

### **DEFERRAL REPORT**

Property:

**South Eddy Cryo** 

Unit H, S01, T25S, R30E 32.160412° N, 103.82791° W Eddy County, New Mexico New Mexico EMNRD OCD Incident ID: nAPP2233445626

> February 12, 2024 Ensolum Project No. 03B1226303

> > Prepared for:

Enterprise Field Services LLC PO Box 4324 Houston, Texas 77210

**Attn: Robert Dunaway** 

Prepared by:

Project Manager

Heather Holthaus Senior Project Manager



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#### **DEFERRAL REPORT**

**South Eddy Cryo** 

Unit H, S01, T25S, R30E 32.160412° N, 103.82791° W Eddy County, New Mexico New Mexico EMNRD OCD Incident ID: nAPP2233445626

Ensolum Project No. 03B1226303

### 1.0 INTRODUCTION

### 1.1 Site Description & Background

Operator:	Operator: Enterprise Field Services LLC (Enterprise)		
Site Name:	South Eddy Cryo		
Location:	South Eddy Cryo Plant Unit H, Section 01, Township 25 South, Range 30 East Eddy County, New Mexico		
Property:	Private (Enterprise)		
Regulatory:	New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Oil Conservation Division (OCD)		

On November 30, 2022, a sump overflowed causing 8 barrels (bbls) of lean amine to spill onto the ground surface at the South Eddy Cryo Plant (Site). Approximately 4 bbls of lean amine were recovered during initial response actions.

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**.



- 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 are no private, domestic freshwater wells used by less than five households for domestic or stock water purposes identified within 500 feet of the Site.
- According to the OSE WRSS database, there are no freshwater well records identified within 1,000 feet of the Site; however, there is one exploratory water well water well with OSE record number C03891, reportedly utilized for monitoring purposes. The depth to water in this well was reported to be 429 feet below ground surface (bgs).
- 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 not located within 300 feet of a wetland; however, a freshwater emergent wetland is located on the southeast corner of the facility, located approximately 300 feet east-southeast of the release area.
- 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 low 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				
	Chloride	EPA 300.0 or SM4500 CI B	600 mg/kg				
≤ 50 feet	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	100 mg/kg				
= 50 leet	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 November 30, 2022, a sump overflowed causing 8 bbls of lean amine to spill onto the ground surface at the Site. Approximately 4 bbls of lean amine were recovered during initial response actions.

Deferral Report
South Eddy Cryo

February 12, 2024 Page 2

An initial Site visit was conducted by Souder, Miller & Associates (SMA) on January 13, 2023, following completion of hydro-excavation activities of the affected surface material to depths ranging from 0.5 feet to 0.75 feet bgs, where hard caliche rock prevented further excavation.

Excavated soil was removed from the Site and disposed of 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.

SMA prepared a *Remediation Closure Report with Deferral Request*, dated February 27, 2023, for submittal to the New Mexico EMNRD OCD.

**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

On January 13, 2023, SMA collected a total of 25 composite soil samples (CS01 through CS25) from the excavation area. The samples were collected at a depth of 0.5-0.75 feet bgs. SMA prepared a *Remediation Closure Report with Deferral Request*, dated February 27, 2023, for submittal to the New Mexico EMNRD OCD; the recommendations from this report are as follows:

"As demonstrated in Table 3, all excavation confirmation samples meet NMOCD criteria for delineation at a site with groundwater greater than 100 feet bgs. However, due to the proximity of the NMOSE registered water well, the NMOCD Closure Criteria for the release is the depth to groundwater of less than 50 feet per Table I of 19.15.29.12 NMAC. Table 3 also demonstrates that certain areas of the remedial excavation and areas immediately adjacent or under facility do not yet meet these Closure Criteria. As illustrated on Figure 4, a request for deferral of remediation is requested for the area indicated by hatching measuring approximately 4,757 square feet.

Excavated soils were removed and replaced with clean backfill material to return the surface to previous contours. All excavated soil was transported and disposed of at Lea Land LLC, Hobbs, New Mexico, an NMOCD-permitted disposal facility.

SMA recommends no further action and requests the deferral of the remediation of the residual impacted material at the South Eddy Cryo Plant Amine Release."

A copy of the SMA letter report, *Remediation Closure Report with Deferral Request*, dated February 27, 2023, detailing the remediation and sampling activities is located in **Appendix B**.

Based on correspondence received from the New Mexico EMNRD OCD on July 14, 2023, the initial closure report with deferral request for the Site was denied. According to the New Mexico EMNRD OCD,

"The Deferral Request is Denied. The deferral may be granted so long as the contamination is fully delineated and does not cause an imminent risk to human health, the environment, or ground water. As much contaminated soil as possible should be removed safely with alternative methods (shovel, hydrovac, etc.). Only sample points that could cause a major facility deconstruction will be deferred. The only remediation that should remain are the sample points that are being requested for deferral. Specify exactly which sample points you are asking for a deferral on and the reason the contaminants can't be removed. A background sample will need to be conducted to see if Sulfates are in the soil (Method 300). The impacted area needs to be tested for sulfates also. (Method 8270) will need to be ran to verify the presence/absence of "Semi Volatiles." The landfill needs to know if the contaminated material contains "Semi Volatiles". Also, a full list for TPH will need to be ran (Method 8015)."

On August 22 and September 6, 2023, Ensolum arrived on-Site and collected 25 composite confirmation soil samples from the 25 locations that had previously been sampled (CS01 through CS25). Due to the previous excavation and subsequent backfill with clean material to 0.75 feet bgs and the presence of the hard caliche rock beneath the Site, Ensolum utilized a rock bar to obtain soils from a depth of approximately

1.5 feet bgs at each location. In addition, Ensolum collected a lateral delineation discrete soil sample from four locations (North, East, South and West), within approximately 2 feet outside of the impacted area, at a depth of 0.25 feet bgs. One background soil sample (BG-1) was also collected at a depth of 1.5 feet bgs, no closer than 50 feet but no greater than 100 feet from the lateral and horizontal extents of the impacted area.

The composite confirmation and lateral delineation 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 Hall Environmental Analysis Laboratory in Albuquerque, New Mexico under proper chain-of-custody procedures.

#### 5.0 SOIL LABORATORY ANALYTICAL METHODS

The composite confirmation and lateral delineation discrete soil samples were analyzed for chloride and sulfate following United States Environmental Protection Agency (EPA) Method 300.0, and/or 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/D, and/or benzene, toluene, ethylbenzene and total xylenes (BTEX) following EPA SW-846 Method 8021B.

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

#### 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 confirmation and lateral delineation soil samples (CS01 through CS25 and North, East, South and West, respectively) for soil remaining in place to the applicable New Mexico EMNRD OCD closure criteria.

The New Mexico EMNRD OCD does not have closure criteria for sulfate; therefore, Ensolum utilized the detected concentrations of sulfate in the confirmation samples collected outside of the impacted area (BG-1, North, East, South and West) to calculate the 95<sup>th</sup> Upper Tolerance Limit (UTL) for the Site. Ensolum compared the sulfate concentrations and/or laboratory SDLs associated with the composite confirmation soil samples to the calculated site-specific UTL.

- Laboratory analytical results indicated benzene concentrations for soil remaining in place at a depth
  of 1.5 feet bgs do not exceed the laboratory SDLs or the New Mexico EMNRD OCD closure criteria
  of 10 milligrams per kilogram (mg/kg).
- Laboratory analytical results indicates total BTEX concentrations for soil remaining in place at a depth of 1.5 feet bgs do not exceed the laboratory SDLs or the New Mexico EMNRD OCD closure criteria of 50 mg/kg.
- Laboratory analytical results indicated combined TPHGRO/DRO/MRO concentrations for soil remaining in place at a depth of 1.5 feet bgs do not exceed the laboratory SDLs and/or the New Mexico EMNRD OCD closure criteria of 100 mg/kg.
- Laboratory analytical results indicated chloride concentrations for soil remaining in place at a depth of 1.5 feet bgs do not exceed the New Mexico EMNRD OCD closure criteria of 600 mg/kg.
- Laboratory analytical results indicate sulfate concentrations for soils remaining in place at a depth of 1.5 feet bgs do not exceed the calculated site-specific UTL of 6,992 mg/kg.

Laboratory analytical results are summarized in **Table 1** in **Appendix C**.

### 7.0 RECLAMATION AND RE-VEGETATION

Subsequent to the results of the final confirmation soil sampling, no further excavation was necessary. Per Enterprise's safety procedures regarding the restriction to utilize heavy equipment/machinery inside a facility due to risks to human health and safety which prohibits the further excavation of soil remaining in place, a deferral request for remediation is required in these areas, comprising of approximately 8,560 cubic feet, as indicated in orange on **Figure 3 (Appendix A)**.

#### 8.0 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.
- On January 13, 2023, SMA collected a total of 25 composite soil samples (CS01 through CS25) from the excavation area. The samples were collected at depths ranging from 0.5 feet to 0.75 feet bgs. Based on the results of the soil sampling, a request for deferral of remediation was requested for an area measuring approximately 4,757 square feet.
- Based on correspondence received from the New Mexico EMNRD OCD on July 14, 2023, the initial Closure Report with Deferral Request for Site was denied. "The Deferral Request is Denied. The deferral may be granted so long as the contamination is fully delineated and does not cause an imminent risk to human health, the environment, or ground water. As much contaminated soil as possible should be removed safely with alternative methods (shovel, hydrovac, etc.). Only sample points that could cause a major facility deconstruction will be deferred. The only remediation that should remain are the sample points that are being requested for deferral. Specify exactly which sample points you are asking for a deferral on and the reason the contaminants can't be removed. A background sample will need to be conducted to see if Sulfates are in the soil (Method 300). The impacted area needs to be tested for sulfates also. (Method 8270) will need to be ran to verify the presence/absence of "Semi Volatiles." The landfill needs to know if the contaminated material contains "Semi Volatiles". Also, a full list for TPH will need to be ran (Method 8015)."
- The New Mexico EMNRD OCD comment above concerning the need to test for semi volatiles for landfill use is acknowledged, however, if deferral is approved, the removal of soils for off-Site disposal at an approved landfill facility will not be warranted.
- On August 22 and September 6, 2023, Ensolum arrived on-Site and collected 25 composite soil samples from the original 25 locations that had previously been sampled (CS01 through CS25). Due to the previous excavation and subsequent backfill with clean material from 0 0.75 feet bgs and the presence of the hard caliche rock beneath the Site, Ensolum utilized a rock bar to obtain soils from a depth of approximately 1.5 feet bgs at each location. In addition, Ensolum collected four delineation soil samples (North, East, South and West), from four locations within approximately 2 feet outside of the impacted area, at a depth of 0.25 feet bgs. One background soil sample was also collected (BG-1) at a depth of 1.5 feet bgs, no closer than 50 feet but no greater than 100 feet from the lateral and horizontal extents of the impacted area. Based on the laboratory analytical data of the final composite confirmation soil samples, no additional excavation is required.

Based on the final soil analytical results, soils remaining in place at a depth of 1.5 feet bgs do not exhibit benzene, BTEX, TPH GRO/DRO/MRO, or chloride concentrations exceeding the applicable New Mexico EMNRD OCD closure criteria, or sulfate concentrations above the calculated UTL for the Site.

 Due to the location of the release relative to pertinent on-Site equipment and refusal consisting of hard caliche encountered at 0.75 feet bgs, with prior attempts to hydrovac to deeper depths proving unsuccessful, confirmation samples were unable to be collected immediately adjacent to or beneath the equipment without deconstruction at the facility. Per Enterprise's safety procedures regarding the restriction to utilize heavy equipment/machinery inside a facility due to risks to human health and safety which prohibits the further excavation of soil remaining in place, a deferral request for remediation is required in these areas, comprising of approximately 8,560 cubic feet, as indicated in orange on **Figure 3 (Appendix A)**.

Based on field observations and laboratory analytical results, no additional investigation or corrective action appears warranted at this time.

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

#### 9.1 Standard of Care

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

#### 9.2 Limitations

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

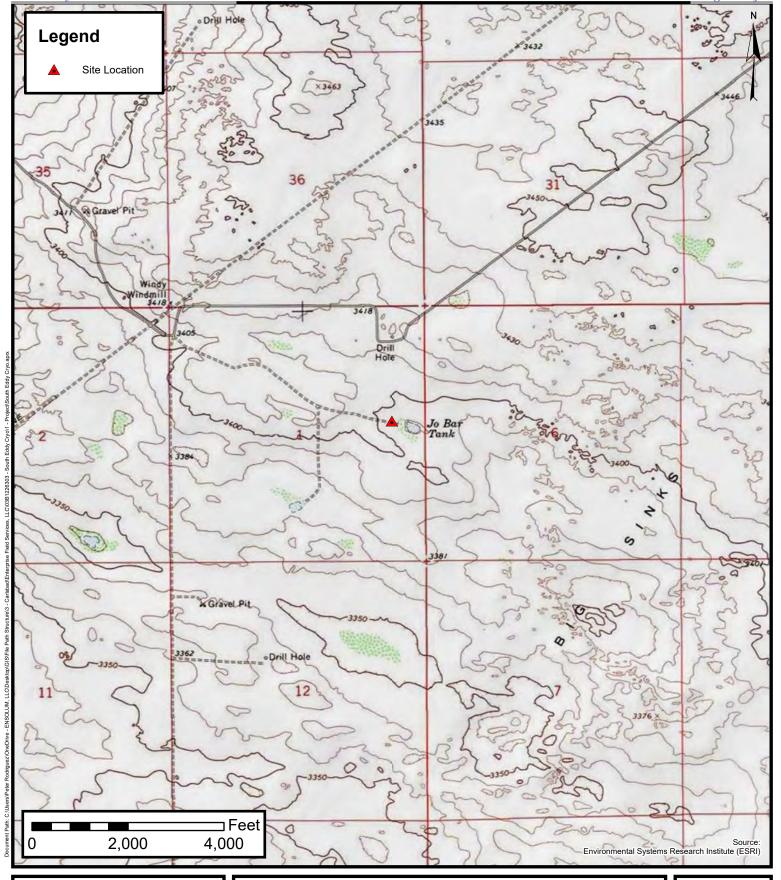
#### 9.3 Reliance

This report has been prepared for the exclusive use of 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 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





### **Topographic Map**

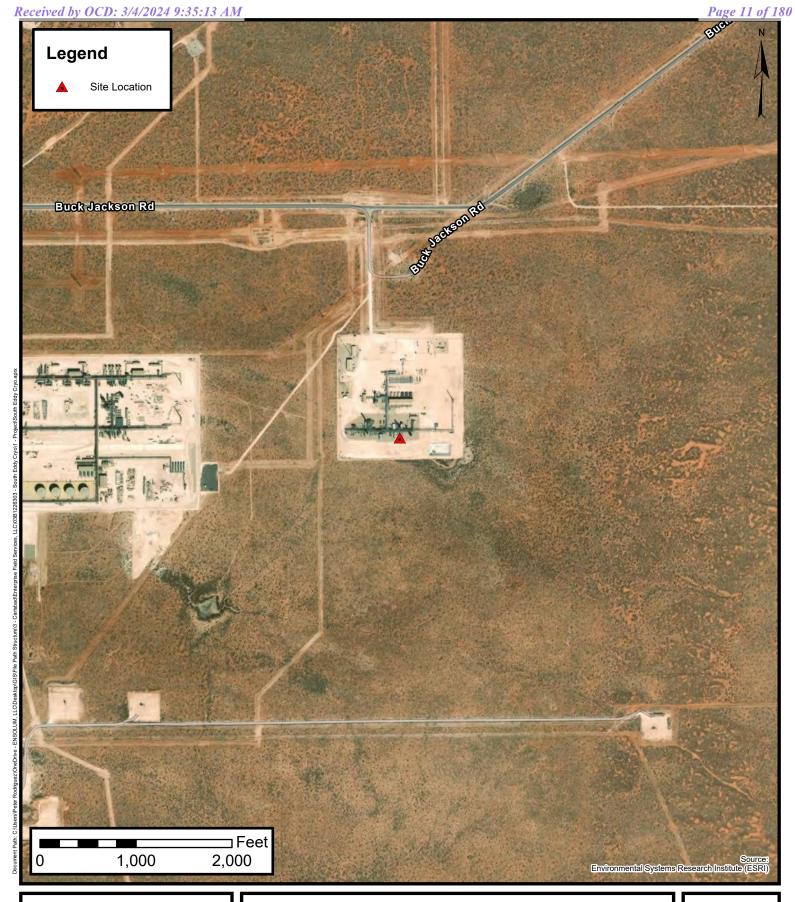
ENTERPRISE FIELD SERVICES, LLC SOUTH EDDY CRYO

Eddy County, New Mexico 32.160412° N, 103.82791° W

Project Number: 03B1226303

FIGURE

1





### **Site Vicinity Map**

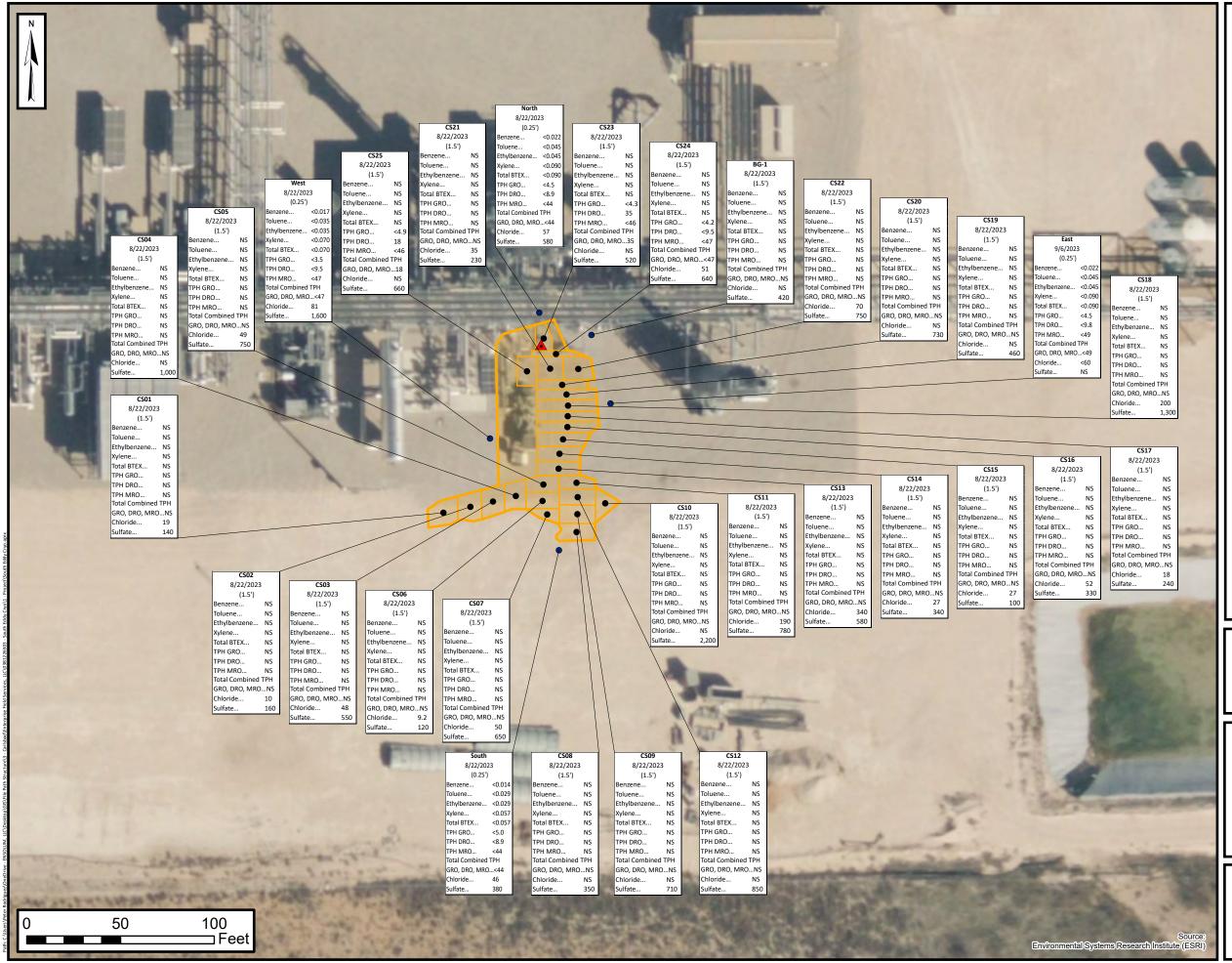
ENTERPRISE FIELD SERVICES, LLC SOUTH EDDY CRYO

