to cely.keene@cardinalabnm.com



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

---

January 03, 2024

KELLY LOWERY

ENSOLUM, LLC

705 W WADLEY AVE.

MIDLAND, TX 79705

RE: SOUTH CARLSBAD CS TANK LEAK

Enclosed are the results of analyses for samples received by the laboratory on 01/02/24 13:22.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. 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 with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 KELLY LOWERY  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 01/02/2024  
 Reported: 01/03/2024  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERPRISE - EDDY CO NM

Sampling Date: 01/02/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: FS 22 10 (H240009-01)**

BTX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>0.090</b>	0.050	01/02/2024	ND	1.92	95.9	2.00	8.29	
<b>Toluene*</b>	<b>0.329</b>	0.050	01/02/2024	ND	1.87	93.4	2.00	8.89	
<b>Ethylbenzene*</b>	<b>0.164</b>	0.050	01/02/2024	ND	1.85	92.7	2.00	8.52	
<b>Total Xylenes*</b>	<b>0.790</b>	0.150	01/02/2024	ND	5.40	89.9	6.00	8.66	
<b>Total BTX</b>	<b>1.37</b>	0.300	01/02/2024	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>288</b>	16.0	01/03/2024	ND	416	104	400	10.9	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>20.3</b>	10.0	01/02/2024	ND	184	91.9	200	0.385	
<b>DRO &gt;C10-C28*</b>	<b>23.3</b>	10.0	01/02/2024	ND	177	88.7	200	0.949	
<b>EXT DRO &gt;C28-C36</b>	<b>19.0</b>	10.0	01/02/2024	ND					

Surrogate: 1-Chlorooctane 104 % 48.2-134

Surrogate: 1-Chlorooctadecane 97.7 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 KELLY LOWERY  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 01/02/2024  
 Reported: 01/03/2024  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERPRISE - EDDY CO NM

Sampling Date: 01/02/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: FS 28 10 (H240009-02)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/02/2024	ND	1.92	95.9	2.00	8.29		
Toluene*	0.064	0.050	01/02/2024	ND	1.87	93.4	2.00	8.89		
Ethylbenzene*	<0.050	0.050	01/02/2024	ND	1.85	92.7	2.00	8.52		
Total Xylenes*	<0.150	0.150	01/02/2024	ND	5.40	89.9	6.00	8.66		
Total BTEx	<0.300	0.300	01/02/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.7 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	352	16.0	01/03/2024	ND	416	104	400	10.9		

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	01/02/2024	ND	184	91.9	200	0.385	
DRO >C10-C28*	<10.0	10.0	01/02/2024	ND	177	88.7	200	0.949	
EXT DRO >C28-C36	10.2	10.0	01/02/2024	ND					

Surrogate: 1-Chlorooctane 99.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 94.2 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 KELLY LOWERY  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 01/02/2024  
 Reported: 01/03/2024  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERPRISE - EDDY CO NM

Sampling Date: 01/02/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: FS 29 10 (H240009-03)**

BTEX 8021B		mg/kg	Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	0.055	0.050	01/02/2024	ND	1.92	95.9	2.00	8.29	
Toluene*	0.071	0.050	01/02/2024	ND	1.87	93.4	2.00	8.89	
Ethylbenzene*	<0.050	0.050	01/02/2024	ND	1.85	92.7	2.00	8.52	
Total Xylenes*	0.154	0.150	01/02/2024	ND	5.40	89.9	6.00	8.66	
Total BTEX	<0.300	0.300	01/02/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 97.1 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	368	16.0	01/03/2024	ND	416	104	400	10.9	

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	01/02/2024	ND	184	91.9	200	0.385	
DRO >C10-C28*	<10.0	10.0	01/02/2024	ND	177	88.7	200	0.949	
EXT DRO >C28-C36	<10.0	10.0	01/02/2024	ND					

Surrogate: 1-Chlorooctane 120 % 48.2-134

Surrogate: 1-Chlorooctadecane 113 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 KELLY LOWERY  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 01/02/2024  
 Reported: 01/03/2024  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERPRISE - EDDY CO NM