Eddy County, New Mexico 32.160412° N, 103.82791° W

Project Number: 03B1226303

FIGURE 2

Received by OCD: 3/4/2024 9:35:13 AM Page 12 of 180



### **LEGEND**

- Release Point
- Composite Soil Sample Location
- Confirmation Delineation Soil Sample Location
  - 200 Square Foot Boundary
- Deferred Release Extent (0 1.5' BGS)

- 1. BGS Below Ground Surface
- 3. NS Not Sampled
- 4. < Sample Results Below Laboratory Reporting Limits



Environmental, Engineering and Hydrogeologic Consultants

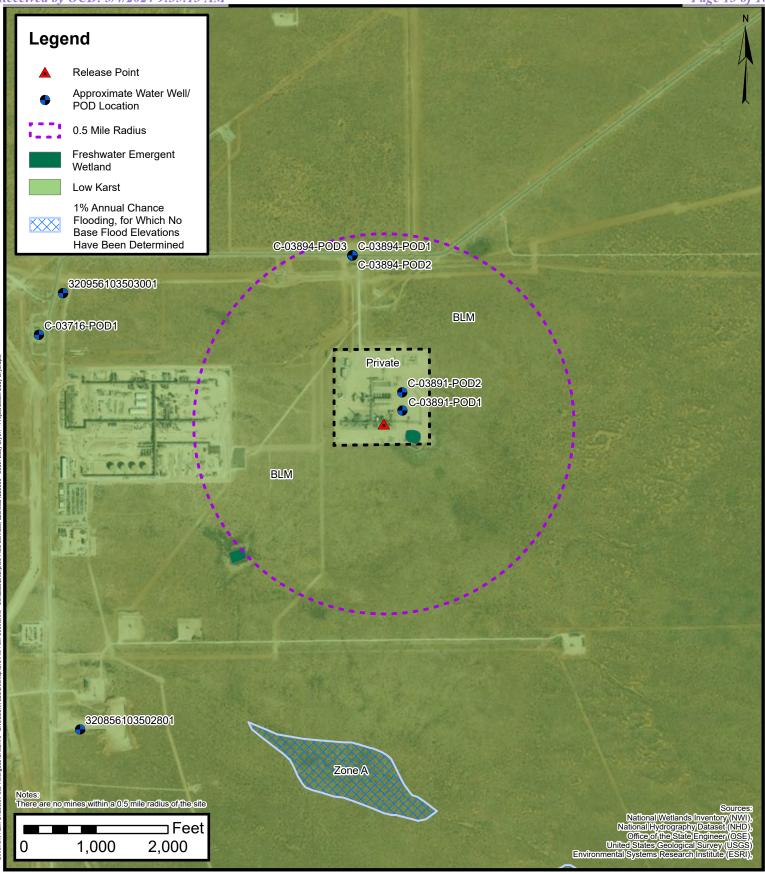
### **Site Map**

ENTERPRISE FIELD SERVICES, LLC SOUTH EDDY CRYO Eddy County, New Mexico

32.160412° N, 103.82791° W

**Figure** 

Project Number: 03B1226303





### **Closure Criteria Map**

ENTERPRISE FIELD SERVICES, LLC SOUTH EDDY CRYO

Eddy County, New Mexico 32.160412° N, 103.82791° W

Project Number: 03B1226303

FIGURE

4



**APPENDIX B** 

**Supporting Documentation** 

### **Kelly Lowery**

From: Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>

**Sent:** Friday, August 18, 2023 11:54 AM

**To:** Kelly Lowery

Cc: Bratcher, Michael, EMNRD; Hamlet, Robert, EMNRD

**Subject:** RE: [EXTERNAL] South Eddy Cryo (Incident ID #nAPP2233445626)

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

Hi Kelly,

The OCD has received your notification. Notification requirements are **two business days**, per rule. You may proceed on your schedule. This, and all correspondence, should be included in the closure report to ensure inclusion 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 http://www.emnrd.state.nm.us/OCD/

From: Kelly Lowery <klowery@ensolum.com> Sent: Friday, August 18, 2023 10:34 AM

To: Enviro, OCD, EMNRD < OCD. Enviro@emnrd.nm.gov>

Cc: Long, Thomas <tjlong@eprod.com>

Subject: [EXTERNAL] South Eddy Cryo (Incident ID #nAPP2233445626)

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

Good morning,

On behalf of Enterprise Field Services, LLC, Ensolum, LLC would like to provide notification for sampling activities that will be conducted at the South Eddy Cryo (Incident ID #nAPP2233445626) on Tuesday, August 22<sup>nd</sup>. The samples may be used for closure, providing that they meet applicable closure limits.

Thank you



### **Kelly Lowery**

From: Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>

Sent: Thursday, September 7, 2023 8:24 AM

**To:** Kelly Lowery

Cc: Bratcher, Michael, EMNRD; Hamlet, Robert, EMNRD; Long, Thomas

**Subject:** RE: [EXTERNAL] South Eddy Cryo (nAPP2233445626)

You don't often get email from shelly.wells@emnrd.nm.gov. Learn why this is important

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

Hi Kelly,

I apologize in the delay with my response as I was out of the office until today. 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.govhttp://www.emnrd.state.nm.us/OCD/

From: Kelly Lowery <klowery@ensolum.com> Sent: Friday, September 1, 2023 7:04 PM

To: Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>

Cc: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Hamlet, Robert, EMNRD

<Robert.Hamlet@emnrd.nm.gov>; Long, Thomas <tjlong@eprod.com>

Subject: RE: [EXTERNAL] South Eddy Cryo (nAPP2233445626)

Good evening,

On behalf of Enterprise Field Services, LLC, Ensolum, LLC would like to provide notification for sampling activities that will be conducted at the South Eddy Cryo (Incident ID# nAPP2233445626) on Wednesday, September 6<sup>th</sup>. The samples may be used for closure, providing that they meet applicable closure limits.

Thank you



From: Wells, Shelly, EMNRD < Shelly.Wells@emnrd.nm.gov >

**Sent:** Friday, September 1, 2023 5:20 PM **To:** Kelly Lowery < <u>klowery@ensolum.com</u>>

Cc: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Hamlet, Robert, EMNRD

<Robert.Hamlet@emnrd.nm.gov>

Subject: RE: [EXTERNAL] South Eddy Cryo (nAPP2233445626)

You don't often get email from shelly.wells@emnrd.nm.gov. Learn why this is important

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

Hi Kelly,

This request for a variance to the two business days' notice is denied per 19.15.29.12(D)1(a) NMAC because Ensolum on behalf of Enterprise Field Services, LLC failed to provide good cause.

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

From: Kelly Lowery < <u>klowery@ensolum.com</u>>
Sent: Friday, September 1, 2023 12:09 PM

To: Enviro, OCD, EMNRD < OCD. Enviro@emnrd.nm.gov>

Cc: Long, Thomas < tilong@eprod.com >

Subject: [EXTERNAL] South Eddy Cryo (nAPP2233445626)

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

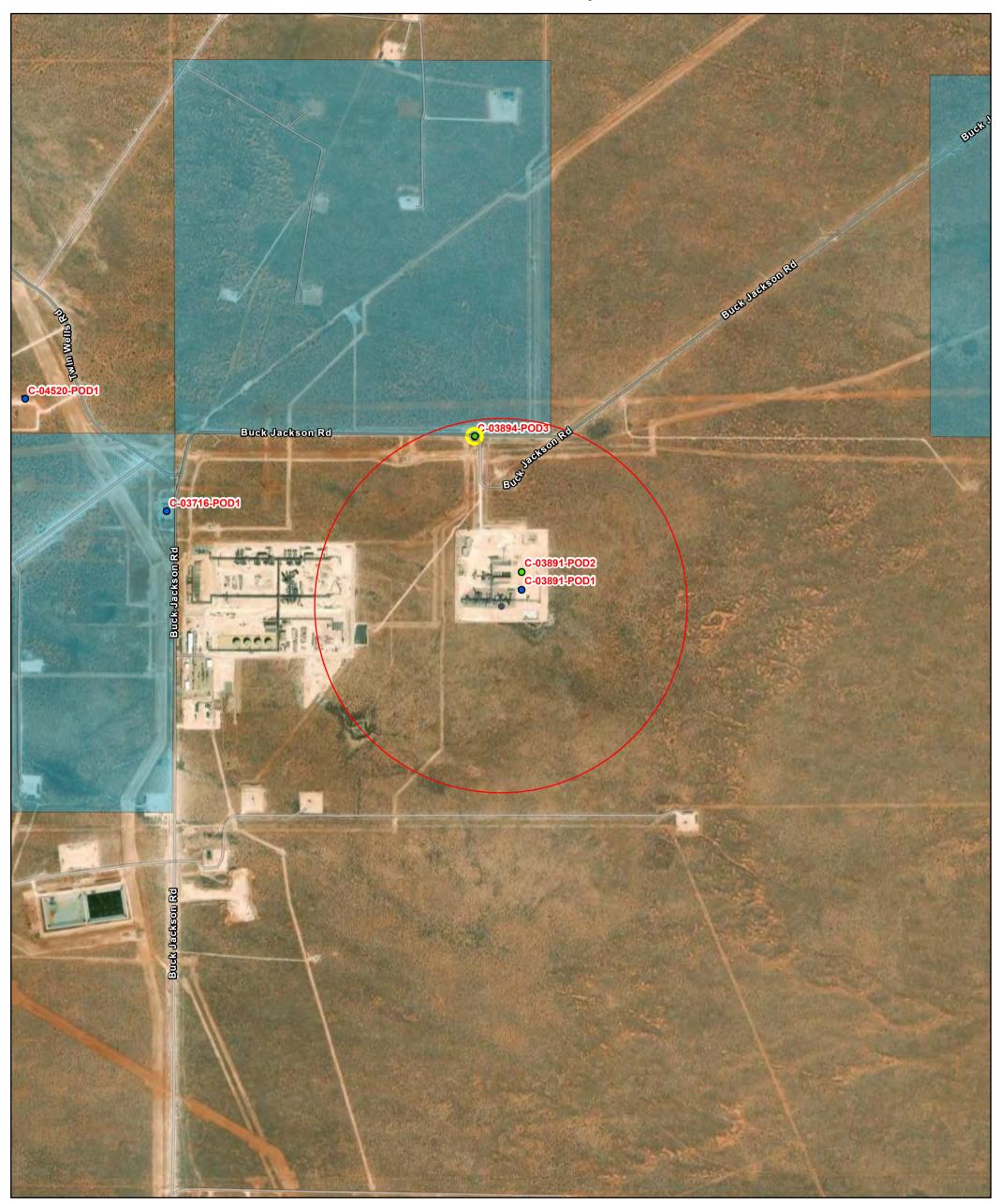
Good afternoon,

This email is a notification and a variance request. Ensolum, LLC, on behalf of Enterprise Field Services, LLC, is requesting a variance for required 48 hour notification per 19.15.29.12D (1a) NMAC. Ensolum would like to collect soil samples for laboratory analysis Friday, September 01, 2023 at the South Eddy Cryo (nAPP2233445626) Site. Please acknowledge acceptance of this variance request. If you have any questions, please call or email. The samples may be used for closure, providing that they meet applicable closure limits.

Thank you



# OSE POD Location Map - 0.5 mile



10/4/2023, 5:07:20 PM GIS WATERS PODs

Ο Δ - 4:...

Active

Pending

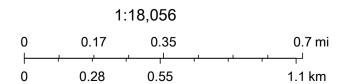
New Mexico State Trust Lands

Both Estates

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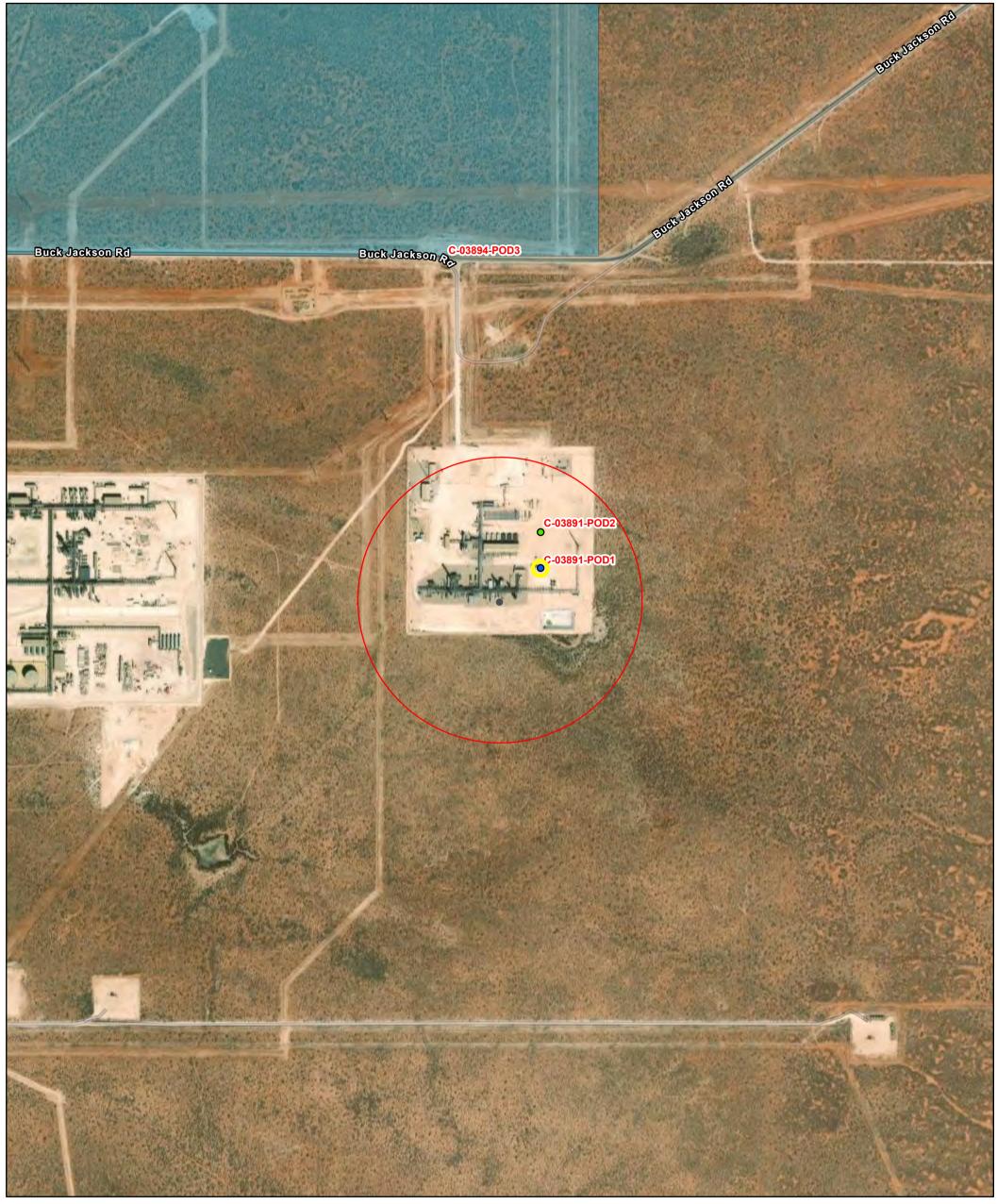
SiteBoundaries

OSE District Boundary



U.S. Department of Energy Office of Legacy Management, Maxar, Esri Community Maps Contributors, Texas Parks & Wildlife, CONANP, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US

## **OSE POD Location Map**



10/4/2023, 5:06:03 PM GIS WATERS PODs

Active

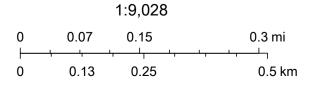
Pending

New Mexico State Trust Lands

Both Estates

Sit

SiteBoundaries



Esri Community Maps Contributors, Texas Parks & Wildlife,

© OpenStreetMap, Microsoft, CONANP, Esri, HERE,
Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA,
USGS, EPA, NPS, US Census Bureau, USDA, U.S.

**OSE District Boundary** 



### New Mexico Office of the State Engineer

### **Water Right Summary**

WR File Number: C 03891

Subbasin: CUB

Cross Reference: -

**Primary Purpose:** MON

MONITORING WELL

**Primary Status: PMT PERMIT** 

**Total Acres:** 

Subfile: Header: -

**Total Diversion:** 

Cause/Case:

Transaction Desc.

Owner: ENTERPRISE FIELD SERVICES LLC

**Contact:** ED WATTENBARGER

**Documents on File** 

Status File/Act

From/ To **Diversion Consumptive** Acres

Doc 2015-07-24

PMT LOG C 03891 POD1

**Current Points of Diversion** 

Trn#

(NAD83 UTM in meters)

**POD Number** Well Tag

Source 64Q16Q4Sec Tws Rng Shallow 4 4 2 01 25S 30E

610608 3558890 **Other Location Desc** WELL 1

C 03891 POD1 C 03891 POD2

2 01 25S 30E

610607

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

7/24/23 2:04 PM WATER RIGHT SUMMARY



### New Mexico Office of the State Engineer

### **Point of Diversion Summary**

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

Well Tag **POD Number** Q64 Q16 Q4 Sec Tws Rng

25S 30E

C 03891 POD1

610608 3558890

**Driller License:** 1723 **Driller Company:** SBQ2, LLC DBA STEWART BROTHERS DRILLING CO.

**Driller Name:** 

**Drill Start Date:** Log File Date:

11/10/2015 **Drill Finish Date:** 

Plug Date: 11/14/2015

Shallow

**Pump Type:** 

**PCW Rcv Date:** 12/04/2015

Estimated Yield: 33 GPM

Source:

**Casing Size:** 6.13

Depth Well:

Pipe Discharge Size:

635 feet

Depth Water: 429 feet

х	Water Bearing Stratifications:	Тор	Bottom	Description
		420	450	Sandstone/Gravel/Conglomerate
		450	460	Sandstone/Gravel/Conglomerate
		460	490	Sandstone/Gravel/Conglomerate
		490	500	Sandstone/Gravel/Conglomerate
		500	530	Sandstone/Gravel/Conglomerate
		530	635	Sandstone/Gravel/Conglomerate
Х	Casing Perforations:	Тор	Bottom	
		460	635	

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

7/24/23 2:14 PM

POINT OF DIVERSION SUMMARY



### New Mexico Office of the State Engineer

### **Point of Diversion Summary**

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

610607

Well Tag POD Number Q64 Q16 Q4 Sec Tws

Q64 Q16 Q4 Sec Tws Rng

X

C 03891 POD2 2 4 2 01 25S 30E

3558967

**Driller License:** 

**Driller Company:** 

**Driller Name:** 

Drill Start Date: Plug Date:
Log File Date: PCW Rev Date: Source:

Pump Type:Pipe Discharge Size:Estimated Yield:Casing Size:Depth Well:Depth Water:

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, or suitability for any particular purpose of the data.