Sampling Date: 01/02/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: FS 30 10 (H240009-04)**

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Benzene*</b>	<b>0.157</b>	0.050	01/02/2024	ND	1.92	95.9	2.00	8.29	
<b>Toluene*</b>	<b>0.411</b>	0.050	01/02/2024	ND	1.87	93.4	2.00	8.89	
<b>Ethylbenzene*</b>	<b>0.168</b>	0.050	01/02/2024	ND	1.85	92.7	2.00	8.52	
<b>Total Xylenes*</b>	<b>0.782</b>	0.150	01/02/2024	ND	5.40	89.9	6.00	8.66	
<b>Total BTEX</b>	<b>1.52</b>	0.300	01/02/2024	ND					

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

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>272</b>	16.0	01/03/2024	ND	416	104	400	10.9	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>20.7</b>	10.0	01/02/2024	ND	184	91.9	200	0.385	
<b>DRO &gt;C10-C28*</b>	<b>10.8</b>	10.0	01/02/2024	ND	177	88.7	200	0.949	
EXT DRO >C28-C36	<10.0	10.0	01/02/2024	ND					

Surrogate: 1-Chlorooctane 96.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 91.0 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

ENSOLUM, LLC  
 KELLY LOWERY  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 01/02/2024  
 Reported: 01/03/2024  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERPRISE - EDDY CO NM

Sampling Date: 01/02/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: SW 15 0-10 (H240009-05)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/02/2024	ND	1.92	95.9	2.00	8.29		
Toluene*	<0.050	0.050	01/02/2024	ND	1.87	93.4	2.00	8.89		
Ethylbenzene*	<0.050	0.050	01/02/2024	ND	1.85	92.7	2.00	8.52		
Total Xylenes*	<0.150	0.150	01/02/2024	ND	5.40	89.9	6.00	8.66		
Total BTEX	<0.300	0.300	01/02/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 97.6 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	416	16.0	01/03/2024	ND	416	104	400	10.9		

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	01/02/2024	ND	184	91.9	200	0.385	
DRO >C10-C28*	<10.0	10.0	01/02/2024	ND	177	88.7	200	0.949	
EXT DRO >C28-C36	<10.0	10.0	01/02/2024	ND					

Surrogate: 1-Chlorooctane 98.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 91.4 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM, LLC  
 KELLY LOWERY  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 01/02/2024  
 Reported: 01/03/2024  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERPRISE - EDDY CO NM

Sampling Date: 01/02/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: SW 21 0-10 (H240009-06)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/02/2024	ND	1.92	95.9	2.00	8.29		
Toluene*	<0.050	0.050	01/02/2024	ND	1.87	93.4	2.00	8.89		
Ethylbenzene*	<0.050	0.050	01/02/2024	ND	1.85	92.7	2.00	8.52		
Total Xylenes*	0.296	0.150	01/02/2024	ND	5.40	89.9	6.00	8.66		
Total BTEX	<0.300	0.300	01/02/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.4 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	592	16.0	01/03/2024	ND	416	104	400	10.9		

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	01/02/2024	ND	184	91.9	200	0.385	
DRO >C10-C28*	<10.0	10.0	01/02/2024	ND	177	88.7	200	0.949	
EXT DRO >C28-C36	<10.0	10.0	01/02/2024	ND					

Surrogate: 1-Chlorooctane 91.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 85.6 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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### 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

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A handwritten signature in black ink, appearing to read "C. D. Keene", is written over a horizontal line.

---

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

Company Name: Ensolum, LLC		<b>BILL TO</b>		ANALYSIS REQUEST			
Project Manager: Kelly Lowery		P.O. #:					
Address: 601 N. Marland St. STE 400		Company: Enterprise Field Services,					
City: Midland State: TX Zip: 79701		Attn: Thomas Long					
Phone #: 214-733-3165 Email: klowery@ensolum.com		Address:					
Project #:		Project Owner:					
Project Name: South Carlisbad CS Tank Leak		City:					
Project Location: Eddy County		State: Zip:					
Sample Name: SC		Phone #: 505-215-4727					
FOR LAB USE ONLY		Email: tjlong@eprod.com					
Lab I.D.	Sample I.D.	Sample Depth (feet)	(G)RAB OR (C)OMP.	PRESERV.		SAMPLING	
H240009	TS22	10	C1	GROUNDWATER			
				WASTEWATER			
				SOIL			
				OIL			
				SLUDGE			
				OTHER:			
				ACID/BASE:			
				ICE / COOL			
				OTHER:			
				DATE		TIME	
1	TS22	10	C1	1/2/24	8:44	TPH (8021B)	
2	TS28	10	C1	1/2/24	9:02	DTEX (8015M)	
3	TS29	10	C1	1/2/24	9:04	Chloride (4500)	
4	TS30	10	C1	1/2/24	10:13		
5	SW15	0-10	C1	1/2/24	10:23		
6	SW21	0-10	C1	1/2/24	11:20		
	NFE						
	SK						
<small>PLEASE NOTE: Liability and Damages. Customer liability and damages are limited to the amount paid by the client for the analysis. Ensolum Laboratories, LLC and its employees shall not be held liable for any damages, including those for negligence and any other cause whatsoever, 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 regions or otherwise. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits, arising out of or related to the performance of services hereunder by Cardinal. 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 regions or otherwise.</small>							
Relinquished By:	Date: 1-24-24	Received By:	Date: 1-24-24	Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #:			
Relinquished By:	Date: 1-24-24	Received By:	Date: 1-24-24	All Results are emailed. Please provide Email address: klowery@ensolum.com / tjlong@eprod.com			
REMARKS: Paykey/AFENOMAF				24/4/25			
N67878							
Delivered By: (Circle One)	Observed Temp. °C	Corrected Temp. °C	Sample Condition	CHECKED BY: (Initials)	Turnaround Time: <input checked="" type="checkbox"/> Rush <input type="checkbox"/> Standard	Backlogs (only) Sample Condition	
Sampler - UPS - Bus - Other:	4.3	4.3	<input checked="" type="checkbox"/> Cool <input type="checkbox"/> Intact <input type="checkbox"/> Yes <input type="checkbox"/> No	SK			
					Thermometer ID: #13	Correction Factor: -0.5°C	#140

FORM-006 R 3.2 10/07/21

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



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

January 25, 2024

KELLY LOWERY

ENSOLUM, LLC

705 W WADLEY AVE.

MIDLAND, TX 79705

RE: SOUTH CARLSBAD CS TANK LEAK

Enclosed are the results of analyses for samples received by the laboratory on 01/24/24 15:38.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. 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 with a large, stylized 'C' and 'K'.

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 KELLY LOWERY  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 01/24/2024  
 Reported: 01/25/2024  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERPRISE - EDDY CO NM

Sampling Date: 01/24/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: NORTH 3' (H240325-01)**

BTX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/24/2024	ND	1.93	96.6	2.00	0.568	
Toluene*	<0.050	0.050	01/24/2024	ND	2.05	103	2.00	1.02	
Ethylbenzene*	<0.050	0.050	01/24/2024	ND	2.06	103	2.00	1.21	
Total Xylenes*	<0.150	0.150	01/24/2024	ND	6.22	104	6.00	1.51	
Total BTX	<0.300	0.300	01/24/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 119 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	01/25/2024	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	01/24/2024	ND	191	95.5	200	8.72	
DRO >C10-C28*	<10.0	10.0	01/24/2024	ND	177	88.7	200	10.3	
EXT DRO >C28-C36	<10.0	10.0	01/24/2024	ND					

Surrogate: 1-Chlorooctane 96.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 106 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

ENSOLUM, LLC  
 KELLY LOWERY  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 01/24/2024  
 Reported: 01/25/2024  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERPRISE - EDDY CO NM