7/24/23 2:13 PM

POINT OF DIVERSION SUMMARY

### OCD Well Locations & Karst Map



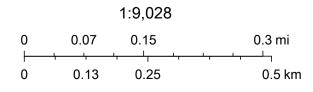
10/4/2023, 5:15:18 PM

Wells - Large Scale Karst Occurrence Potential

Oil, Active Low

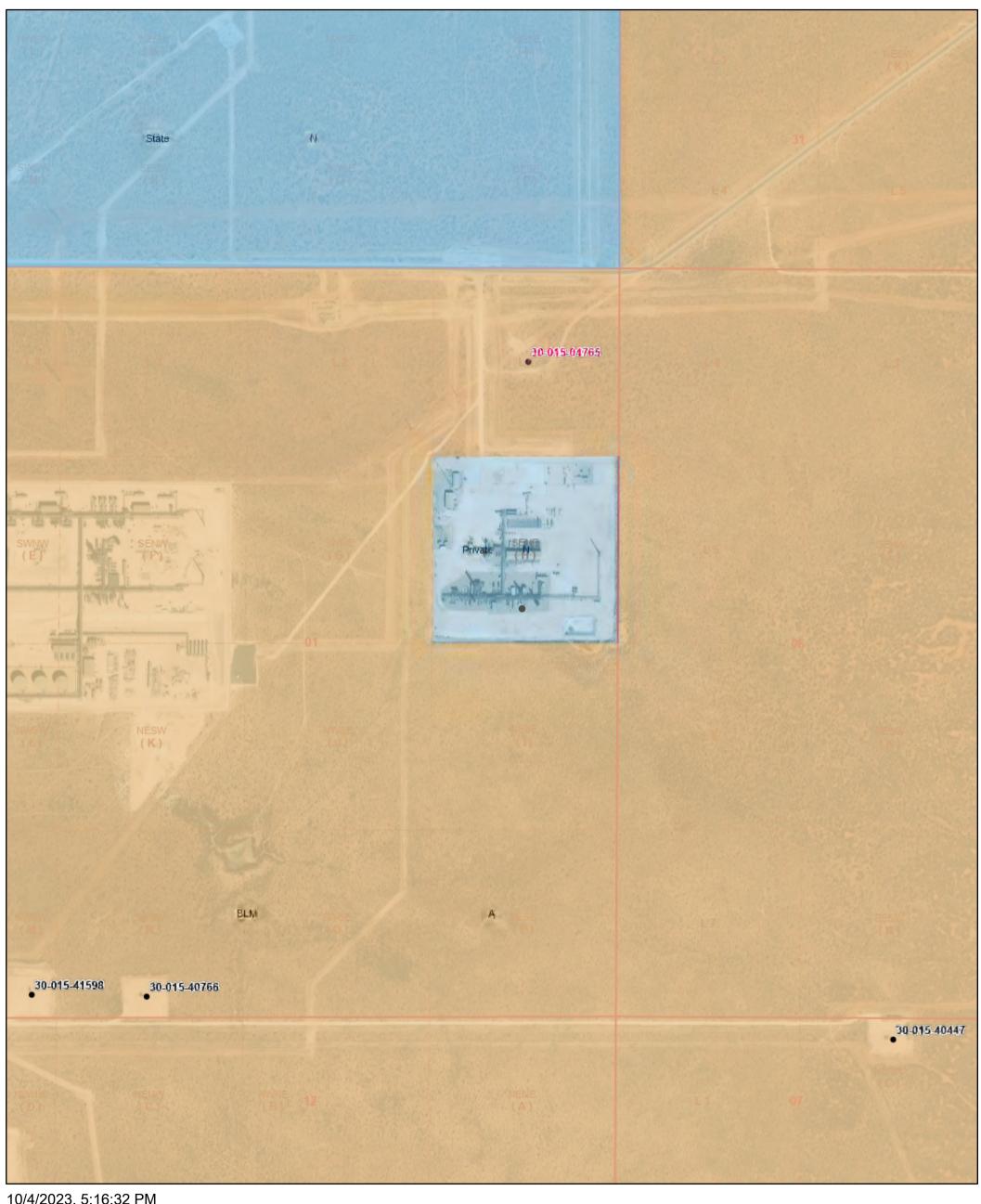
Oil, Plugged **PLSS Second Division** 

**PLSS First Division** 



BLM, OCD, New Mexico Tech, Oil Conservation Division of the New Mexico Energy, Minerals and Natural Resources Department., OCD, Esri, HERE, Garmin, iPC, Maxar, BLM

### Mineral and Surface Ownership



10/4/2023, 5:16:32 PM Wells - Large Scale Land Ownership Oil, Active BLM Oil, Plugged Р Mineral Ownership S A-All minerals are owned by U.S. PLSS Second Division N-No minerals are owned by the U.S. **PLSS First Division** 

1:9,028 0.07 0.15  $0.3 \, mi$ 0.25 0.5 km 0.13

U.S. BLM, Oil Conservation Division of the New Mexico Energy, Minerals and Natural Resources Department., OCD, Esri, HERE, Garmin, iPC, Maxar, BLM

### Active Mines in New Mexico



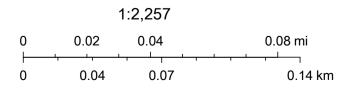
10/4/2023, 5:17:36 PM Land Ownership

BLM

Р

\_ \_ PLSS Second Division

PLSS First Division



U.S. BLM, Maxar, Microsoft, Esri, HERE, Garmin, iPC, BLM

### **NWI Map**



October 4, 2023

#### Wetlands

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

Freshwater Emergent Wetland

Freshwater Pond

d Lake

Freshwater Forested/Shrub Wetland

Riverine

Other

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

# National Flood Hazard Layer FIRMette





SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

Without Base Flood Elevation (BFE) With BFE or Depth Zone AE, AO, AH, VE, AR SPECIAL FLOOD HAZARD AREAS Regulatory Floodway 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X **Future Conditions 1% Annual** Chance Flood Hazard Zone X Area with Reduced Flood Risk due to Levee. See Notes. Zone X OTHER AREAS OF Area with Flood Risk due to Levee Zone D FLOOD HAZARD NO SCREEN Area of Minimal Flood Hazard Zone X Effective LOMRs OTHER AREAS Area of Undetermined Flood Hazard Zone D - - - Channel, Culvert, or Storm Sewer **GENERAL** STRUCTURES | LILLIL Levee, Dike, or Floodwall 20.2 Cross Sections with 1% Annual Chance 17.5 Water Surface Elevation **Coastal Transect** Base Flood Elevation Line (BFE) Limit of Study **Jurisdiction Boundary**  — --- Coastal Transect Baseline OTHER **Profile Baseline FEATURES** Hydrographic Feature

MAP PANELS

No Digital Data Available

Unmapped

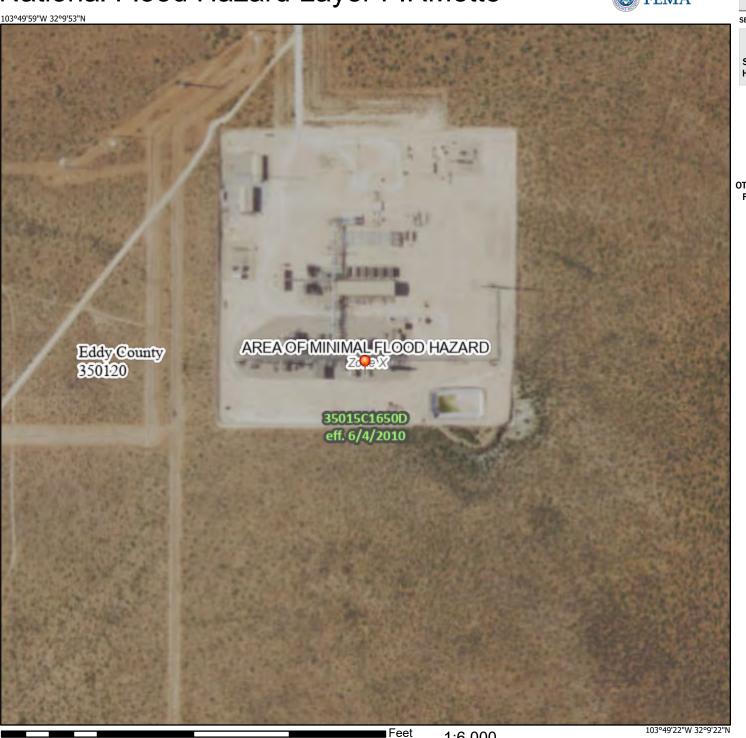
Digital Data Available

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

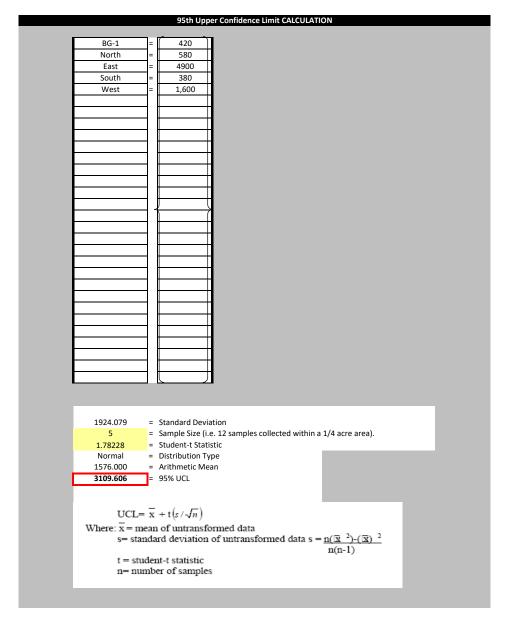
This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

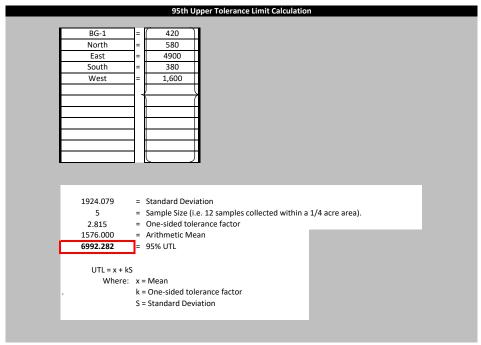
The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 10/4/2023 at 6:19 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



2,000





### **Kelly Lowery**

From: Dunaway, Robert <rhdunaway@eprod.com>

**Sent:** Friday, July 14, 2023 9:45 AM

**To:** Kelly Lowery

**Subject:** FW: [EXTERNAL] The Oil Conservation Division (OCD) has rejected the application, Application ID:

191227

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

Aaaand it's rejected. Let's work on this.

This is the earlier Amine spill in November 22 at South Eddy.



### **Robert Dunaway**

Senior Environmental Engineer

W: 575-628-6802 C: 361-815-0990

rhdunaway@eprod.com

From: OCDOnline@state.nm.us < OCDOnline@state.nm.us >

**Sent:** Friday, July 14, 2023 8:43 AM

To: Dunaway, Robert <rhdunaway@eprod.com>

Subject: [EXTERNAL] The Oil Conservation Division (OCD) has rejected the application, Application ID: 191227

### [Use caution with links/attachments]

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

The OCD has rejected the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nAPP2233445626, for the following reasons:

• The Deferral Request is Denied. The deferral may be granted so long as the contamination is fully delineated and does not cause an imminent risk to human health, the environment, or ground water. As much contaminated soil as possible should be removed safely with alternative methods (shovel, hydrovac, etc.). Only sample points that could cause a major facility deconstruction will be deferred. The only remediation that should remain are the sample points that are being requested for deferral. Specify exactly which sample points you are asking for a deferral on and the reason the contaminants can't be removed. A background sample will need to be conducted to see if Sulfates are in the soil (Method 300). The impacted area needs to be tested for sulfates also. (Method 8270) will need to be ran to verify the presence/absence of "Semi Volatiles." The landfill needs to know if the contaminated material contains "Semi Volatiles". Also, a full list for TPH will need to be ran (Method 8015).

The rejected C-141 can be found in the OCD Online: Permitting - Action Status, under the Application ID: 191227. Please review and make the required correction(s) prior to resubmitting.

If you have any questions why this application was rejected or believe it was rejected in error, please contact me prior to submitting an additional C-141.

Thank you,
Robert Hamlet
575-748-1283
Robert.Hamlet@emnrd.nm.gov

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.



February 27, 2023

#5E31002-BG28

NMOCD District 2 811 S. First St. Artesia, New Mexico 88210

SUBJECT: Remediation Closure Report with Deferral Request for the South Eddy Cryo Plant Amine Release (nAPP2233445626), Eddy County, New Mexico

### 1.0 Executive Summary

On behalf of Enterprise Field Services LLC (Enterprise), Souder, Miller & Associates (SMA) has prepared this Remediation Closure Report with Deferral Request that describes the remediation of a lean amine release at the South Eddy Cryo Plant. The release site is located in Unit H, Section 1, Township 25S, Range 30E, Eddy County, New Mexico, on private land. Figure 1 illustrates the vicinity and site location on a United States Geological Survey (USGS) 7.5-minute quadrangle map.

This report demonstrates that the release area has been remediated to meet the standards of Table I of 19.15.29.12 New Mexico Administrative Code (NMAC) except for the requested deferral area which is immediately under or adjacent to facility equipment.

SMA recommends no further action at this time and requests a deferral of final remediation of the residual impacted material for Incident Number nAPP2233445626.

Table 1: Release Information and Closure Criteria						
Name	South Eddy Cryo Plant Amine Release	Company	Enterprise Field Services LLC			
Incident Number	nAPP2233445626	Location	32.160412, -103.82791			
Date Release Discovered	November 30, 2022	Land Status	Private			
Source of Release	Overflow of sump					
Nature and Volume of Release	8.0 bbl Amine	Volume Recovered	4 bbl Amine			
NMOCD Closure <50 feet per Table 1 of 19.15.29.12 NMAC						
SMA Response Dates	January 13, 2023					

### 2.0 Background

On November 30, 2022, an amine release was discovered at the South Eddy Cryo Plant. Initial response activities were conducted by Enterprise, and included source elimination and site security, containment, and site stabilization activities. Figure 1 illustrates the vicinity and site location; Figure 2 illustrates the release location. A copy of the initial C-141 form is included in Appendix A.

### South Eddy Cryo Plant Amine Release Closure Report February 27, 2023

Page 2 of 4

#### 3.0 Site Information and Closure Criteria

The South Eddy Cryo Plant is located approximately 15 miles southeast of Malaga, New Mexico on privately-owned land at an elevation of approximately 3,405 feet above mean sea level (amsl).

### Depth to Groundwater and Wellhead Protection Area

A search of the New Mexico Office of the State Engineer (OSE) New Mexico Water Rights Reporting System (NMWRRS) and the USGS National Water Information System reported five wells within a ½-mile of the site. The well record associated with NMOSE registered well C-03891 reports a static water level of 429 feet below grade surface (bgs) and is located approximately 270 feet northeast of the release location. Water well documentation is included in Appendix B and registered wells are in the vicinity shown in Figure 1.

#### Distance to Nearest Significant Watercourse

The nearest significant watercourse is a small playa lake or stockpond located approximately 2,540 feet to the southwest.

#### Closure Criteria

Table 2 demonstrates the Closure Criteria applicable to this location. Figures 1 and 2 illustrate the 200 and 300-foot radii which indicate that the site does lie within a sensitive area as described in Paragraph (4) of Subsection (C) of 19.15.29.12 NMAC due to the presence of the well.

Based on the information presented herein, the applicable NMOCD Closure Criteria for this site is for a groundwater depth of less than 50 feet bgs.

#### 4.0 Release Characterization and Remediation Activities

On January 13, 2023, following remedial excavation activities, SMA personnel performed excavation confirmation sampling. Impacted surface material was excavated by hydrovac to depths ranging from 0.5 to 0.75 feet bgs where hard caliche rock prevented further excavation.

Twenty-Five (25) composite confirmation samples were collected from the excavation for laboratory analysis for total chloride using United States Environmental Protection Agency (USEPA) Method 300.0; benzene, toluene, ethylbenzene and total xylenes (BTEX) using USEPA Method 8021B; and total petroleum hydrocarbons (TPH) as motor, diesel, and gasoline range organics (MRO, DRO, and GRO) by USEPA Method 8015D. Excavation samples were composed of 5-point composites collected every 200 square feet or less in accordance with the sampling protocol included in Appendix C.

Soil samples were field screened for chloride using an electrical conductivity (EC) meter and for hydrocarbon impacts using a calibrated MiniRAE 3000 photoionization detector (PID) equipped with a 10.6 eV lamp. Field notes are included in Appendix D.

Copies of confirmation sampling notifications are included in Appendix A. Excavation extents and closure confirmation sample locations are depicted on Figure 3. A photo log is included in Appendix D. Confirmation laboratory results are summarized in Table 3. Laboratory reports are included in Appendix E.

#### 5.0 Recommendations

As demonstrated in Table 3, all excavation confirmation samples meet NMOCD criteria for delineation at a site with groundwater greater than 100 feet bgs. However, due to the proximity of the NMOSE registered water well, the NMOCD Closure Criteria for the release is the depth to groundwater of less than 50 feet per Table I of

### South Eddy Cryo Plant Amine Release Closure Report February 27, 2023

Page 3 of 4

19.15.29.12 NMAC. Table 3 also demonstrates that certain areas of the remedial excavation and areas immediately adjacent or under facility do not yet meet these Closure Criteria. As illustrated on Figure 4, a request for deferral of remediation is requested for the area indicated by hatching measuring approximately 4,757 square feet.

Excavated soils were removed and replaced with clean backfill material to return the surface to previous contours. All excavated soil was transported and disposed of at Lea Land LLC, Hobbs, New Mexico, an NMOCD-permitted disposal facility.

SMA recommends no further action and requests the deferral of the remediation of the residual impacted material at the South Eddy Cryo Plant Amine Release.

### 6.0 Scope and Limitations

The scope of our services included: assessment sampling; verifying release stabilization; regulatory liaison; remediation guidance; and preparing this report. All work has been performed in accordance with generally accepted professional environmental consulting practices for oil and gas releases in the Permian Basin in New Mexico.

If there are any questions regarding this report, please contact Heather Woods at (505) 716-2787.

Submitted by:

SOUDER, MILLER & ASSOCIATES

Reviewed by:

Sarahmay Schlea Staff Scientist I Heather M. Woods, P.G. Project Geoscientist

Heather M. Woods

### South Eddy Cryo Plant Amine Release Closure Report February 27, 2023

Page 4 of 4

### **REFERENCES:**

New Mexico Office of the State Engineer (NMOSE) online water well database https://gis.ose.state.nm.us/gisapps/ose\_pod\_locations/; accessed 2/17/2023

USGS National Water Information System: Web Interface online water well database https://nwis.waterdata.usgs.gov/nwis/gwlevels?site\_no=321205103544701&agency\_cd=USGS&format=html; accessed 2/17/2023

#### **ATTACHMENTS:**

### Figures:

Figure 1: Topographic Site Map

Figure 2: Aerial Site Map

Figure 3: Site and Sample Location Map

#### **Tables:**

Table 2: NMOCD Closure Criteria

Table 3: Summary of Laboratory Analytical Results

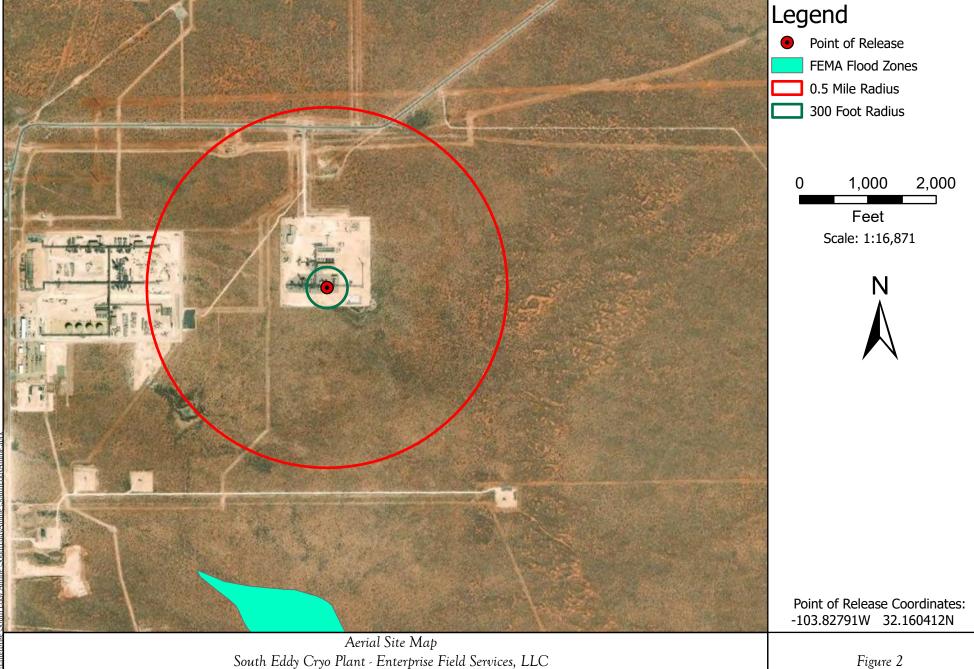
### **Appendices:**

Appendix A: Form C-141 and Correspondence

Appendix B: Water Well Data Appendix C: Sampling Protocol

Appendix D: Field Notes and Photo Log
Appendix E: Laboratory Analytical Reports

## **FIGURES**



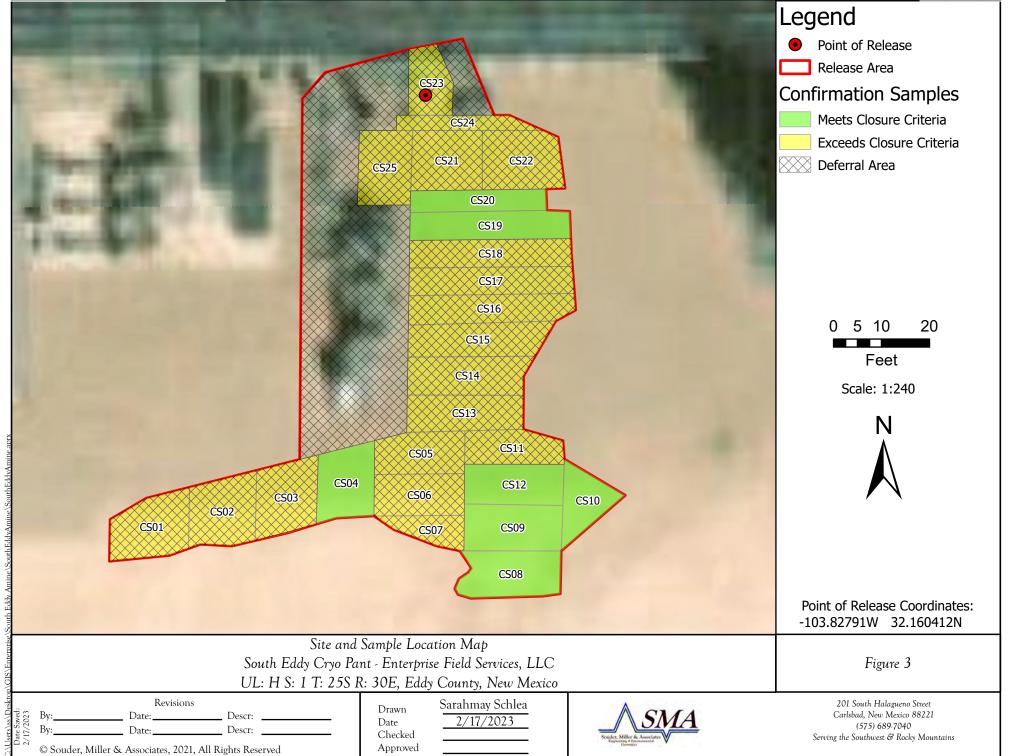
South Eddy Cryo Plant - Enterprise Field Services, LLC UL: H S: 1 T: 25S R: 30E, Eddy County, New Mexico