Sampling Date: 01/24/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: NORTH 6' (H240325-02)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/24/2024	ND	1.93	96.6	2.00	0.568		
Toluene*	<0.050	0.050	01/24/2024	ND	2.05	103	2.00	1.02		
Ethylbenzene*	<0.050	0.050	01/24/2024	ND	2.06	103	2.00	1.21		
Total Xylenes*	<0.150	0.150	01/24/2024	ND	6.22	104	6.00	1.51		
Total BTEX	<0.300	0.300	01/24/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 119 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	144	16.0	01/25/2024	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	01/24/2024	ND	191	95.5	200	8.72	
DRO >C10-C28*	<10.0	10.0	01/24/2024	ND	177	88.7	200	10.3	
EXT DRO >C28-C36	<10.0	10.0	01/24/2024	ND					

Surrogate: 1-Chlorooctane 94.1 % 48.2-134

Surrogate: 1-Chlorooctadecane 102 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM, LLC  
 KELLY LOWERY  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 01/24/2024  
 Reported: 01/25/2024  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERPRISE - EDDY CO NM

Sampling Date: 01/24/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: NORTH 9' (H240325-03)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/24/2024	ND	1.93	96.6	2.00	0.568		
Toluene*	<0.050	0.050	01/24/2024	ND	2.05	103	2.00	1.02		
Ethylbenzene*	<0.050	0.050	01/24/2024	ND	2.06	103	2.00	1.21		
Total Xylenes*	<0.150	0.150	01/24/2024	ND	6.22	104	6.00	1.51		
Total BTEX	<0.300	0.300	01/24/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 117 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	5600	16.0	01/25/2024	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	01/24/2024	ND	191	95.5	200	8.72	
DRO >C10-C28*	<10.0	10.0	01/24/2024	ND	177	88.7	200	10.3	
EXT DRO >C28-C36	<10.0	10.0	01/24/2024	ND					

Surrogate: 1-Chlorooctane 98.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 106 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM, LLC  
 KELLY LOWERY  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 01/24/2024  
 Reported: 01/25/2024  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERPRISE - EDDY CO NM

Sampling Date: 01/24/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: SOUTH 3' (H240325-04)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/24/2024	ND	1.93	96.6	2.00	0.568		
Toluene*	<0.050	0.050	01/24/2024	ND	2.05	103	2.00	1.02		
Ethylbenzene*	<0.050	0.050	01/24/2024	ND	2.06	103	2.00	1.21		
Total Xylenes*	<0.150	0.150	01/24/2024	ND	6.22	104	6.00	1.51		
Total BTEx	<0.300	0.300	01/24/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 117 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	304	16.0	01/25/2024	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	01/24/2024	ND	191	95.5	200	8.72	
DRO >C10-C28*	<10.0	10.0	01/24/2024	ND	177	88.7	200	10.3	
EXT DRO >C28-C36	<10.0	10.0	01/24/2024	ND					

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 112 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 KELLY LOWERY  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 01/24/2024  
 Reported: 01/25/2024  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERPRISE - EDDY CO NM

Sampling Date: 01/24/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: SOUTH 6' (H240325-05)**

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/24/2024	ND	1.93	96.6	2.00	0.568	
Toluene*	<0.050	0.050	01/24/2024	ND	2.05	103	2.00	1.02	
Ethylbenzene*	<0.050	0.050	01/24/2024	ND	2.06	103	2.00	1.21	
Total Xylenes*	<0.150	0.150	01/24/2024	ND	6.22	104	6.00	1.51	
Total BTEx	<0.300	0.300	01/24/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 115 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	368	16.0	01/25/2024	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	01/25/2024	ND	191	95.5	200	8.72	
DRO >C10-C28*	<10.0	10.0	01/25/2024	ND	177	88.7	200	10.3	
EXT DRO >C28-C36	<10.0	10.0	01/25/2024	ND					

Surrogate: 1-Chlorooctane 99.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 110 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

ENSOLUM, LLC  
 KELLY LOWERY  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 01/24/2024  
 Reported: 01/25/2024  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERPRISE - EDDY CO NM

Sampling Date: 01/24/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: SOUTH 9.5' (H240325-06)**