Revisions Date: \_\_\_\_\_ Descr: \_ © Souder, Miller & Associates, 2021, All Rights Reserved

Drawn Date Checked Approved Sarahmay Schlea 12/22/2022



201 South Halagueno Street Carlsbad, New Mexico 88221 (575) 689-7040 Serving the Southwest & Rocky Mountains



### **TABLES**

### Table 2: NMOCD Closure Criteria

Site Information (19.15.29.11.A(2, 3, and 4) NMAC)	Source/Notes	
Depth to Groundwater (feet bgs)	429	NMOSE and USGS Water Well Data
Hortizontal Distance From All Water Sources Within 1/2 Mile (ft)	260	NMOSE and USGS Water Well Data
Hortizontal Distance to Nearest Significant Watercourse (ft)	2,540	USGS Topographic Map

Closure Criteria (19.15.2	d Table 1 NMAC)						
	Closure Criteria (units in mg/kg)						
Depth to Groundwater	Chloride *numerical limit or background, whichever is greater	ТРН	GRO + DRO	ВТЕХ	Benzene		
< 50' BGS	600	100		50	10		
51' to 100'		10000	2500	1000	50	10	
>100'		20000	2500	1000	50	10	
Surface Water	yes or no		if yes	s, then			
<300' from continuously flowing watercourse or other significant							
watercourse?	No						
<200' from lakebed, sinkhole or playa lake?	No						
Water Well or Water Source							
<500 feet from spring or a private, domestic fresh water well used by							
less than 5 households for domestic or stock watering purposes?	No						
<1000' from fresh water well or spring?	Yes						
Human and Other Areas		600	100		50	10	
<300' from an occupied permanent residence, school, hospital,		600	100		30	10	
institution or church?	No						
within incorporated municipal boundaries or within a defined							
municipal fresh water well field?	No						
<100' from wetland?	No						
within area overlying a subsurface mine	No						
within an unstable area?	No						
within a 100-year floodplain?	No						



Table 3: Summary of Laboratory Analytical Results

Enterprise Field Services LLC South Eddy Cryo Amine Release

		Depth of	Method	l 8021B		N	1ethod 8015	SD.		Method 300.0
Sample ID	Sample Date	Sample (feet bgs)	ВТЕХ	Benzene	GRO	DRO	GRO + DRO	MRO	Total TPH	Chloride
			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
	Remediation Closure Criteria			10					100	600
Deli	neation Criter	ia*	50	10			1,000		2,500	20,000
CS01	1/13/2023	0.5 to 0.75	<0.100	<0.0250	<20.0	61	61	<50.0	61	628
CS02	1/13/2023	0.5 to 0.75	<0.100	<0.0250	<20.0	28.5	28.5	<50.0	28.5	671
CS03	1/13/2023	0.5 to 0.75	<0.100	<0.0250	<20.0	<25.0	<45.0	<50.0	<95.0	924
CS04	1/13/2023	0.5 to 0.75	<0.100	<0.0250	<20.0	27.6	27.6	<50.0	27.6	582
CS05	1/13/2023	0.5 to 0.75	<0.100	<0.0250	<20.0	<25.0	<45.0	<50.0	<95.0	1,210
CS06	1/13/2023	0.5 to 0.75	<0.100	<0.0250	<20.0	<25.0	<45.0	<50.0	<95.0	1,360
CS07	1/13/2023	0.5 to 0.75	<0.100	<0.0250	<20.0	<25.0	<45.0	<50.0	<95.0	774
CS08	1/13/2023	0.5 to 0.75	<0.100	<0.0250	<20.0	<25.0	<45.0	<50.0	<95.0	520
CS09	1/13/2023	0.5 to 0.75	<0.100	<0.0250	<20.0	<25.0	<45.0	<50.0	<95.0	235
CS10	1/13/2023	0.5 to 0.75	<0.100	<0.0250	<20.0	<25.0	<45.0	<50.0	<95.0	361
CS11	1/13/2023	0.5 to 0.75	<0.100	<0.0250	<20.0	<25.0	<45.0	<50.0	<95.0	1,350
CS12	1/13/2023	0.5 to 0.75	<0.100	<0.0250	<20.0	<25.0	<45.0	<50.0	<95.0	295
CS13	1/13/2023	0.5 to 0.75	<0.100	<0.0250	<20.0	<25.0	<45.0	<50.0	<95.0	629
CS14	1/13/2023	0.5 to 0.75	<0.100	<0.0250	<20.0	<25.0	<45.0	<50.0	<95.0	796
CS15	1/13/2023	0.5 to 0.75	<0.100	<0.0250	<20.0	25.5	25.5	<50.0	25.5	1,060
CS16	1/13/2023	0.5 to 0.75	<0.100	<0.0250	<20.0	<25.0	<45.0	<50.0	<95.0	978
CS17	1/13/2023	0.5 to 0.75	<0.100	<0.0250	<20.0	<25.0	<45.0	<50.0	<95.0	1,140
CS18	1/13/2023	0.5 to 0.75	<0.100	<0.0250	<20.0	<25.0	<45.0	<50.0	<95.0	1,210
CS19	1/13/2023	0.5 to 0.75	<0.100	<0.0250	<20.0	<25.0	<45.0	<50.0	<95.0	275
CS20	1/13/2023	0.5 to 0.75	<0.100	<0.0250	<20.0	<25.0	<45.0	<50.0	<95.0	274
CS21	1/13/2023	0.5 to 0.75	<0.100	<0.0250	<20.0	<25.0	<45.0	<50.0	<95.0	1,270
CS22	1/13/2023	0.5 to 0.75	<0.100	<0.0250	<20.0	<25.0	<45.0	<50.0	<95.0	1,320
CS23	1/13/2023	0.5 to 0.75	<0.100	<0.0250	<20.0	367	367	1790	2,157	198
CS24	1/13/2023	0.5 to 0.75	<0.100	<0.0250	<20.0	143	143	289	432	930
CS25	1/13/2023	0.5 to 0.75	<0.100	<0.0250	<20.0	233	233	<50.0	233	49.3

Notes: NMOCD - New Mexico Oil Conservation Division

bgs - below grade surface mg/kg - milligram per kilogram

"--" indicates not analyzed or not applicable

BTEX - benzene, toluene, ethylbenzene, and xylenes

GRO - gasoline range organics

DRO - diesel range organics

MRO - motor oil range organics

TPH - total petroluem hydrocabons

\*Based on depth to groundwater greater than 100 ft bgs



# APPENDIX A FORM C-141 AND CORRESPONDENCE

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

Responsible Party

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	NAPP2233445626
District RP	7
Facility ID	
Application ID	

### Release Notification

### Responsible Party

**OGRID** 

241602

Enterprise Field Services LLC

Contact Nam	ie	Robert Dunaway	у	Contact Te	Contact Telephone 575-628-6802				
Contact email rhdunaway@eprod.com			rod.com	Incident # (	Incident # (assigned by OCD) nAPP2233445626				
Contact mail	ing address	PO Box 4324, H	Iouston, TX 77210						
			Location	of Release So	ource				
			Location						
Latitude	32.10	60412	(NAD 83 in deci	Longitude _ imal degrees to 5 decim	-103.82791				
			(IVAD 65 in deci						
Site Name	South E	ddy Cryo		Site Type	Natural Gas Processing Plant				
Date Release	Discovered	11/30/202	22	API# (if app	licable)				
** ** **		T 1:	D	Cour	4.				
Unit Letter H	Section 01	Township 25S	Range 30E	Coun Edd	<u>·                                      </u>				
П	01	233	3015		<u>,                                      </u>				
Crude Oi		l(s) Released (Select a Volume Release	Il that apply and attach	Volume of I	iustification for the volumes provided below) Volume Recovered (bbls)				
Produced	Water	Volume Release	ed (bbls)		Volume Recovered (bbls)				
		Is the concentra produced water	tion of dissolved cl	hloride in the	☐ Yes ☐ No				
Condens	ate	Volume Release			Volume Recovered (bbls)				
☐ Natural C	Gas	Volume Release	ed (Mcf)		Volume Recovered (Mcf)				
☐ Other (describe) Volume/Weight Released (provide units Lean Amine 8 bbl									
Other (de	escribe)			units)	Volume/Weight Recovered (provide units) 4 bbl				
Other (de				e units)					

Received by OCD: 3/4/2024 9:35:13 AM1 Form C-141 State of New Mexico

Page 44eof 180

Page 2

Oil Conservation Division

Incident ID	NAPP2233445626
District RP	
Facility ID	
Application ID	

Was this a major release as defined by	If YES, for what reason(s) does the responsible party consider this a major release?	
19.15.29.7(A) NMAC?		
☐ Yes ⊠ No		
If YES, was immediate no	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	
	Initial Response	
The responsible p	party must undertake the following actions immediately unless they could create a safety hazard that would result in injury	
∑ The source of the rele	ease has been stopped.	
	as been secured to protect human health and the environment.	
	ave been contained via the use of berms or dikes, absorbent pads, or other containment devices.	
	ecoverable materials have been removed and managed appropriately.	
If all the actions described	d above have not been undertaken, explain why:	
has begun, please attach a	AAC the responsible party may commence remediation immediately after discovery of a release. If remediation a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurrent area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	on ed
I hereby certify that the infor	ormation 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 ment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have	[
failed to adequately investigated	gate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In 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.	1 a C-141 report does not remove the operator of responsionity for compliance with any other recent, states, or room terms	
Printed Name:Robert I	Dunaway Title: Senior Environmental Engineer	
Signature: 2 4 hum	nany Date: 12/7/22	
email: rhdunaway@epro		
OCD Only		
	celyn Harimon 12/07/2022 Date:	
Toolived by.		

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

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 164743

### **CONDITIONS**

Operator:	OGRID:
Enterprise Field Services, LLC	241602
PO Box 4324	Action Number:
Houston, TX 77210	164743
	Action Type:
	[C-141] Release Corrective Action (C-141)

#### CONDITIONS

Created By		Condition Date
jharimon	None	12/7/2022

### **Heather Woods**

From: Heather Woods

Sent: Tuesday, January 10, 2023 4:53 PM

**To:** ocd.enviro@emnrd.nm.gov

**Cc:** rhdunaway@eprod.com; Sarahmay Schlea; Georgeann Goodman

**Subject:** Confirmation Sampling Notification - Enterprise South Eddy Cryo (nAPP2233445626)

#### Good Afternoon,

Souder, Miller & Associates will be onsite to collect confirmation samples at the Enterprise South Eddy Cryo release (nAPP2233445626) located at 32.160412, -103.82791, on Friday, January 13<sup>th</sup> beginning at 8:00am.

Many Thanks, Heather Woods

Heather Woods, P.G. *Project Geoscientist* 

Personal Registrations: UT Professional Geologist

Corporate Registrations: AZ Engineering/Geology/Surveying Firm (14070), FL Engineering Firm (34203), ID Engineering/Surveying Firm (C-3564), ND Engineering Firm (28545PE), OK Engineering Firm (8498), SD Surveying Firm (C-7436), TX Engineering Firm (8877), TX Geology Firm (50254), TX PST CAPM (CS-0000051), TX Surveying Firm (10162200), WY Engineering/Surveying Firm (S-1704)



### Souder, Miller & Associates

Engineering ◆ Environmental ◆ Geomatics 401 West Broadway
Farmington, NM 87401
(505) 716-2787 (mobile)
(505) 325-7535 (office)
Heather.Woods@soudermiller.com

rieather.woods@soddermiller.co

www.soudermiller.com



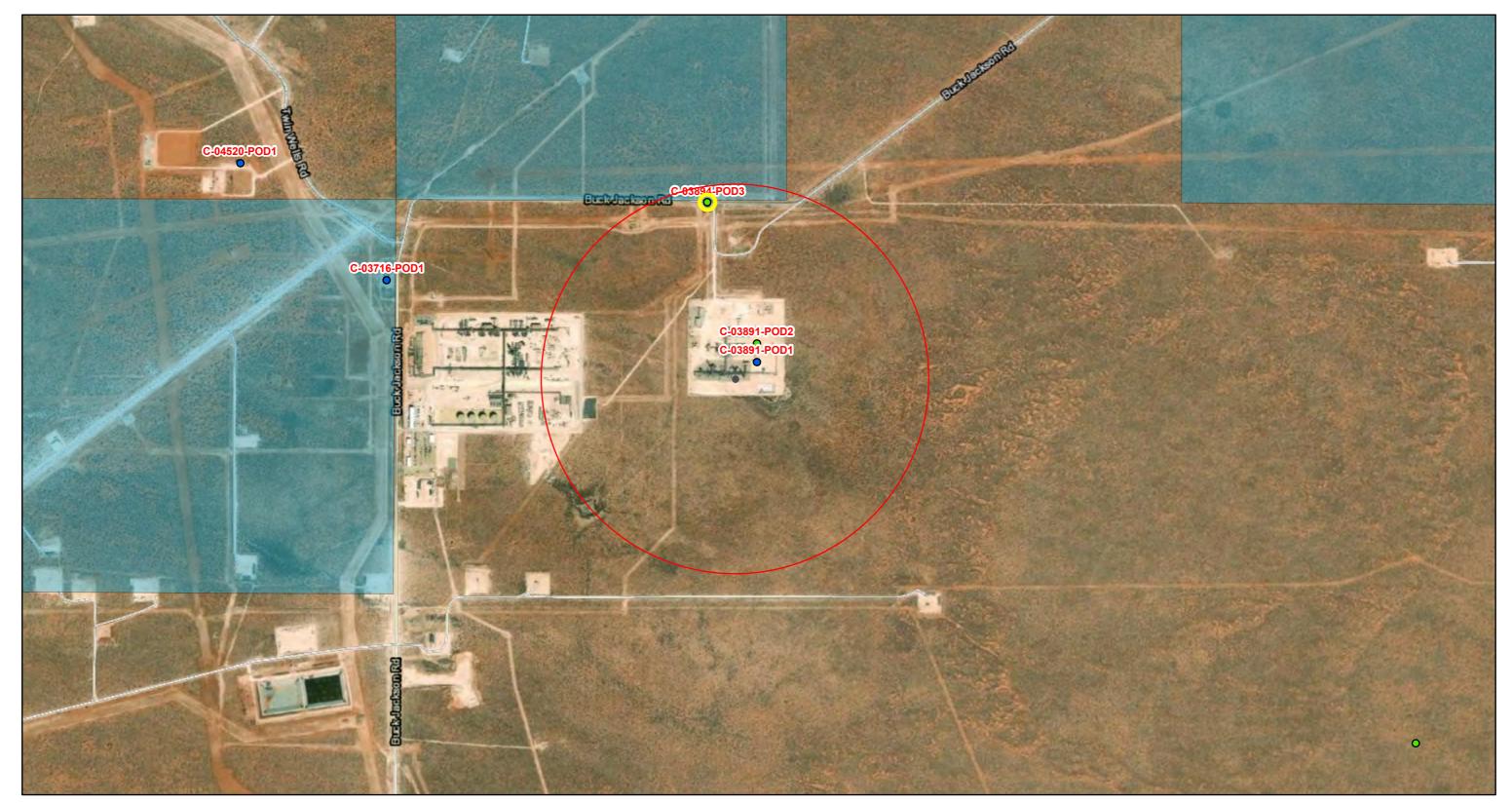


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# APPENDIX B WATER WELL DATA

### OSE POD Locations Map



2/17/2023, 1:26:06 PM

GIS WATERS PODs OSE District Boundary SiteBoundaries

Active New Mexico State Trust Lands

• Pending Both Estates

1:18,056 0 0.17 0.35 0.7 mi 0 0.3 0.6 1.2 km

Esri, HERE, iPC, U.S. Department of Energy Office of Legacy Management, Esri, HERE, Garmin, iPC, Maxar



### WELL RECORD & LOG

### OFFICE OF THE STATE ENGINEER www.ose.state.nm.us

### STATE ENGINEER OFFICE ROSWELL, NEW MEXICO

2015 DEC -4 AM 10: 03

		<del></del>			<del> </del>			···		· · · · · · · · · · · · · · · · · · ·			
NO	l	JMBER (W 1 POD-2	VELL NUMBER)					OSE FILE NUI C-3891	MBER(S)				
GENERAL AND WELL LOCATION	WELL OWN Enterprise		• •		PHONE (OPTIONAL)								
2				<del></del>		·····							
WELL	•		ng address . Rm11.104		:	CITY Houston		TX 77002	ZIP				
<u> </u>	WELL	<del> </del>		DEGREES	MINUTES	SECOND	s			<u> </u>	<del>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</del>		
. Y	LOCATIO		ATTTUDE	32	9	39.8	N	* ACCURACY	REQUIRED: ONE TEN	TH OF A SECOND			
ERA	(FROM GI	PS)	ONGITUDE	103	49	37.1	w	* DATUM REG	QUIRED: WGS 84				
	DESCRIPTI	ON RELAT	TING WELL LOCATION	TO STREET ADDI	RESS AND COMMON	LANDMAR	KS – PLS	S (SECTION, TO	WNSHJIP, RANGE) WH	ERE AVAILABLE			
1. (	15 miles se	15 miles southeast of Malaga,NM Section 1 Township 25S Range 30E											
	LICENSE NUMBER NAME OF LICENSED DRILLER NAME OF WELL DRILLING COMPANY												
	WD-	1723			Randy Stewart				Stev	vart Bros. Drilling			
	DRILLING S	TARTED	DRILLING ENDER	DEPTH OF CO	MPLETED WELL (F)	r) E	ORE HO	E DEPTH (FT)	DEPTH WATER FIR	ST ENCOUNTERED (FT)	)		
	11/10	0/15	11/14/15		635		1	650		429			
			<u></u>		<del></del>			······································	STATIC WATER LEV	EL IN COMPLETED WE	LL (FT)		
N	COMPLETE	D WELL IS	S: ARTESIAN	DRY HOL	E SHALLOV	W (UNCONF	INED)			429			
E	DRILLING F	LUID:	AIR	MUD	ADDITIVI	ES – SPECIF	Y:						
CASING INFORMATION	DRILLING METHOD: ROTARY HAMMER CABLE TOOL OTHER												
Ĭ.	DEPTH	(feet bgl)	BORE HOLI	CASING	MATERIAL AND	OR	C.A	SING	CASING	CASING WALL	SLOT		
5	FROM	то			GRADE (include each casing string, and note sections of screen)			ECTION	INSIDE DIAM.	THICKNESS	SIZE		
ES		1	(inches)					YPE	(inches)	(inches)	(inches)		
77	0	20	18		J-55 Steel		]	N/A	12.625	.375	N/A		
ğ	20	459	12.250	ATSM	I A53 grade B stee	1	Weld		6.125	.250	N/A		
E	459	460	12.250	Dissir	nilar metal adapter		Weld		6.125	.250	N/A		
DRILLING	460	635	12,250	ASTM A	778 304 Stainless S	steel	V	Veld	6,125	.250	1/16		
~	635	650	12.250		None		1	ŇΑ	N/A	N/A			
				<u> </u>									
1	DEPTH	(feet bgl)	BORE HOLE	119	T ANNULAR SE	AT MATE	DIAT A	ND	AMOUNT	METHO	D OF		
3	FROM	TO	DIAM. (inches	. !	VEL PACK SIZE-				(cubic feet)		METHOD OF PLACEMENT		
8	0	5	12.250		1/4" Do	a Gravel			3	Trem			
ATH	5	427	12.250		******	Cement			245	Trem	<del></del>		
Z Z	427	429	<del></del>		<del></del>	ine sand			2	Trem	<del></del>		
3	429	650		<del>-  </del>	<del> </del>	Sand			149	Trem	*** ****		
Š	743	030	12.250		0-12	Gana	···		149	Tient			
3. ANNULAR MATERIAL													
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<u> </u>						·			***************************************				
	OSE INTER	NAL US	E 3-C3 /	<del></del>		····				LOG (Version 10/29	0/15)		
FILE	NUMBER	('	-389/		POD NUI	MBER	<u> </u>	TRN N	UMBER 5	2/228			
TOC	ATTON	$\mathcal{T}_{\mathcal{C}}$	こくこうへに	. / 1	1616	•	•		$M \cap A$	LOW PAGE	1000		



### STATE ENGINEER OFFICE ROSWELL. NEW MEXICO

	DEPTH (	feet bgl)		2015 DEC	-// /// ///	ESTIMATED
	FROM	то	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED DEC INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER (): BEARING? (YES/NO)	U ¥IELD FOR WATER- BEARING
ļ			20			ZONES (gpm)
	0	20	20	Caliche- hard medium to fine sand	YVN	
	20	50	30	Sand- tan, medium to fine grained, some silt	Y /N	
	50	180 200	130 20	Sand- light brown, medium to fine grained, poorly graded, some silt  Silty sand- light brown, well graded	Y √N	
1	180	Y /N	·			
	200	Y VN				
ELL	210	Y \N				
4. HYDROGEOLOGIC LOG OF WELL	280	360	80	Silty sand-light brown, medium to fine grained, reddish silt	Y /N	
0.5	360	420	60	Sand-light brown,medium to fine grained,well graded,few gravel	Y VN	
ro	420	450	30	Sand-tan, fine grained, some silt	✓Y N	
99	450	460	10	Silty sand-reddish brown,fine to medium grained	✓Y N	
S S	460	490	30	Sand,tan,fine grained,some silt	✓Y N	
Š	490	500	10	Sand-tan, fine grained, some silt, few fine gravel	✓Y N	
080	500	530	30	Clayey silt-reddish brown, some fine sand	✓Y N	
HX	530	635	105	Silty sand-light brown,medium to fine grained	✓ Y N	
4	635	650	15	Mudstone-Red	Y VN	
					Y N	
					Y N	
					Y N	
			Y N			
					Y N	
			Y N			
	METHOD U	SED TO ES	TIMATE YIELD	OF WATER-BEARING STRATA: TOT	AL ESTIMATED	224
	<b>✓</b> PUMP	AI	RLIFT [	BAILER OTHER - SPECIFY: WE	LL YIELD (gpm):	<del>3.30</del>
NO	WELL TEST	TEST F	RESULTS - ATTA TIME, END TIM	ACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDI ME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER TH	ING DISCHARGE M E TESTING PERIO	METHOD, D.
PERVISION	MISCELLAN	EOUS INF	ORMATION: 10	hr. drawdown= 67.5' @33gpm, well yield exceeds 33 GPM		
PER			18	hr. drawdown= 67.5' @33gpm, well yield exceeds 33 GPM		1
						in the state of th
₩ J						į
TEST; RIG SI	DDINECALAR	E/C) OF DR	TI DIC OUT	THOU ON THE TRION OF THE CONTROL OF		
			ILL RIG SUPER	VISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRU	CHON OTHER TH	AN LICENSEE:
	Danny L Wh	ne				
	THE UNDER	SIGNED HI	EREBY CERTIFI	ES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, T	IE FOREGOING IS	A TRUE AND
25	CORRECT R	ECORD OF ERMIT HOL	THE ABOVE DI DER WITHIN 20	ESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECOR DAYS AFTER COMPLETION OF WELL DRILLING:	D WITH THE STAT	TE ENGINEER
SIGNATURE		4 -	001	A /)		
Sig	Kay	.le 011	H	A Rull (IX) and	12/1/15	
9	1 James	CICNATU	DE CE DRU LEI	MANUELLAND FERMEN		
	<u> </u>	SIGNATU	AL OF DRIELER	R / PRINT SIGNEE NAME	DATE	
FOR	OSE INTERN	AL USE		WR-20 WELL RE	CORD & LOG (Ven	sion 06/08/2012)
FILE	NUMBER	<u>C</u> -	3891	POD NUMBER A TRN NUMBER	571	227
LOC	ATION	£55	.30E	1.2.4.4 MOI	nitor	PAGE 2 OF 2



(A CLW#### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned,

C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

	POD Sub-		_	Q Q	•				.,	-	-	Water
POD Number	Code basin	County	64 °	16 4	Sec	: Tws	Rng	Х	Y	Well	Water	Column
C 03716 POD1	CUB	ED	4 :	2 2	02	25S	30E	609069	3559211 🌍	600	425	175
C 03891 POD1	CUB	ED	4	4 2	01	25S	30E	610608	3558890 🌍	635	429	206

Average Depth to Water: 427 feet

> Minimum Depth: 425 feet

Maximum Depth: 429 feet

**Record Count: 2** 

**PLSS Search:** 

Section(s): 2, 1, 11, 12 Township: 25S Range: 30E



No records found.

**PLSS Search:** 

Section(s): 31 Township: 24S Range: 31E



(A CLW#### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned,

C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

**POD** Sub-

QQQ Code basin County 64 16 4 Sec Tws Rng 3 3 4 35 24S 30E

608454 3559687

**Well Water Column** 630 455

Depth Depth Water 175

Average Depth to Water: 455 feet

> 455 feet Minimum Depth:

455 feet Maximum Depth:

**Record Count: 1** 

**POD Number** 

C 04520 POD1

**PLSS Search:** 

Range: 30E **Section(s):** 35, 36 Township: 24S



No records found.

**PLSS Search:** 

Section(s): 6, 7 Township: 25S Range: 31E

လုံ



### WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

_					5 6 5 T 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					
	POD NUMB	ER (WELL	NUMBER)	2211		OSE FOLE NU	VBER(S) A 7	1/		
NO.			<del></del>	37/6		PHONE (OPT)	<u>, , , , , , , , , , , , , , , , , , , </u>	16		
GENERAL AND WELL LOCATION	WELL OWN	TER NAME	PCO	LP	, i	·				
יני	WELL OWN	TER MAILT	NO ADDRESS	- 0-	- 3	спу	CATLS Gad NM 88220			
WEL		3/0	4 E	757 GR	EEN KOT	le CAI	15 09 d	WM 8	800	
ĝ.	WELL			DEGREES	MINUTES SECO	NDS	REQUIRED: ONE TEN	CLOS + SECOND		
	LOCATIO	ON L	ATTTUDE	_32	07 34	10 N	QUIRED: WGS 84	HOF A SECOND		
ER	(FROM G	1_1	ONGITUDE	103	5035.59	<u> </u>				
	DESCRIPT	ION RELA	TNG WELL LOCATI	ON TO STREET ADDRES	S AND COMMON LANDM	(ARKS	, 0	1 - 4	,	
ij	We	s# 3	Buch	facker	on Rd,	in Center	of Su	5 Stalue	·~	
	(2.5 ACR	UE)	(10 ACRE)	(40 ACRE)	(160 ACRE)	SECTION /	TOWNSHIP	□ NORTH RANGE	ELST	
¥.		4	1/4	¼		LOT NUMBER	BLOCK NUMBER	UNIT/TRA	west	
OPTIONÁL.	SUBDIVISI	ON NAME				LOT NOMBER			1	
OP	HYDROGR	APHIC SUF	LVEY			<u></u>	MAP NUMBER	TRACTINU	MBER	
2.	1									
	LICENSE N	UMBER	NAME OF LICE	ASED DIGILLER	01		NAME OF WELL DR	ILLING COMPANY	,00,	
	WD-1	229	K	ichard	Carter		Carter Well Della			
-	DRILLING	STARTED	DRILLING ENT	ED DEPTH OF COMP	LETED WELL (FT)					
N	2/5/2014 3/3/2014 PluggEd 600							/EL IN COMPLETED WEL	1.(FD)	
DRILLING INFORMATION	COMPLETE	ED METT I	S: ARTESIAN	DRY HOLE	SHALLOW (UNCO	ONFINED)	4	25		
FORU	DRILLING FLUID: AIR MUD ADDITIVES - SPECIFY:									
2	DRILLING METHOD: ROTARY				CABLE TOOL	OTHER - SPECIFY:				
LIX.	DEPTH (FT)		BORE HOL		CASING		INSIDE DIA.	CASING WALL	SLOT	
발	FROM	то	DIA. (IN)	J	MATERIAL		CASING (IN)	THICKNESS (IN)	SIZE (IN)	
. e.										
,					,	<del></del>				
						<u> </u>				
<u>:</u>	0.50-		<u> </u>		DRIVATION DESCRIP	TION OF PRINCIPAL V	VATER-BEARING S	TRATA	YIELD	
. 🛪	FROM	н (FT) ТО	THICKNES (FT)	S .	(INCLUDE WATER	BEARING CAVITIES	NCIPAL WATER-BEARING STRATA  VIELI AVITIES OR FRACTURE ZONES)  (GPM			
WATER BEARING STRAT	442	600	2 158	Re	Israde	tona			50	
S.		00					<u>.                                    </u>			
			<u> </u>				<del></del>			
BEA			_							
TER	METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA						TOTAL ESTIMATED	WELL YIELD (GPM)	1	
	METHOD	10ED 10 E	SIMWIE LEFT AL	HATER-DEVICES OF THE		•		50		
*	<u></u>									
	FOR OS	E INTERN	NAL USE					RD & LOG (Version 6		
		V CD CD	ALUSE - 2011	^	POD NUMBI	ER	TRN NUMBE	R 53010	12	

	_
10:56:50 a.m.	12-16-2010

Page 363 of 180

								_≃_	
			☐ SUBME	RSIBLE	□ JET	NO PUMP - WELL NOT EQUIPPED	2	· Æ	
<b>a</b> l	TYPE OF	PUMP:	TURBIN		CYLINDER	OTHER - SPECIFY:	· · · · · · · · · · · · · · · · · · ·	177	
Ž			DEPTI		BORE HOLE		AMOUNT	CMETHO	D OF
AND PUMP			FROM	10	DIA. (IN)	MATERIAL TYPE AND SIZE	(CUBIC FID	. PLACE	MENT
	ANNI SEAL		0	425	83/4	Coment & Water	252=	TRE	EMIE
SEAL	GRAVE			700					
vi		1	425	600	8 34	Silien SAND	73.5	TRE	MIE
<u></u>	DEPTI	1 (57)	THICK	NECC		COLOR AND TYPE OF MATERIAL ENCOUNTE	ERÉD	WAT	
` - :	FROM	то	THICK (F		(INCLU	JDE WATER-BEARING CAVITIES OR FRACTU	RE ZONES)	BEAR	ING?
			2	<u> </u>	whi	to Caliabie		☐ YES	<b>M</b> NO
	0	2	2		Po	I Sond		☐ YES	<b>B</b> NO
	2	4		4	1/2	t. Colichie		☐ YES	ОИД
	4_	/8			000	7		☐ YES	NO
•	18	120		2	Res	d Sond		☐ YES	<b>™</b> NO
7	120	168		<u>8</u>		Clay L		☐ YES	<b>S</b> NO
LOG OF WELL	168	263	9		<u>Fer</u>	1 March Stone	<del></del>	☐ YES	₽ио
301	263	266		3	Ke	d Clay		YES	₩ ио
<u> </u>	266	406		46	led	Sond stone		☐ YES	ОИ
GEOLOGIC	406	416		<u> </u>	Ked	Clag		YES	NO E
) 유	416	442	ء_2	6	gro	y Clay		YES	ON □
	442	600			Per	Sand 500		YES	□ NO
ع ا		<u> </u>						☐ YES	□ NO
١		<u> </u>			<u> </u>			YES	ON
							·	☐ YES	ON □
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						<del></del>		☐ YES	□ NO
		<u> </u>	<u> </u>		<u> </u>	TO THE V DOCUMENT THE GEOLOGIC	LI OG OF THE WELL		
			ATTAC	H ADDITION	IAL PAGES AS N	EEDED TO FULLY DESCRIBE THE GEOLOGIC		77	·
	Ĭ		METHOD:	☐ BAILE	ER PUMP	AIR LIFT OTHER - SPECIFY:			
INFO	WELI	L TEST	TEST RES	ULTS - ATT	ACH A COPY OF	DATA COLLECTED DURING WELL TESTING, AND DRAWDOWN OVER THE TESTING PERI	INCLUDING START 1 OD.	IME, END I	IME,
∵¥	` <u></u>	<u> </u>	<del>!</del> -		NO DISCHARGE	And Distriction of the second	· · · · · · · · · · · · · · · · · · ·		
TEST & ADDITION	ADDITIO	NAL STATE	MENTS OR EXP	LANATIONS:					
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· 끭		~~~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	10 0 TITE A	DOVE DEC	'RINFILHOLE AN	(I) I HA I HE OR SILL WILL I ILL IIII	ECORD WITH THE ST	ATE ENGIN	IEER AND
5	THE PE	RMIT HOI	LDER WITHI	N 20 DAYS	AFTER COMPLET	TON OF WELL DRILLING:			
SIGNATURE		V.	har	//_	ten	3/10/2014			
8. SI		July 1	AGNATL	IKE OF ERI	AGEN /	DATE			
	<u> </u>	ju	cyact	<u>/</u>					<u></u>

		WELL RECORD & LOG (Version 6/9/08)
FILE NUMBER ( - 27) 10	POD NUMBER	TRN NUMBER 539192
	2.21	PAGE 2 OF 2
LOCATION 255,30E,02	<u> </u>	

# APPENDIX C SAMPLING PROTOCOL



### **Sampling Protocol**

The soil samples were collected in laboratory supplied containers in accordance with this sampling protocol, immediately placed on ice and sent under standard chain-of-custody protocols to Envirotech Laboratory in Farmington, New Mexico for analysis. Samples collected for laboratory analysis were analyzed for total chloride using EPA Method 300.0; benzene, toluene, ethylbenzene and total xylenes (BTEX) using EPA Method 8021B; and motor, diesel and gasoline range organics (MRO, DRO, and GRO) by EPA Method 8015D.

### **Sampling Analysis Field Quality Assurance Procedures**

A unique sample numbering was used to identify each sample collected and designated for on-site and off-site laboratory analysis. The purpose of this numbering scheme was to provide a tracking system for the retrieval of analytical and field data on each sample. Sample identification numbers were recorded on sample labels or tags, field notes, chain-of-custody records (COC) and all other applicable documentation used during the project. Sample labels were affixed to all sample containers during sampling activities. Information was recorded on each sample container label at the time of sample collection. The information recorded on the labels were as follows: sample identification number; sample type (discrete or composite); site name and area/location number; analysis to be performed; type of chemical preservative present in container; date and time of sample collection; and sample collector's name and initials. All samples were packed in ice in an approved rigid body container, custody sealed signed and shipped to the appropriate laboratory via insured currier service.

COC procedures implemented for the project provided documentation of the handling of each sample from the time of collection until completion of laboratory analysis. A COC form serves as a legal record of possession of the sample. A sample is considered to be under custody if one or more of the following criteria are met: the sample is in the sampler's possession; the sample is in the sampler's view after being in possession; the sample was in the sampler's possession and then was placed into a locked area to prevent tampering; and/or the sample is in a designated secure area. Custody was documented throughout the project field sampling activities by a chain-of custody form initiated each day during which samples are collected. Container custody seals placed on either individual samples or on the rigid body container were used to ensure that no sample tampering occurs between the time the samples are placed into the containers and the time the containers are opened for analysis at the laboratory. Container custody seals were signed and dated by the individual responsible for completing the COC form contained within the container.

# APPENDIX D FIELD NOTES AND PHOTO LOG

Received by OCD: 3/4/2024 9:35:13 AM Cryo

Collect excavation confirmation samples.

Take photos.

Offsite @ 1040



SW Photograph #1 Client: **Enterprise Field** Services Site Name: South Eddy Cryo Amine Release Date Photo Taken: 01/13/2023 Release Location: N32.160412, W103.82791 H-S1-T25S- R30E Eddy County, New Mexico 01/13/2023, Photo Taken by: Description: Facing west-northwest, view of the remediation area. Sarahmay Schlea



Photograph #2

Client: Enterprise Field Services

Site Name: South Eddy Cryo Amine Release

Date Photo Taken: 01/13/2023

Release Location: N32.160412, W103.82791

H-S1-T25S- R30E Eddy County, New Mexico

Photo Taken by: Sarahmay Schlea

N NW NE 300 © 326°NW (T) © 32.160309°N, 103.827882°W ±13ft ▲ 3403ft

Description: Facing northwest, view of the remediation area.



Photograph #3

Client: Enterprise Field Services

Site Name: South Eddy Cryo Amine Release

Date Photo Taken: 01/13/2023

Release Location: N32.160412, W103.82791

H-S1-T25S- R30E Eddy County, New Mexico

Photo Taken by: Sarahmay Schlea

NW NE 

Description: Facing north-northeast, view of the remediation area.







Photograph #5

Client: Enterprise Field Services

Site Name: South Eddy Cryo Amine Release

Date Photo Taken: 01/13/2023

Release Location: N32.160412, W103.82791

H-S1-T25S- R30E Eddy County, New Mexico

Photo Taken by: Sarahmay Schlea

NW NE 300 330 

Description: Facing north, view of the remediation area.

# APPENDIX E LABORATORY ANALYTICAL REPORTS

Report to:
Heather Woods



5796 U.S. Hwy 64 Farmington, NM 87401

Phone: (505) 632-1881 Envirotech-inc.com





### envirotech

Practical Solutions for a Better Tomorrow

### **Analytical Report**

Souder Miller Associates - Carlsbad

Project Name: South Eddy Cryo Plant

Work Order: E301073

Job Number: 97057-0001

Received: 1/14/2023

Revision: 2

Report Reviewed By:

Walter Hinchman Laboratory Director 2/27/23

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.

Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.

Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.

Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.

Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.

Date Reported: 2/27/23

Heather Woods 201 S Halagueno St. Carlsbad, NM 88220

Project Name: South Eddy Cryo Plant

Workorder: E301073

Date Received: 1/14/2023 8:00:00AM

Heather Woods,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 1/14/2023 8:00:00AM, under the Project Name: South Eddy Cryo Plant.

The analytical test results summarized in this report with the Project Name: South Eddy Cryo Plant apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman

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### Sample Summary

Souder Miller Associates - Carlsbad	Project Name:	South Eddy Cryo Plant	Reported:
201 S Halagueno St.	Project Number:	97057-0001	Keporteu:
Carlsbad NM, 88220	Project Manager:	Heather Woods	02/27/23 11:37

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
BH01 @ 0	E301073-01A	Soil	01/13/23	01/14/23	Glass Jar, 4 oz.
BH02 @ 0	E301073-02A	Soil	01/13/23	01/14/23	Glass Jar, 4 oz.
BH03 @ 0	E301073-03A	Soil	01/13/23	01/14/23	Glass Jar, 4 oz.
BH04 @ 0	E301073-04A	Soil	01/13/23	01/14/23	Glass Jar, 4 oz.
CS01	E301073-05A	Soil	01/13/23	01/14/23	Glass Jar, 4 oz.
CS02	E301073-06A	Soil	01/13/23	01/14/23	Glass Jar, 4 oz.
CS03	E301073-07A	Soil	01/13/23	01/14/23	Glass Jar, 4 oz.
CS04	E301073-08A	Soil	01/13/23	01/14/23	Glass Jar, 4 oz.
CS05	E301073-09A	Soil	01/13/23	01/14/23	Glass Jar, 4 oz.
CS06	E301073-10A	Soil	01/13/23	01/14/23	Glass Jar, 4 oz.
CS07	E301073-11A	Soil	01/13/23	01/14/23	Glass Jar, 4 oz.
CS08	E301073-12A	Soil	01/13/23	01/14/23	Glass Jar, 4 oz.
CS09	E301073-13A	Soil	01/13/23	01/14/23	Glass Jar, 4 oz.
CS10	E301073-14A	Soil	01/13/23	01/14/23	Glass Jar, 4 oz.
CS11	E301073-15A	Soil	01/13/23	01/14/23	Glass Jar, 4 oz.
CS12	E301073-16A	Soil	01/13/23	01/14/23	Glass Jar, 4 oz.
CS13	E301073-17A	Soil	01/13/23	01/14/23	Glass Jar, 4 oz.
CS14	E301073-18A	Soil	01/13/23	01/14/23	Glass Jar, 4 oz.
CS15	E301073-19A	Soil	01/13/23	01/14/23	Glass Jar, 4 oz.
CS16	E301073-20A	Soil	01/13/23	01/14/23	Glass Jar, 4 oz.