BTEx 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/24/2024	ND	1.93	96.6	2.00	0.568	
Toluene*	<0.050	0.050	01/24/2024	ND	2.05	103	2.00	1.02	
Ethylbenzene*	<0.050	0.050	01/24/2024	ND	2.06	103	2.00	1.21	
Total Xylenes*	<0.150	0.150	01/24/2024	ND	6.22	104	6.00	1.51	
Total BTEx	<0.300	0.300	01/24/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 115 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	1120	16.0	01/25/2024	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	01/25/2024	ND	191	95.5	200	8.72	
DRO >C10-C28*	<10.0	10.0	01/25/2024	ND	177	88.7	200	10.3	
EXT DRO >C28-C36	<10.0	10.0	01/25/2024	ND					

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 111 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 KELLY LOWERY  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 01/24/2024  
 Reported: 01/25/2024  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERPRISE - EDDY CO NM

Sampling Date: 01/24/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: EAST 3' (H240325-07)**

BTEx 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	01/24/2024	ND	1.93	96.6	2.00	0.568		
Toluene*	<0.050	0.050	01/24/2024	ND	2.05	103	2.00	1.02		
Ethylbenzene*	<0.050	0.050	01/24/2024	ND	2.06	103	2.00	1.21		
Total Xylenes*	<0.150	0.150	01/24/2024	ND	6.22	104	6.00	1.51		
Total BTEX	<0.300	0.300	01/24/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 113 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	208	16.0	01/25/2024	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	01/25/2024	ND	191	95.5	200	8.72	
DRO >C10-C28*	<10.0	10.0	01/25/2024	ND	177	88.7	200	10.3	
EXT DRO >C28-C36	<10.0	10.0	01/25/2024	ND					

Surrogate: 1-Chlorooctane 89.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 97.3 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

ENSOLUM, LLC  
 KELLY LOWERY  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 01/24/2024  
 Reported: 01/25/2024  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERPRISE - EDDY CO NM

Sampling Date: 01/24/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: EAST 6' (H240325-08)**

BTX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/24/2024	ND	1.93	96.6	2.00	0.568	
Toluene*	<0.050	0.050	01/24/2024	ND	2.05	103	2.00	1.02	
Ethylbenzene*	<0.050	0.050	01/24/2024	ND	2.06	103	2.00	1.21	
Total Xylenes*	<0.150	0.150	01/24/2024	ND	6.22	104	6.00	1.51	
Total BTX	<0.300	0.300	01/24/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 119 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	832	16.0	01/25/2024	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	01/25/2024	ND	191	95.5	200	8.72	
DRO >C10-C28*	<10.0	10.0	01/25/2024	ND	177	88.7	200	10.3	
EXT DRO >C28-C36	<10.0	10.0	01/25/2024	ND					

Surrogate: 1-Chlorooctane 99.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 107 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSOLUM, LLC  
 KELLY LOWERY  
 705 W WADLEY AVE.  
 MIDLAND TX, 79705  
 Fax To:

Received: 01/24/2024  
 Reported: 01/25/2024  
 Project Name: SOUTH CARLSBAD CS TANK LEAK  
 Project Number: 03B1226315  
 Project Location: ENTERPRISE - EDDY CO NM

Sampling Date: 01/24/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: EAST 8' (H240325-09)**

BTX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	01/24/2024	ND	1.93	96.6	2.00	0.568	
Toluene*	<0.050	0.050	01/24/2024	ND	2.05	103	2.00	1.02	
Ethylbenzene*	<0.050	0.050	01/24/2024	ND	2.06	103	2.00	1.21	
Total Xylenes*	<0.150	0.150	01/24/2024	ND	6.22	104	6.00	1.51	
Total BTX	<0.300	0.300	01/24/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 116 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5760	16.0	01/25/2024	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	01/25/2024	ND	191	95.5	200	8.72	
DRO >C10-C28*	<10.0	10.0	01/25/2024	ND	177	88.7	200	10.3	
EXT DRO >C28-C36	<10.0	10.0	01/25/2024	ND					