### Sample Data

Souder Miller Associates - Carlsbad	Project Name:	South Eddy Cryo Plant	
201 S Halagueno St.	Project Number:	97057-0001	Reported:
Carlsbad NM, 88220	Project Manager:	Heather Woods	2/27/2023 11:37:30AM

### CS01

### E301073-05

		E301073-03				
Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Anal	Analyst: SL		Batch: 2302083
Benzene	ND	0.0250	1	01/14/23	01/16/23	
Ethylbenzene	ND	0.0250	1	01/14/23	01/16/23	
Toluene	ND	0.0250	1	01/14/23	01/16/23	
o-Xylene	ND	0.0250	1	01/14/23	01/16/23	
p,m-Xylene	ND	0.0500	1	01/14/23	01/16/23	
Total Xylenes	ND	0.0250	1	01/14/23	01/16/23	
Surrogate: 4-Bromochlorobenzene-PID		97.0 %	70-130	01/14/23	01/16/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Anal	Analyst: SL		Batch: 2302083
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/14/23	01/16/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		91.8 %	70-130	01/14/23	01/16/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analy	yst: RAS		Batch: 2303002
Diesel Range Organics (C10-C28)	61.0	25.0	1	01/15/23	01/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	01/15/23	01/16/23	
Surrogate: n-Nonane		71.3 %	50-200	01/15/23	01/16/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analy	yst: BA		Batch: 2302085
Chloride	628	20.0	1	01/14/23	01/14/23	



Souder Miller Associates - Carlsbad	Project Name:	South Eddy Cryo Plant	
201 S Halagueno St.	Project Number:	97057-0001	Reported:
Carlsbad NM, 88220	Project Manager:	Heather Woods	2/27/2023 11:37:30AM

### **CS02**

		Reporting				
Analyte	Result	Limit	Diluti	on Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	A	nalyst: SL		Batch: 2302083
Benzene	ND	0.0250	1	01/14/23	01/16/23	
Ethylbenzene	ND	0.0250	1	01/14/23	01/16/23	
Toluene	ND	0.0250	1	01/14/23	01/16/23	
o-Xylene	ND	0.0250	1	01/14/23	01/16/23	
p,m-Xylene	ND	0.0500	1	01/14/23	01/16/23	
Total Xylenes	ND	0.0250	1	01/14/23	01/16/23	
Surrogate: 4-Bromochlorobenzene-PID		97.2 %	70-130	01/14/23	01/16/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	A	nalyst: SL		Batch: 2302083
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/14/23	01/16/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		93.6 %	70-130	01/14/23	01/16/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	A	nalyst: RAS		Batch: 2303002
Diesel Range Organics (C10-C28)	28.5	25.0	1	01/15/23	01/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	01/15/23	01/16/23	
Surrogate: n-Nonane		95.1 %	50-200	01/15/23	01/16/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	A	nalyst: BA		Batch: 2302085
Chloride	671	20.0	1	01/14/23	01/14/23	

Souder Miller Associates - Carlsbad	Project Name:	South Eddy Cryo Plant	
201 S Halagueno St.	Project Number:	97057-0001	Reported:
Carlsbad NM, 88220	Project Manager:	Heather Woods	2/27/2023 11:37:30AM

### **CS03**

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	llyst: SL		Batch: 2302083
Benzene	ND	0.0250	1	01/14/23	01/16/23	
Ethylbenzene	ND	0.0250	1	01/14/23	01/16/23	
Toluene	ND	0.0250	1	01/14/23	01/16/23	
o-Xylene	ND	0.0250	1	01/14/23	01/16/23	
p,m-Xylene	ND	0.0500	1	01/14/23	01/16/23	
Total Xylenes	ND	0.0250	1	01/14/23	01/16/23	
Surrogate: 4-Bromochlorobenzene-PID		97.1 %	70-130	01/14/23	01/16/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	llyst: SL		Batch: 2302083
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/14/23	01/16/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		89.2 %	70-130	01/14/23	01/16/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	llyst: RAS		Batch: 2303002
Diesel Range Organics (C10-C28)	ND	25.0	1	01/15/23	01/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	01/15/23	01/16/23	
Surrogate: n-Nonane		89.7 %	50-200	01/15/23	01/16/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	lyst: BA		Batch: 2302085
Chloride	924	40.0	2	01/14/23	01/14/23	



Souder Miller Associates - Carlsbad	Project Name:	South Eddy Cryo Plant	
201 S Halagueno St.	Project Number:	97057-0001	Reported:
Carlsbad NM, 88220	Project Manager:	Heather Woods	2/27/2023 11:37:30AM

### **CS04**

	Reporting				
Result	Limit	Dilution	Prepared	Analyzed	Notes
mg/kg	mg/kg	Analy	yst: SL		Batch: 2302083
ND	0.0250	1	01/14/23	01/16/23	
ND	0.0250	1	01/14/23	01/16/23	
ND	0.0250	1	01/14/23	01/16/23	
ND	0.0250	1	01/14/23	01/16/23	
ND	0.0500	1	01/14/23	01/16/23	
ND	0.0250	1	01/14/23	01/16/23	
	95.2 %	70-130	01/14/23	01/16/23	
mg/kg	mg/kg	Analyst: SL			Batch: 2302083
ND	20.0	1	01/14/23	01/16/23	
	90.5 %	70-130	01/14/23	01/16/23	
mg/kg	mg/kg	Analy	yst: RAS		Batch: 2303002
27.6	25.0	1	01/15/23	01/16/23	
ND	50.0	1	01/15/23	01/16/23	
	94.3 %	50-200	01/15/23	01/16/23	
	_		. 7.4		D . 1 2202005
mg/kg	mg/kg	Analy	yst: BA		Batch: 2302085
	mg/kg ND 27.6	Result         Limit           mg/kg         mg/kg           ND         0.0250           ND         0.0250           ND         0.0250           ND         0.0250           ND         0.0500           ND         0.0250           mg/kg         mg/kg           MD         20.0           90.5 %         mg/kg           mg/kg         mg/kg           27.6         25.0           ND         50.0	Result         Limit         Dilution           mg/kg         mg/kg         Analy           ND         0.0250         1           ND         0.0250         1           ND         0.0250         1           ND         0.0250         1           ND         0.0500         1           ND         0.0250         1           ND         0.0250         1           95.2%         70-130           mg/kg         mg/kg         Analy           ND         20.0         1           mg/kg         mg/kg         Analy           mg/kg         mg/kg         Analy           27.6         25.0         1           ND         50.0         1	Result         Limit         Dilution         Prepared           mg/kg         mg/kg         Analyst: SL           ND         0.0250         1         01/14/23           ND         0.0250         1         01/14/23           ND         0.0250         1         01/14/23           ND         0.0250         1         01/14/23           ND         0.0500         1         01/14/23           ND         0.0250         1         01/14/23           mg/kg         mg/kg         Analyst: SL           ND         20.0         1         01/14/23           mg/kg         mg/kg         Analyst: RAS           27.6         25.0         1         01/15/23           ND         50.0         1         01/15/23	Result         Limit         Dilution         Prepared         Analyzed           mg/kg         mg/kg         Analyst: SL           ND         0.0250         1         01/14/23         01/16/23           ND         0.0250         1         01/14/23         01/16/23           ND         0.0250         1         01/14/23         01/16/23           ND         0.0500         1         01/14/23         01/16/23           ND         0.0250         1         01/14/23         01/16/23           ND         0.0250         1         01/14/23         01/16/23           mg/kg         mg/kg         Analyst: SL           ND         20.0         1         01/14/23         01/16/23           mg/kg         mg/kg         Analyst: RAS           27.6         25.0         1         01/15/23         01/16/23           ND         50.0         1         01/15/23         01/16/23



Souder Miller Associates - Carlsbad	Project Name:	South Eddy Cryo Plant	
201 S Halagueno St.	Project Number:	97057-0001	Reported:
Carlsbad NM, 88220	Project Manager:	Heather Woods	2/27/2023 11:37:30AM

### **CS05**

		Reporting				
Analyte	Result	Limit	Dilution	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	alyst: SL	<u> </u>	Batch: 2302083
Benzene	ND	0.0250	1	01/14/23	01/16/23	
Ethylbenzene	ND	0.0250	1	01/14/23	01/16/23	
Toluene	ND	0.0250	1	01/14/23	01/16/23	
o-Xylene	ND	0.0250	1	01/14/23	01/16/23	
p,m-Xylene	ND	0.0500	1	01/14/23	01/16/23	
Total Xylenes	ND	0.0250	1	01/14/23	01/16/23	
Surrogate: 4-Bromochlorobenzene-PID		97.5 %	70-130	01/14/23	01/16/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	alyst: SL		Batch: 2302083
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/14/23	01/16/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		92.2 %	70-130	01/14/23	01/16/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	alyst: RAS		Batch: 2303002
Diesel Range Organics (C10-C28)	ND	25.0	1	01/15/23	01/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	01/15/23	01/16/23	
Surrogate: n-Nonane		84.5 %	50-200	01/15/23	01/16/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	alyst: BA		Batch: 2302085
Chloride	1210	20.0	1	01/14/23	01/14/23	



Souder Miller Associates - Carlsbad	Project Name:	South Eddy Cryo Plant	
201 S Halagueno St.	Project Number:	97057-0001	Reported:
Carlsbad NM, 88220	Project Manager:	Heather Woods	2/27/2023 11:37:30AM

### **CS06**

		D				
Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	ılyst: SL	<u> </u>	Batch: 2302083
Benzene	ND	0.0250	1	01/14/23	01/16/23	
Ethylbenzene	ND	0.0250	1	01/14/23	01/16/23	
Toluene	ND	0.0250	1	01/14/23	01/16/23	
o-Xylene	ND	0.0250	1	01/14/23	01/16/23	
p,m-Xylene	ND	0.0500	1	01/14/23	01/16/23	
Total Xylenes	ND	0.0250	1	01/14/23	01/16/23	
Surrogate: 4-Bromochlorobenzene-PID		96.1 %	70-130	01/14/23	01/16/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	ılyst: SL		Batch: 2302083
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/14/23	01/16/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		91.0 %	70-130	01/14/23	01/16/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	ılyst: RAS		Batch: 2303002
Diesel Range Organics (C10-C28)	ND	25.0	1	01/15/23	01/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	01/15/23	01/16/23	
Surrogate: n-Nonane		104 %	50-200	01/15/23	01/16/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	ılyst: BA		Batch: 2302085
Chloride	1360	100	5	01/14/23	01/14/23	



Souder Miller Associates - Carlsbad	Project Name:	South Eddy Cryo Plant	
201 S Halagueno St.	Project Number:	97057-0001	Reported:
Carlsbad NM, 88220	Project Manager:	Heather Woods	2/27/2023 11:37:30AM

### **CS07**

	·	Reporting				
Analyte	Result	Limit	Dilution	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	An	alyst: SL		Batch: 2302083
Benzene	ND	0.0250	1	01/14/23	01/16/23	
Ethylbenzene	ND	0.0250	1	01/14/23	01/16/23	
Toluene	ND	0.0250	1	01/14/23	01/16/23	
o-Xylene	ND	0.0250	1	01/14/23	01/16/23	
p,m-Xylene	ND	0.0500	1	01/14/23	01/16/23	
Total Xylenes	ND	0.0250	1	01/14/23	01/16/23	
Surrogate: 4-Bromochlorobenzene-PID		97.8 %	70-130	01/14/23	01/16/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	An	Analyst: SL		Batch: 2302083
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/14/23	01/16/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		94.0 %	70-130	01/14/23	01/16/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	An	alyst: RAS		Batch: 2303002
Diesel Range Organics (C10-C28)	ND	25.0	1	01/15/23	01/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	01/15/23	01/16/23	
Surrogate: n-Nonane		103 %	50-200	01/15/23	01/16/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	An	alyst: BA		Batch: 2302085
Chloride	774	40.0	2	01/14/23	01/14/23	



Souder Miller Associates - Carlsbad	Project Name:	South Eddy Cryo Plant	
201 S Halagueno St.	Project Number:	97057-0001	Reported:
Carlsbad NM, 88220	Project Manager:	Heather Woods	2/27/2023 11:37:30AM

### **CS08**

		Reporting				
Analyte	Result	Limit	Dilutio	on Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Aı	nalyst: SL		Batch: 2302083
Benzene	ND	0.0250	1	01/14/23	01/16/23	
Ethylbenzene	ND	0.0250	1	01/14/23	01/16/23	
Toluene	ND	0.0250	1	01/14/23	01/16/23	
o-Xylene	ND	0.0250	1	01/14/23	01/16/23	
p,m-Xylene	ND	0.0500	1	01/14/23	01/16/23	
Total Xylenes	ND	0.0250	1	01/14/23	01/16/23	
Surrogate: 4-Bromochlorobenzene-PID		98.9 %	70-130	01/14/23	01/16/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Aı	nalyst: SL		Batch: 2302083
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/14/23	01/16/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		90.2 %	70-130	01/14/23	01/16/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Aı	nalyst: RAS		Batch: 2303002
Diesel Range Organics (C10-C28)	ND	25.0	1	01/15/23	01/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	01/15/23	01/16/23	
Surrogate: n-Nonane		99.7 %	50-200	01/15/23	01/16/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Aı	nalyst: BA		Batch: 2302085
Chloride	520	20.0	1	01/14/23	01/14/23	



Souder Miller Associates - Carlsbad	Project Name:	South Eddy Cryo Plant	
201 S Halagueno St.	Project Number:	97057-0001	Reported:
Carlsbad NM, 88220	Project Manager:	Heather Woods	2/27/2023 11:37:30AM

### **CS09**

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Anal	yst: SL		Batch: 2302083
Benzene	ND	0.0250	1	01/14/23	01/16/23	
Ethylbenzene	ND	0.0250	1	01/14/23	01/16/23	
Toluene	ND	0.0250	1	01/14/23	01/16/23	
o-Xylene	ND	0.0250	1	01/14/23	01/16/23	
p,m-Xylene	ND	0.0500	1	01/14/23	01/16/23	
Total Xylenes	ND	0.0250	1	01/14/23	01/16/23	
Surrogate: 4-Bromochlorobenzene-PID		97.9 %	70-130	01/14/23	01/16/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Anal	yst: SL		Batch: 2302083
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/14/23	01/16/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		91.9 %	70-130	01/14/23	01/16/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Anal	yst: RAS		Batch: 2303002
Diesel Range Organics (C10-C28)	ND	25.0	1	01/15/23	01/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	01/15/23	01/16/23	
Surrogate: n-Nonane		98.7 %	50-200	01/15/23	01/16/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Anal	yst: BA		Batch: 2302085
Chloride	235	20.0	1	01/14/23	01/14/23	

Souder Miller Associates - Carlsbad	Project Name:	South Eddy Cryo Plant	
201 S Halagueno St.	Project Number:	97057-0001	Reported:
Carlsbad NM, 88220	Project Manager:	Heather Woods	2/27/2023 11:37:30AM

### **CS10**

		Reporting				
Analyte	Result	Limit	Diluti	on Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	A	nalyst: SL		Batch: 2302083
Benzene	ND	0.0250	1	01/14/23	01/16/23	
Ethylbenzene	ND	0.0250	1	01/14/23	01/16/23	
Toluene	ND	0.0250	1	01/14/23	01/16/23	
o-Xylene	ND	0.0250	1	01/14/23	01/16/23	
p,m-Xylene	ND	0.0500	1	01/14/23	01/16/23	
Total Xylenes	ND	0.0250	1	01/14/23	01/16/23	
Surrogate: 4-Bromochlorobenzene-PID		98.0 %	70-130	01/14/23	01/16/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	A	nalyst: SL		Batch: 2302083
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/14/23	01/16/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		90.2 %	70-130	01/14/23	01/16/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	A	nalyst: RAS		Batch: 2303002
Diesel Range Organics (C10-C28)	ND	25.0	1	01/15/23	01/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	01/15/23	01/16/23	
Surrogate: n-Nonane		99.2 %	50-200	01/15/23	01/16/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	A	nalyst: BA		Batch: 2302085
Chloride	361	20.0	1	01/14/23	01/14/23	



Souder Miller Associates - Carlsbad	Project Name:	South Eddy Cryo Plant	
201 S Halagueno St.	Project Number:	97057-0001	Reported:
Carlsbad NM, 88220	Project Manager:	Heather Woods	2/27/2023 11:37:30AM

### CS11

		Reporting				
Analyte	Result	Limit	Dilution	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	alyst: SL		Batch: 2302083
Benzene	ND	0.0250	1	01/14/23	01/16/23	
Ethylbenzene	ND	0.0250	1	01/14/23	01/16/23	
Toluene	ND	0.0250	1	01/14/23	01/16/23	
o-Xylene	ND	0.0250	1	01/14/23	01/16/23	
p,m-Xylene	ND	0.0500	1	01/14/23	01/16/23	
Total Xylenes	ND	0.0250	1	01/14/23	01/16/23	
Surrogate: 4-Bromochlorobenzene-PID		97.4 %	70-130	01/14/23	01/16/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	alyst: SL		Batch: 2302083
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/14/23	01/16/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		87.8 %	70-130	01/14/23	01/16/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	alyst: RAS		Batch: 2303002
Diesel Range Organics (C10-C28)	ND	25.0	1	01/15/23	01/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	01/15/23	01/16/23	
Surrogate: n-Nonane		99.3 %	50-200	01/15/23	01/16/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	alyst: BA		Batch: 2302085
Chloride	1350	100	5	01/14/23	01/15/23	



Souder Miller Associates - Carlsbad	Project Name:	South Eddy Cryo Plant	
201 S Halagueno St.	Project Number:	97057-0001	Reported:
Carlsbad NM, 88220	Project Manager:	Heather Woods	2/27/2023 11:37:30AM

### **CS12**

		Reporting				
Analyte	Result	Limit	Diluti	on Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	A	nalyst: SL		Batch: 2302083
Benzene	ND	0.0250	1	01/14/23	01/16/23	
Ethylbenzene	ND	0.0250	1	01/14/23	01/16/23	
Toluene	ND	0.0250	1	01/14/23	01/16/23	
o-Xylene	ND	0.0250	1	01/14/23	01/16/23	
p,m-Xylene	ND	0.0500	1	01/14/23	01/16/23	
Total Xylenes	ND	0.0250	1	01/14/23	01/16/23	
Surrogate: 4-Bromochlorobenzene-PID		97.0 %	70-130	01/14/23	01/16/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	A	nalyst: SL		Batch: 2302083
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/14/23	01/16/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		88.1 %	70-130	01/14/23	01/16/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	A	nalyst: RAS		Batch: 2303002
Diesel Range Organics (C10-C28)	ND	25.0	1	01/15/23	01/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	01/15/23	01/16/23	
Surrogate: n-Nonane		98.8 %	50-200	01/15/23	01/16/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	A	nalyst: BA		Batch: 2302085
Chloride	295	20.0	1	01/14/23	01/15/23	



Souder Miller Associates - Carlsbad	Project Name:	South Eddy Cryo Plant	
201 S Halagueno St.	Project Number:	97057-0001	Reported:
Carlsbad NM, 88220	Project Manager:	Heather Woods	2/27/2023 11:37:30AM

### CS13

		Reporting				
Analyte	Result	Limit	Dilution	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	alyst: SL		Batch: 2302083
Benzene	ND	0.0250	1	01/14/23	01/16/23	
Ethylbenzene	ND	0.0250	1	01/14/23	01/16/23	
Toluene	ND	0.0250	1	01/14/23	01/16/23	
o-Xylene	ND	0.0250	1	01/14/23	01/16/23	
o,m-Xylene	ND	0.0500	1	01/14/23	01/16/23	
Total Xylenes	ND	0.0250	1	01/14/23	01/16/23	
Surrogate: 4-Bromochlorobenzene-PID		100 %	70-130	01/14/23	01/16/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Ana	alyst: SL		Batch: 2302083
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/14/23	01/16/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		88.6 %	70-130	01/14/23	01/16/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	alyst: RAS		Batch: 2303002
Diesel Range Organics (C10-C28)	ND	25.0	1	01/15/23	01/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	01/15/23	01/16/23	
Surrogate: n-Nonane		108 %	50-200	01/15/23	01/16/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	alyst: BA		Batch: 2302085
Chloride	629	20.0	1	01/14/23	01/15/23	



Souder Miller Associates - Carlsbad	Project Name:	South Eddy Cryo Plant	
201 S Halagueno St.	Project Number:	97057-0001	Reported:
Carlsbad NM, 88220	Project Manager:	Heather Woods	2/27/2023 11:37:30AM

### **CS14**

		Domontino				
Analyte	Result	Reporting Limit	Dilution	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B		mg/kg	Analyst: SL		<u> </u>	Batch: 2302083
Benzene	ND	0.0250	1	01/14/23	01/16/23	
Ethylbenzene	ND	0.0250	1	01/14/23	01/16/23	
Toluene	ND	0.0250	1	01/14/23	01/16/23	
o-Xylene	ND	0.0250	1	01/14/23	01/16/23	
p,m-Xylene	ND	0.0500	1	01/14/23	01/16/23	
Total Xylenes	ND	0.0250	1	01/14/23	01/16/23	
Surrogate: 4-Bromochlorobenzene-PID		99.6 %	70-130	01/14/23	01/16/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: SL			Batch: 2302083
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/14/23	01/16/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		93.8 %	70-130	01/14/23	01/16/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Ana	alyst: RAS		Batch: 2303002
Diesel Range Organics (C10-C28)	ND	25.0	1	01/15/23	01/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	01/15/23	01/16/23	
Surrogate: n-Nonane		97.2 %	50-200	01/15/23	01/16/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Ana	alyst: BA		Batch: 2302085
Chloride	796	20.0	1	01/14/23	01/15/23	



Souder Miller Associates - Carlsbad	Project Name:	South Eddy Cryo Plant	
201 S Halagueno St.	Project Number:	97057-0001	Reported:
Carlsbad NM, 88220	Project Manager:	Heather Woods	2/27/2023 11:37:30AM

### **CS15**

		Reporting				
Analyte	Result	Limit	Diluti	on Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B		mg/kg	A	nalyst: SL		Batch: 2302083
Benzene	ND	0.0250	1	01/14/23	01/16/23	
Ethylbenzene	ND	0.0250	1	01/14/23	01/16/23	
Toluene	ND	0.0250	1	01/14/23	01/16/23	
o-Xylene	ND	0.0250	1	01/14/23	01/16/23	
p,m-Xylene	ND	0.0500	1	01/14/23	01/16/23	
Total Xylenes	ND	0.0250	1	01/14/23	01/16/23	
Surrogate: 4-Bromochlorobenzene-PID		98.7 %	70-130	01/14/23	01/16/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: SL			Batch: 2302083
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/14/23	01/16/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		88.4 %	70-130	01/14/23	01/16/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	A	nalyst: RAS		Batch: 2303002
Diesel Range Organics (C10-C28)	25.5	25.0	1	01/15/23	01/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	01/15/23	01/16/23	
Surrogate: n-Nonane		97.1 %	50-200	01/15/23	01/16/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	A	nalyst: BA		Batch: 2302085
Chloride	1060	20.0	1	01/14/23	01/15/23	



Souder Miller Associates - Carlsbad	Project Name:	South Eddy Cryo Plant	
201 S Halagueno St.	Project Number:	97057-0001	Reported:
Carlsbad NM, 88220	Project Manager:	Heather Woods	2/27/2023 11:37:30AM

### **CS16**

	Reporting									
Analyte	Result	Limit	Dilutio	n Prepared	Analyzed	Notes				
Volatile Organics by EPA 8021B		mg/kg	Analyst: SL			Batch: 2302083				
Benzene	ND	0.0250	1	01/14/23	01/16/23					
Ethylbenzene	ND	0.0250	1	01/14/23	01/16/23					
Toluene	ND	0.0250	1	01/14/23	01/16/23					
o-Xylene	ND	0.0250	1	01/14/23	01/16/23					
p,m-Xylene	ND	0.0500	1	01/14/23	01/16/23					
Total Xylenes	ND	0.0250	1	01/14/23	01/16/23					
Surrogate: 4-Bromochlorobenzene-PID		99.8 %	70-130	01/14/23	01/16/23					
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: SL			Batch: 2302083				
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/14/23	01/16/23					
Surrogate: 1-Chloro-4-fluorobenzene-FID		90.7 %	70-130	01/14/23	01/16/23					
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	An	alyst: RAS		Batch: 2303002				
Diesel Range Organics (C10-C28)	ND	25.0	1	01/15/23	01/16/23					
Oil Range Organics (C28-C36)	ND	50.0	1	01/15/23	01/16/23					
Surrogate: n-Nonane		98.2 %	50-200	01/15/23	01/16/23					
Anions by EPA 300.0/9056A	mg/kg	mg/kg	An	alyst: BA		Batch: 2302085				
· ·	978	20.0		01/14/23	01/15/23					



### **QC Summary Data**

		QC 50	41111116	iry Dat					
Souder Miller Associates - Carlsbad 201 S Halagueno St. Carlsbad NM, 88220		Project Name: Project Number: Project Manager:	97	outh Eddy Cry 7057-0001 eather Woods	yo Plant			2/2	<b>Reported:</b> 7/2023 11:37:30AM
		Volatile O	rganics l	by EPA 802	21B				Analyst: SL
Analyte		Reporting	Spike	Source		Rec		RPD	
Analyte	Result	Limit	Level	Result	Rec	Limits	RPD	Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2302083-BLK1)							Prepared: 0	1/14/23 Anal	yzed: 01/15/23
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	7.75		8.00		96.9	70-130			
LCS (2302083-BS1)							Prepared: 0	1/14/23 Anal	yzed: 01/15/23
Benzene	4.46	0.0250	5.00		89.1	70-130			
Ethylbenzene	4.77	0.0250	5.00		95.3	70-130			
Toluene	4.81	0.0250	5.00		96.3	70-130			
o-Xylene	4.91	0.0250	5.00		98.1	70-130			
p,m-Xylene	9.66	0.0500	10.0		96.6	70-130			
Total Xylenes	14.6	0.0250	15.0		97.1	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.65		8.00		95.6	70-130			
Matrix Spike (2302083-MS1)				Source:	E301073-	04	Prepared: 01/14/23 Analyzed: 01/15/23		
Benzene	4.63	0.0250	5.00	ND	92.6	54-133			
Ethylbenzene	4.95	0.0250	5.00	ND	99.1	61-133			
Toluene	5.01	0.0250	5.00	ND	100	61-130			
p-Xylene	5.10	0.0250	5.00	ND	102	63-131			
p,m-Xylene	10.0	0.0500	10.0	ND	100	63-131			
Total Xylenes	15.1	0.0250	15.0	ND	101	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.85		8.00		98.1	70-130			
Matrix Spike Dup (2302083-MSD1)				Source:	E301073-	04	Prepared: 0	1/14/23 Anal	yzed: 01/15/23
Benzene	4.50	0.0250	5.00	ND	90.1	54-133	2.78	20	
Ethylbenzene	4.82	0.0250	5.00	ND	96.3	61-133	2.80	20	
Toluene	4.87	0.0250	5.00	ND	97.4	61-130	2.82	20	
o-Xylene	4.96	0.0250	5.00	ND	99.2	63-131	2.78	20	
p,m-Xylene	9.76	0.0500	10.0	ND	97.6	63-131	2.64	20	
	14.7		15.0	ND	98.2	63-131	2.69	20	

8.00

7.73

70-130



Surrogate: 4-Bromochlorobenzene-PID

### **QC Summary Data**

Souder Miller Associates - Carlsbad 201 S Halagueno St.	Project Name: Project Number:	South Eddy Cryo Plant 97057-0001	Reported:
Carlsbad NM, 88220	Project Manager:	Heather Woods	2/27/2023 11:37:30AM

Carlsbad NM, 88220		Project Manage	r: He	eather Woods				2	2/27/2023 11:37:30AM
	Non	halogenated		Analyst: SL					
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits	RPD %	RPD Limit %	Notes
Blank (2302083-BLK1)							Prepared: 0	1/14/23 An	nalyzed: 01/15/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.50		8.00		93.8	70-130			
LCS (2302083-BS2)							Prepared: 0	1/14/23 An	nalyzed: 01/15/23
Gasoline Range Organics (C6-C10)	47.0	20.0	50.0		94.0	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.38		8.00		92.2	70-130			
Matrix Spike (2302083-MS2)				Source:	E301073-	04	Prepared: 0	1/14/23 An	nalyzed: 01/15/23
Gasoline Range Organics (C6-C10)	48.4	20.0	50.0	ND	96.8	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.51		8.00		93.8	70-130			
Matrix Spike Dup (2302083-MSD2)				Source:	E301073-	04	Prepared: 0	1/14/23 An	nalyzed: 01/15/23
Gasoline Range Organics (C6-C10)	47.7	20.0	50.0	ND	95.5	70-130	1.41	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.68		8.00		96.0	70-130			



### **QC Summary Data**

Souder Miller Associates - Carlsbad	Project Name:	South Eddy Cryo Plant	Reported:
201 S Halagueno St.	Project Number:	97057-0001	·
Carlsbad NM, 88220	Project Manager:	Heather Woods	2/27/2023 11:37:30AM

Carlsbad NM, 88220		Project Manage	r: He	ather Woods				2	/27/2023 11:37:30AN
	Nonha	logenated Or	ganics by l	EPA 8015I	) - DRO	/ORO			Analyst: RAS
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2303002-BLK1)							Prepared: 0	1/15/23 An	alyzed: 01/16/23
Diesel Range Organics (C10-C28)	ND	25.0							
Dil Range Organics (C28-C36)	ND	50.0							
urrogate: n-Nonane	57.8		50.0		116	50-200			
LCS (2303002-BS1)							Prepared: 0	1/15/23 An	alyzed: 01/16/23
Diesel Range Organics (C10-C28)	224	25.0	250		89.7	38-132			
urrogate: n-Nonane	50.1		50.0		100	50-200			
Matrix Spike (2303002-MS1)				Source:	E301073-	01	Prepared: 0	1/15/23 An	alyzed: 01/16/23
Diesel Range Organics (C10-C28)	248	25.0	250	ND	99.1	38-132			
urrogate: n-Nonane	54.1		50.0		108	50-200			
Matrix Spike Dup (2303002-MSD1)				Source:	E301073-	01	Prepared: 0	1/15/23 An	alyzed: 01/17/23
Diesel Range Organics (C10-C28)	250	25.0	250	ND	100	38-132	1.06	20	
'urrogate: n-Nonane	52.9		50.0		106	50-200			



Chloride

### **QC Summary Data**

Souder Miller Associates - Carlsbad 201 S Halagueno St. Carlsbad NM, 88220		Project Name: Project Number: Project Manager	: 9	South Eddy Cry 97057-0001 Heather Woods				2/	<b>Reported:</b> 27/2023 11:37:30AM
		Anions	by EPA	300.0/9056	4				Analyst: BA
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
Blank (2302085-BLK1)							Prepared: 0	1/14/23 Ana	alyzed: 01/14/23
Chloride	ND	20.0							
LCS (2302085-BS1)							Prepared: 0	1/14/23 Ana	alyzed: 01/14/23
Chloride	241	20.0	250		96.2	90-110			
LCS Dup (2302085-BSD1)							Prepared: 0	1/14/23 Ana	alyzed: 01/14/23

250

20.0

99.3

90-110

3.10

20

248

#### QC Summary Report Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



### **Definitions and Notes**

	Souder Miller Associates - Carlsbad	Project Name:	South Eddy Cryo Plant	
ı	201 S Halagueno St.	Project Number:	97057-0001	Reported:
ı	Carlsbad NM, 88220	Project Manager:	Heather Woods	02/27/23 11:37

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

Note (1): Methods marked with \*\* are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



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Printed: 1/16/2023 9:59:31AM

### **Envirotech Analytical Laboratory**

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client: Souder Miller Associates - Carlsbad	Date Received:	01/14/23 08	:00	Work Order ID:	E301073
Phone: (575) 200-5443	Date Logged In:	01/14/23 09	21	Logged In By:	Alexa Michaels
Email:	Due Date:	01/16/23 17	:00 (0 day TAT)		
Chain of Custody (COC)					
1. Does the sample ID match the COC?		Yes			
2. Does the number of samples per sampling site locati	on match the COC	Yes			
3. Were samples dropped off by client or carrier?		Yes	Carrier: C	<u>Courier</u>	
4. Was the COC complete, i.e., signatures, dates/times,	requested analyses?	Yes			
5. Were all samples received within holding time? Note: Analysis, such as pH which should be cond i.e. 15 minute hold time, are not included in this d		Yes		<u>Commen</u>	ts/Resolution
Sample Turn Around Time (TAT)					
6. Did the COC indicate standard TAT, or Expedited TA	AT?	Yes		Project South Eddy Cy	ro Plant has been
Sample Cooler				separated into 2 reports	due to sample
7. Was a sample cooler received?		Yes		volume. Workoerders a	-
8. If yes, was cooler received in good condition?		Yes		E301073 & E301074.	ie us foliows
9. Was the sample(s) received intact, i.e., not broken?		Yes		E3010/3 & E3010/4.	
10. Were custody/security seals present?		No			
11. If yes, were custody/security seals intact?		NA			
12. Was the sample received on ice? If yes, the recorded temp Note: Thermal preservation is not required, if sam minutes of sampling 13. If no visible ice, record the temperature. Actual s	nples are received w/i 15	Yes			
*	sample temperature. 4	<u>C</u>			
Sample Container  14. Are aqueous VOC samples present?		No			
15. Are VOC samples collected in VOA Vials?		NA			
16. Is the head space less than 6-8 mm (pea sized or less	ss)?	NA			
17. Was a trip blank (TB) included for VOC analyses?	,.	NA			
18. Are non-VOC samples collected in the correct cont	ainers?	Yes			
19. Is the appropriate volume/weight or number of sample		Yes			
Field Label					
20. Were field sample labels filled out with the minimu	ım information:				
Sample ID?		Yes			
Date/Time Collected?		Yes	'		
Collectors name?		No			
<u>Sample Preservation</u> 21. Does the COC or field labels indicate the samples v	vera preserved?	No			
22. Are sample(s) correctly preserved?	were preserved?	NA NA			
24. Is lab filteration required and/or requested for disso	alved metals?	No			
	arvou mouns.	110			
<u>Multiphase Sample Matrix</u> 26. Does the sample have more than one phase, i.e., mu	ultinhaga?	NT-			
27. If yes, does the COC specify which phase(s) is to b	=	No			
	c anaryzeu:	NA			
Subcontract Laboratory					
28. Are samples required to get sent to a subcontract la		No			
29. Was a subcontract laboratory specified by the clien	t and if so who?	NA S	ubcontract Lab	o: na	
Client Instruction					

Date

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Report to:
Heather Woods



5796 U.S. Hwy 64 Farmington, NM 87401

Phone: (505) 632-1881 Envirotech-inc.com





# envirotech

Practical Solutions for a Better Tomorrow

# **Analytical Report**

Souder Miller Associates - Carlsbad

Project Name: South Eddy Cryo Plant

Work Order: E301074

Job Number: 97057-0001

Received: 1/14/2023

Revision: 1

Report Reviewed By:

Walter Hinchman Laboratory Director 1/17/23

Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise. Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way. Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc. Envirotech Inc, holds the Utah TNI certification NM00979 for data reported. Envirotech Inc, holds the Texas TNI certification T104704557 for data reported. Envirotech Inc, holds the NM SDWA certification for data reported. (Lab #NM00979)

Date Reported: 1/17/23

Heather Woods 201 S Halagueno St. Carlsbad, NM 88220

Project Name: South Eddy Cryo Plant

Workorder: E301074

Date Received: 1/14/2023 8:00:00AM

Heather Woods,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 1/14/2023 8:00:00AM, under the Project Name: South Eddy Cryo Plant.

The analytical test results summarized in this report with the Project Name: South Eddy Cryo Plant apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues reguarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

Walter Hinchman

Laboratory Director Office: 505-632-1881 Cell: 775-287-1762

whinchman@envirotech-inc.com

Raina Schwanz

Laboratory Administrator Office: 505-632-1881

rainaschwanz@envirotech-inc.com

Alexa Michaels

Sample Custody Officer Office: 505-632-1881

labadmin@envirotech-inc.com

Field Offices:

Southern New Mexico Area Lynn Jarboe

Technical Representative/Client Services

Office: 505-421-LABS(5227)

Cell: 505-320-4759

ljarboe@envirotech-inc.com

Technical Representative Office: 505-421-LABS(5227)

Rayny Hagan

West Texas Midland/Odessa Area

Envirotech Web Address: www.envirotech-inc.com

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### **Sample Summary**

Souder Miller Associates - Carlsbad	Project Name:	South Eddy Cryo Plant	Donoutodi
201 S Halagueno St.	Project Number:	97057-0001	Reported:
Carlsbad NM, 88220	Project Manager:	Heather Woods	01/17/23 16:12

Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
CS17	E301074-01A	Soil	01/13/23	01/14/23	Glass Jar, 4 oz.
CS18	E301074-02A	Soil	01/13/23	01/14/23	Glass Jar, 4 oz.
CS19	E301074-03A	Soil	01/13/23	01/14/23	Glass Jar, 4 oz.
CS20	E301074-04A	Soil	01/13/23	01/14/23	Glass Jar, 4 oz.
CS21	E301074-05A	Soil	01/13/23	01/14/23	Glass Jar, 4 oz.
CS22	E301074-06A	Soil	01/13/23	01/14/23	Glass Jar, 4 oz.
CS23	E301074-07A	Soil	01/13/23	01/14/23	Glass Jar, 4 oz.
CS24	E301074-08A	Soil	01/13/23	01/14/23	Glass Jar, 4 oz.
CS25	E301074-09A	Soil	01/13/23	01/14/23	Glass Jar, 4 oz.