Surrogate: 1-Chlorooctane 98.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 105 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



---

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### 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

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A handwritten signature in black ink, appearing to read "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

Company Name: Ensolum, LLC

Project Manager: Kelly Lowery

Address: 601 N Marientfield Street, Suite 400

City: Midland

State: TX Zip: 79701

Phone #: 214-733-3165

Fax #:

Project #: 03B1226315

Project Owner:

Project Name: South Carlsbad CS Tank Leak

Project Location: Eddy County, New Mexico

Sampler Name: NKD

BILL TO

P.O. #:

Enterprise Field Services

ATTN: Thomas Long

Address:

City:

State: Zip:

Phone # 505-215-4727

Fax #: +1(204)999-1000

ANALYSIS REQUEST

FOR LAB USE ONLY		Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						PRESERV.	SAMPLING	BTEX 8021B	TPH 8015M	Chlorides 4500																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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Relinquished By:

Date: 1/24/24

Time: 1538

Received By:

Verbal Result: ☐ Yes ☒ No

Add'l Phone #:

All Results are emailed. Please provide Email address:

klowery@ensolum.com

Relinquished By:

Date:

Time:

Received By:

REMARKS:

24 hrs

Delivered By: (Circle One)

Observed Temp. °C 2.5

Sample Condition Cool Intact ☒ Yes ☐ No

CHECKED BY: (Initials)

Turnaround Time:

Standard Rush ☒ ☐

Bacteria (only) Sample Condition Cool Intact ☒ Yes ☐ No

Sampler - UPS - Bus - Other:

Corrected Temp. °C

☐ No ☐ No

Thermometer ID #113

Correction Factor -0.3°C

#1140

Corrected Temp. °C

FORM-000 (R-3-2-10/07/21)

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

**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 323150

QUESTIONS

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID: 241602
	Action Number: 323150
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2327931302
Incident Name	NAPP2327931302 SOUTH CARLSBAD COMPRESSOR STATION @ 0
Incident Type	Oil Release
Incident Status	Deferral Request Received

Location of Release Source

Please answer all the questions in this group.

Site Name	SOUTH CARLSBAD COMPRESSOR STATION
Date Release Discovered	10/06/2023
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	Not answered.
Produced Water Released (bbls) Details	Not answered.
Is the concentration of chloride in the produced water >10,000 mg/l	Not answered.
Condensate Released (bbls) Details	Cause: Corrosion   Tank (Any)   Condensate   Released: 5 BBL   Recovered: 0 BBL   Lost: 5 BBL.
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.

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Phone:(575) 748-1283 Fax:(575) 748-9720

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1000 Rio Brazos Rd., Aztec, NM 87410  
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1220 S. St Francis Dr., Santa Fe, NM 87505  
Phone:(505) 476-3470 Fax:(505) 476-3462

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Action 323150

**QUESTIONS (continued)**

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**QUESTIONS**

<b>Nature and Volume of Release (continued)</b>	
Is this a gas only submission (i.e. only significant Mcf values reported)	<b>More info needed to determine if this will be treated as a "gas only" report.</b>
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	<b>No</b>
Reasons why this would be considered a submission for a notification of a major release	<i>Unavailable.</i>
<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	<b>True</b>
The impacted area has been secured to protect human health and the environment	<b>True</b>
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	<b>True</b>
All free liquids and recoverable materials have been removed and managed appropriately	<b>True</b>
If all the actions described above have not been undertaken, explain why	<i>Not answered.</i>

*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: Thomas Long Title: Sr Field Environmental Scientist Email: tjlong@eprod.com Date: 03/14/2024
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Phone:(575) 393-6161 Fax:(575) 393-0720**District II**811 S. First St., Artesia, NM 88210  
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QUESTIONS, Page 3

Action 323150

**QUESTIONS (continued)**

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID:	241602
	Action Number:	323150
	Action Type:	[C-141] Deferral Request C-141 (C-141-v-Deferral)

**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	Direct Measurement
Did this release impact groundwater or surface water	No
<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 500 and 1000 (ft.)
An occupied permanent residence, school, hospital, institution, or church	Between 100 and 200 (ft.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1000 (ft.) and ½ (mi.)
Any other fresh water well or spring	Between 1000 (ft.) and ½ (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Between 1000 (ft.) and ½ (mi.)
A wetland	Between 300 and 500 (ft.)
A subsurface mine	Between 1 and 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	Between 500 and 1000 (ft.)
Did the release impact areas not on an exploration, development, production, or storage site	No

**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
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.	
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)	5760
TPH (GRO+DRO+MRO)	(EPA SW-846 Method 8015M)	84.1
GRO+DRO	(EPA SW-846 Method 8015M)	268
BTEX	(EPA SW-846 Method 8021B or 8260B)	49.6
Benzene	(EPA SW-846 Method 8021B or 8260B)	4.1

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	10/06/2023
On what date will (or did) the final sampling or liner inspection occur	11/09/2023
On what date will (or was) the remediation complete(d)	01/24/2024
What is the estimated surface area (in square feet) that will be reclaimed	5400
What is the estimated volume (in cubic yards) that will be reclaimed	2400
What is the estimated surface area (in square feet) that will be remediated	5400
What is the estimated volume (in cubic yards) that will be remediated	2400

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.

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Action 323150

**QUESTIONS (continued)**

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**QUESTIONS**

<b>Remediation Plan (continued)</b>	
<i>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.</i>	
<b>This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:</b>	
<i>(Select all answers below that apply.)</i>	
(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	Not answered.
OTHER (Non-listed remedial process)	Not answered.
<i>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>	
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: Thomas Long Title: Sr Field Environmental Scientist Email: tjlong@eprod.com Date: 03/14/2024
<i>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.</i>	

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Action 323150

**QUESTIONS (continued)**

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	Action Number:	323150
	Action Type:	[C-141] Deferral Request C-141 (C-141-v-Deferral)

**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	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Is the remaining contamination in areas immediately under or around production equipment where remediation could cause a major facility deconstruction	Yes
Please list or describe the production equipment and how (re)moving the equipment would cause major facility deconstruction	Tank Battery and secondary containment system.
What is the remaining surface area (in square feet) that will still need to be remediated if a deferral is granted	Not answered.
What is the remaining volume (in cubic yards) that will still need to be remediated if a deferral is granted	Not answered.
Per Paragraph (2) of Subsection C of 19.15.29.12 NMAC if contamination is located in areas immediately under or around production equipment such as production tanks, wellheads and pipelines where remediation could cause a major facility deconstruction, the remediation, restoration and reclamation may be deferred with division written approval until the equipment is removed during other operations, or when the well or facility is plugged or abandoned, whichever comes first.	
Enter the facility ID (F#) on which this deferral should be granted	South Carlsbad Compressor Station [fJMW1320648561]
Enter the well API (30-) on which this deferral should be granted	Not answered.
Contamination does not cause an imminent risk to human health, the environment, or groundwater	True
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: Thomas Long Title: Sr Field Environmental Scientist Email: tjlong@eprod.com Date: 03/14/2024

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Action 323150

QUESTIONS (continued)

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	Action Type:	[C-141] Deferral Request C-141 (C-141-v-Deferral)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	306357
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	01/24/2024
What was the (estimated) number of samples that were to be gathered	6
What was the sampling surface area in square feet	200

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	No

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CONDITIONS  
  
Action 323150

CONDITIONS

Operator: Enterprise Field Services, LLC PO Box 4324 Houston, TX 77210	OGRID:
	241602
	Action Number:
	323150
Action Type:	
[C-141] Deferral Request C-141 (C-141-v-Deferral)	

CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Deferral approved. Deferral of the South Carlsbad Compressor Station (32.313302 -104.137647) is approved due to the presence of active production equipment and tank batteries to the east of the spill area. Deferred until plugging and abandonment of the site or a major facility deconstruction, whichever comes first. A complete and accurate remediation report and/or reclamation report will need to be submitted at that time.	4/17/2024