Souder Miller Associates - Carlsbad	Project Name:	South Eddy Cryo Plant	
201 S Halagueno St.	Project Number:	97057-0001	Reported:
Carlsbad NM, 88220	Project Manager:	Heather Woods	1/17/2023 4:12:17PM

### **CS17**

		E301074-01				
Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Anal	yst: SL		Batch: 2302087
Benzene	ND	0.0250	1	01/14/23	01/15/23	
Ethylbenzene	ND	0.0250	1	01/14/23	01/15/23	
Toluene	ND	0.0250	1	01/14/23	01/15/23	
o-Xylene	ND	0.0250	1	01/14/23	01/15/23	
p,m-Xylene	ND	0.0500	1	01/14/23	01/15/23	
Total Xylenes	ND	0.0250	1	01/14/23	01/15/23	
Surrogate: 4-Bromochlorobenzene-PID		96.4 %	70-130	01/14/23	01/15/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Anal	yst: SL		Batch: 2302087
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/14/23	01/15/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		92.2 %	70-130	01/14/23	01/15/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Anal	yst: RAS		Batch: 2303003
Diesel Range Organics (C10-C28)	ND	25.0	1	01/15/23	01/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	01/15/23	01/16/23	
Surrogate: n-Nonane		96.6 %	50-200	01/15/23	01/16/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Anal	yst: BA		Batch: 2302086
Chloride	1140	40.0	2	01/14/23	01/14/23	
Silionae	• •					



Souder Miller Associates - Carlsbad	Project Name:	South Eddy Cryo Plant	
201 S Halagueno St.	Project Number:	97057-0001	Reported:
Carlsbad NM, 88220	Project Manager:	Heather Woods	1/17/2023 4:12:17PM

### **CS18**

		Reporting				
Analyte	Result	Limit	Diluti	on Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	A	nalyst: SL		Batch: 2302087
Benzene	ND	0.0250	1	01/14/23	01/15/23	
Ethylbenzene	ND	0.0250	1	01/14/23	01/15/23	
Toluene	ND	0.0250	1	01/14/23	01/15/23	
o-Xylene	ND	0.0250	1	01/14/23	01/15/23	
p,m-Xylene	ND	0.0500	1	01/14/23	01/15/23	
Total Xylenes	ND	0.0250	1	01/14/23	01/15/23	
Surrogate: 4-Bromochlorobenzene-PID		95.9 %	70-130	01/14/23	01/15/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	A	nalyst: SL		Batch: 2302087
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/14/23	01/15/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		88.7 %	70-130	01/14/23	01/15/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	A	nalyst: RAS		Batch: 2303003
Diesel Range Organics (C10-C28)	ND	25.0	1	01/15/23	01/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	01/15/23	01/16/23	
Surrogate: n-Nonane		101 %	50-200	01/15/23	01/16/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	A	nalyst: BA		Batch: 2302086
Chloride	1210	100	5	01/14/23	01/14/23	



Souder Miller Associates - Carlsbad	Project Name:	South Eddy Cryo Plant	
201 S Halagueno St.	Project Number:	97057-0001	Reported:
Carlsbad NM, 88220	Project Manager:	Heather Woods	1/17/2023 4:12:17PM

### **CS19**

		Reporting				
Analyte	Result	Limit	Dilutio	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	An	alyst: SL		Batch: 2302087
Benzene	ND	0.0250	1	01/14/23	01/15/23	
Ethylbenzene	ND	0.0250	1	01/14/23	01/15/23	
Toluene	ND	0.0250	1	01/14/23	01/15/23	
o-Xylene	ND	0.0250	1	01/14/23	01/15/23	
p,m-Xylene	ND	0.0500	1	01/14/23	01/15/23	
Total Xylenes	ND	0.0250	1	01/14/23	01/15/23	
Surrogate: 4-Bromochlorobenzene-PID		96.8 %	70-130	01/14/23	01/15/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	An	alyst: SL		Batch: 2302087
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/14/23	01/15/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		92.7 %	70-130	01/14/23	01/15/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	An	alyst: RAS		Batch: 2303003
Diesel Range Organics (C10-C28)	ND	25.0	1	01/15/23	01/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	01/15/23	01/16/23	
Surrogate: n-Nonane		97.1 %	50-200	01/15/23	01/16/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	An	alyst: BA		Batch: 2302086
Chloride	275	40.0	2	01/14/23	01/14/23	•

Souder Miller Associates - Carlsbad	Project Name:	South Eddy Cryo Plant	
201 S Halagueno St.	Project Number:	97057-0001	Reported:
Carlsbad NM, 88220	Project Manager:	Heather Woods	1/17/2023 4:12:17PM

### **CS20**

		Reporting				
Analyte	Result	Limit	Dilutio	on Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Aı	nalyst: SL		Batch: 2302087
Benzene	ND	0.0250	1	01/14/23	01/15/23	
Ethylbenzene	ND	0.0250	1	01/14/23	01/15/23	
Toluene	ND	0.0250	1	01/14/23	01/15/23	
o-Xylene	ND	0.0250	1	01/14/23	01/15/23	
p,m-Xylene	ND	0.0500	1	01/14/23	01/15/23	
Total Xylenes	ND	0.0250	1	01/14/23	01/15/23	
Surrogate: 4-Bromochlorobenzene-PID		97.7 %	70-130	01/14/23	01/15/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Aı	nalyst: SL		Batch: 2302087
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/14/23	01/15/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		88.6 %	70-130	01/14/23	01/15/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Aı	nalyst: RAS		Batch: 2303003
Diesel Range Organics (C10-C28)	ND	25.0	1	01/15/23	01/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	01/15/23	01/16/23	
Surrogate: n-Nonane		97.9 %	50-200	01/15/23	01/16/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Aı	nalyst: BA		Batch: 2302086
Chloride	274	20.0	1	01/14/23	01/14/23	<del></del>



Souder Miller Associates - Carlsbad	Project Name:	South Eddy Cryo Plant	
201 S Halagueno St.	Project Number:	97057-0001	Reported:
Carlsbad NM, 88220	Project Manager:	Heather Woods	1/17/2023 4:12:17PM

### **CS21**

		Reporting				
Analyte	Result	Limit	Dilutio	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	An	alyst: SL		Batch: 2302087
Benzene	ND	0.0250	1	01/14/23	01/15/23	
Ethylbenzene	ND	0.0250	1	01/14/23	01/15/23	
Toluene	ND	0.0250	1	01/14/23	01/15/23	
o-Xylene	ND	0.0250	1	01/14/23	01/15/23	
p,m-Xylene	ND	0.0500	1	01/14/23	01/15/23	
Total Xylenes	ND	0.0250	1	01/14/23	01/15/23	
Surrogate: 4-Bromochlorobenzene-PID		97.0 %	70-130	01/14/23	01/15/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	An	alyst: SL		Batch: 2302087
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/14/23	01/15/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		92.0 %	70-130	01/14/23	01/15/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	An	alyst: RAS		Batch: 2303003
Diesel Range Organics (C10-C28)	ND	25.0	1	01/15/23	01/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	01/15/23	01/16/23	
Surrogate: n-Nonane		97.0 %	50-200	01/15/23	01/16/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	An	alyst: BA		Batch: 2302086
Chloride	1270	40.0	2	01/14/23	01/14/23	•



Souder Miller Associates - Carlsbad	Project Name:	South Eddy Cryo Plant	
201 S Halagueno St.	Project Number:	97057-0001	Reported:
Carlsbad NM, 88220	Project Manager:	Heather Woods	1/17/2023 4:12:17PM

### **CS22**

		Reporting				
Analyte	Result	Limit	Dilutio	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	An	alyst: SL		Batch: 2302087
Benzene	ND	0.0250	1	01/14/23	01/15/23	
Ethylbenzene	ND	0.0250	1	01/14/23	01/15/23	
Toluene	ND	0.0250	1	01/14/23	01/15/23	
o-Xylene	ND	0.0250	1	01/14/23	01/15/23	
p,m-Xylene	ND	0.0500	1	01/14/23	01/15/23	
Total Xylenes	ND	0.0250	1	01/14/23	01/15/23	
Surrogate: 4-Bromochlorobenzene-PID		97.1 %	70-130	01/14/23	01/15/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	An	alyst: SL		Batch: 2302087
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/14/23	01/15/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		90.5 %	70-130	01/14/23	01/15/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	An	alyst: RAS		Batch: 2303003
Diesel Range Organics (C10-C28)	ND	25.0	1	01/15/23	01/16/23	
Oil Range Organics (C28-C36)	ND	50.0	1	01/15/23	01/16/23	
Surrogate: n-Nonane		96.0 %	50-200	01/15/23	01/16/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	An	alyst: BA		Batch: 2302086
Chloride	1320	100	5	01/14/23	01/14/23	



Souder Miller Associates - Carlsbad	Project Name:	South Eddy Cryo Plant	
201 S Halagueno St.	Project Number:	97057-0001	Reported:
Carlsbad NM, 88220	Project Manager:	Heather Woods	1/17/2023 4:12:17PM

### **CS23**

		Reporting				
Analyte	Result	Limit	Dilution	n Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Ana	Analyst: SL		Batch: 2302087
Benzene	ND	0.0250	1	01/14/23	01/15/23	
Ethylbenzene	ND	0.0250	1	01/14/23	01/15/23	
Toluene	ND	0.0250	1	01/14/23	01/15/23	
o-Xylene	ND	0.0250	1	01/14/23	01/15/23	
p,m-Xylene	ND	0.0500	1	01/14/23	01/15/23	
Total Xylenes	ND	0.0250	1	01/14/23	01/15/23	
Surrogate: 4-Bromochlorobenzene-PID		96.8 %	70-130	01/14/23	01/15/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: SL		Batch: 2302087	
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/14/23	01/15/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		92.7 %	70-130	01/14/23	01/15/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analyst: RAS			Batch: 2303003
Diesel Range Organics (C10-C28)	367	50.0	2	01/15/23	01/16/23	
Oil Range Organics (C28-C36)	1790	100	2	01/15/23	01/16/23	
Surrogate: n-Nonane		96.4 %	50-200	01/15/23	01/16/23	
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analyst: BA		Batch: 2302086	
Chloride	198	20.0	1	01/14/23	01/14/23	



# **Sample Data**

Souder Miller Associates - Carlsbad	Project Name:	South Eddy Cryo Plant	
201 S Halagueno St.	Project Number:	97057-0001	Reported:
Carlsbad NM, 88220	Project Manager:	Heather Woods	1/17/2023 4:12:17PM

#### CS24

#### E301074-08

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analys	st: SL		Batch: 2302087
Benzene	ND	0.0250	1	01/14/23	01/15/23	
Ethylbenzene	ND	0.0250	1	01/14/23	01/15/23	
Toluene	ND	0.0250	1	01/14/23	01/15/23	
o-Xylene	ND	0.0250	1	01/14/23	01/15/23	
p,m-Xylene	ND	0.0500	1	01/14/23	01/15/23	
Total Xylenes	ND	0.0250	1	01/14/23	01/15/23	
Surrogate: 4-Bromochlorobenzene-PID		97.3 %	70-130	01/14/23	01/15/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analyst: SL			Batch: 2302087
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/14/23	01/15/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		91.3 %	70-130	01/14/23	01/15/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analys	st: RAS		Batch: 2303003
Diesel Range Organics (C10-C28)	143	25.0	1	01/15/23	01/16/23	T17
Oil Range Organics (C28-C36)	289	50.0	1	01/15/23	01/16/23	T17
Surrogate: n-Nonane		97.5 %	50-200	01/15/23	01/16/23	T17
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analys	st: BA		Batch: 2302086
Chloride	930	200	10	01/14/23	01/14/23	



# **Sample Data**

Souder Miller Associates - Carlsbad	Project Name:	South Eddy Cryo Plant	
201 S Halagueno St.	Project Number:	97057-0001	Reported:
Carlsbad NM, 88220	Project Manager:	Heather Woods	1/17/2023 4:12:17PM

#### **CS25**

#### E301074-09

		Reporting				
Analyte	Result	Limit	Dilution	Prepared	Analyzed	Notes
Volatile Organics by EPA 8021B	mg/kg	mg/kg	Analy	st: SL		Batch: 2302087
Benzene	ND	0.0250	1	01/14/23	01/15/23	
Ethylbenzene	ND	0.0250	1	01/14/23	01/15/23	
Toluene	ND	0.0250	1	01/14/23	01/15/23	
o-Xylene	ND	0.0250	1	01/14/23	01/15/23	
p,m-Xylene	ND	0.0500	1	01/14/23	01/15/23	
Total Xylenes	ND	0.0250	1	01/14/23	01/15/23	
Surrogate: 4-Bromochlorobenzene-PID		97.1 %	70-130	01/14/23	01/15/23	
Nonhalogenated Organics by EPA 8015D - GRO	mg/kg	mg/kg	Analy	st: SL		Batch: 2302087
Gasoline Range Organics (C6-C10)	ND	20.0	1	01/14/23	01/15/23	
Surrogate: 1-Chloro-4-fluorobenzene-FID		94.9 %	70-130	01/14/23	01/15/23	
Nonhalogenated Organics by EPA 8015D - DRO/ORO	mg/kg	mg/kg	Analy	st: RAS		Batch: 2303003
Diesel Range Organics (C10-C28)	233	25.0	1	01/15/23	01/16/23	T17
Oil Range Organics (C28-C36)	ND	50.0	1	01/15/23	01/16/23	T17
Surrogate: n-Nonane		106 %	50-200	01/15/23	01/16/23	T17
Anions by EPA 300.0/9056A	mg/kg	mg/kg	Analy	st: BA		Batch: 2302086
Chloride	49.3	40.0	2	01/14/23	01/14/23	•



## **OC Summary Data**

		QC SI	ullilli	ary Data	a				
Souder Miller Associates - Carlsbad 201 S Halagueno St.		Project Name: Project Number:		South Eddy Cry 97057-0001	o Plant				Reported:
Carlsbad NM, 88220		Project Manager:	I	Heather Woods					1/17/2023 4:12:17PM
		Volatile O	rganics	by EPA 802	1B				Analyst: SL
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2302087-BLK1)							Prepared: 0	1/14/23 Aı	nalyzed: 01/15/23
Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	7.75		8.00		96.9	70-130			
LCS (2302087-BS1)							Prepared: 0	1/14/23 Aı	nalyzed: 01/15/23
Benzene	4.01	0.0250	5.00		80.3	70-130			
Ethylbenzene	4.27	0.0250	5.00		85.4	70-130			
Toluene	4.34	0.0250	5.00		86.7	70-130			
o-Xylene	4.45	0.0250	5.00		89.0	70-130			
p,m-Xylene	8.67	0.0500	10.0		86.7	70-130			
Total Xylenes	13.1	0.0250	15.0		87.4	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.81		8.00		97.6	70-130			
Matrix Spike (2302087-MS1)				Source:	E301074-	03	Prepared: 0	1/14/23 Aı	nalyzed: 01/15/23
Benzene	4.16	0.0250	5.00	ND	83.2	54-133			
Ethylbenzene	4.42	0.0250	5.00	ND	88.4	61-133			
Toluene	4.49	0.0250	5.00	ND	89.8	61-130			
p-Xylene	4.61	0.0250	5.00	ND	92.2	63-131			
p,m-Xylene	8.98	0.0500	10.0	ND	89.8	63-131			
Total Xylenes	13.6	0.0250	15.0	ND	90.6	63-131			
Surrogate: 4-Bromochlorobenzene-PID	7.73		8.00		96.6	70-130			
Matrix Spike Dup (2302087-MSD1)				Source:	E301074-	03	Prepared: 0	1/14/23 Aı	nalyzed: 01/15/23
Benzene	4.39	0.0250	5.00	ND	87.8	54-133	5.38	20	
Ethylbenzene	4.69	0.0250	5.00	ND	93.7	61-133	5.89	20	
Toluene	4.75	0.0250	5.00	ND	95.0	61-130	5.58	20	
o-Xylene	4.89	0.0250	5.00	ND	97.8	63-131	5.84	20	
p,m-Xylene	9.52	0.0500	10.0	ND	95.2	63-131	5.86	20	
Total Xylenes	14.4	0.0250	15.0	ND	96.1	63-131	5.85	20	
C			0.00		067	70 120			



Surrogate: 4-Bromochlorobenzene-PID

7.74

70-130

# **QC Summary Data**

Souder Miller Associates - Carlsbad	Project Name:	South Eddy Cryo Plant	Reported:
201 S Halagueno St.	Project Number:	97057-0001	
Carlsbad NM, 88220	Project Manager:	Heather Woods	1/17/2023 4:12:17PM

Carlsbad NM, 88220		Project Manage	r: He	ather Woods				1/1	7/2023 4:12:17PM
	Non	halogenated		Analyst: SL					
Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits	RPD %	RPD Limit %	Notes
DL 1 (2222007 DL 1/1)					70				
Blank (2302087-BLK1)							Prepared: 0	1/14/23 Analy	yzed: 01/15/23
Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.29		8.00		91.1	70-130			
LCS (2302087-BS2)							Prepared: 0	1/14/23 Analy	yzed: 01/15/23
Gasoline Range Organics (C6-C10)	43.9	20.0	50.0		87.9	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.48		8.00		93.5	70-130			
Matrix Spike (2302087-MS2)				Source:	E301074-	03	Prepared: 0	1/14/23 Analy	yzed: 01/15/23
Gasoline Range Organics (C6-C10)	42.3	20.0	50.0	ND	84.6	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.25		8.00		90.6	70-130			
Matrix Spike Dup (2302087-MSD2)				Source:	E301074-	03	Prepared: 0	1/14/23 Analy	yzed: 01/15/23
Gasoline Range Organics (C6-C10)	43.4	20.0	50.0	ND	86.7	70-130	2.48	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.37		8.00		92.1	70-130			

# **QC Summary Data**

Souder Miller Associates - Carlsbad	Project Name:	South Eddy Cryo Plant	Reported:
201 S Halagueno St.	Project Number:	97057-0001	-
Carlsbad NM, 88220	Project Manager:	Heather Woods	1/17/2023 4:12:17PM

Carlsbad NM, 88220		Project Manager	r: He	ather Woods					1/1//2023 4:12:1/PN
	Nonha	logenated Or	ganics by l	EPA 8015I	D - DRO	/ORO			Analyst: RAS
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2303003-BLK1)							Prepared: 0	1/15/23 A	nalyzed: 01/17/23
Diesel Range Organics (C10-C28)	ND	25.0							
il Range Organics (C28-C36)	ND	50.0							
urrogate: n-Nonane	59.1		50.0		118	50-200			
LCS (2303003-BS1)							Prepared: 0	1/15/23 A	nalyzed: 01/17/23
Diesel Range Organics (C10-C28)	251	25.0	250		100	38-132			
urrogate: n-Nonane	56.7		50.0		113	50-200			
Matrix Spike (2303003-MS1)				Source:	E301072-	01	Prepared: 0	1/15/23 A	nalyzed: 01/17/23
Diesel Range Organics (C10-C28)	309	25.0	250	43.4	106	38-132			
urrogate: n-Nonane	54.0		50.0		108	50-200			
Matrix Spike Dup (2303003-MSD1)				Source:	E301072-	01	Prepared: 0	1/15/23 A	nalyzed: 01/17/23
Diesel Range Organics (C10-C28)	349	25.0	250	43.4	122	38-132	12.0	20	
urrogate: n-Nonane	50.7		50.0		101	50-200			

LCS Dup (2302086-BSD1)

Chloride

Prepared: 01/14/23 Analyzed: 01/14/23

20

## **QC Summary Data**

Souder Miller Associates - Carlsbad 201 S Halagueno St. Carlsbad NM, 88220		Project Name: Project Number: Project Manager:	9	outh Eddy Cry 7057-0001 Ieather Woods	o Plant				<b>Reported:</b> 1/17/2023 4:12:17PM
		Anions	by EPA	300.0/9056 <i>A</i>	<b>\</b>				Analyst: BA
Analyte	Result	Reporting Limit	Spike Level	Source Result	Rec	Rec Limits	RPD	RPD Limit	
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%	Notes
Blank (2302086-BLK1)							Prepared: 0	1/14/23 A	nalyzed: 01/14/23
Chloride	ND	20.0							
LCS (2302086-BS1)							Prepared: 0	1/14/23 A	nalyzed: 01/14/23
Chloride	254	20.0	250		102	90-110			

250

20.0

101

90-110

0.273

253

#### QC Summary Report Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



## **Definitions and Notes**

Souder Miller Associates - Carlsbad	Project Name:	South Eddy Cryo Plant	
201 S Halagueno St.	Project Number:	97057-0001	Reported:
Carlsbad NM, 88220	Project Manager:	Heather Woods	01/17/23 16:12

T17 The sample chromatographic pattern does not resemble the typical fuel standard used for quantitation.

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

Note (1): Methods marked with \*\* are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



ct Information	and the same		A CONTRACTOR OF THE PARTY OF TH					1-6	lles	Only	(4)		TAT	FT	E	PA Progr	am
+ Swider	LIM	1914	ASSOCIATES Atte	Bill To	0180	I ah V	VO#	Lat	. 13	ob N	ımber		10 3		RCRA	CWA	SDWA
ect: Southy	Eddy	Cryo	Atte	ress:	- D	PE	20	107	4	4705	mber 7-00	$l\alpha$	1			5	tate
ect Manager:	1000	liene	City	, State, Zip		-	-	-	- A	nalysi	s and Ata	Ethod	1	7		NM CC	UT
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oort due by:				morkago	Lab	DRO/ORO by 8015	GRO/DRO by 8015	RTEX by 8021	VOC. by 8260	Metals 6010	Chloride 300.0		BGDOC - NM	VE - JO		Re	emarks
ime Date	Matrx	No Containers	Sample ID		Number	DHO,	GRO	n're)	VOC.	Met	8		BGI	BGDOC		-	
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111	C	1	CSIB		la							1	X		1		
113	5				3								X				
012 13	5		CS19			+	-					1	V				
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013 113	C		CSZI		5								Y				
014 13	1	-	2.2		10			T					Y				
1015 1/13	S		CS22		19	-	+	+	-	1		+	14	1	11		
1	5	1	CS23				-	1	1	1_		+	1	+	++	41/40	
1017/13	6				18								)				
1016 13	15	44	CS24		a	1	1	T	1	T			1				
1018 1/13	5	1	CS25			-	+	+	+	+	++	+	1	+	+	-	
DIO 113																	
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Additional Instr	Dello S.	nd t	o Heather,	works, Sa	Cannal brain date	OC.	VI	20	4	15	-las consumo	that mal n	reterrat	oc must	כ פרייפל כי	nice the day the	, are sample
the state areas to	the validity a	nd authenticit	of this sample. I am aware that to	mpering with or intentionally misla	abelling the se the section					rece	ned packed in	ice at an	andreut	SOUVE .	, 50633 54 .	1 100 100011	
Relinquished by: (S	idered fraud a	nd may be go	ainds for legal action. Sampled by:  Time	Received by: (Signatu	ha) Data	3-23	Ti	me 1	40	De	eceived	on ice	. (	Y	Use On	ly	
2	X		13/23 1224	Received by: (Signatu	ural // Date				_	- 1	ceived	OIT ICC	(	ن			
Relinquished by	ignature)	6	Date 1 170	Korens	few 1-1	3-23	_	182	29	I	1	_	1	2		<u>T3</u>	
Reinquisted by:	- Cy	18	Date Time	Received by: (Signat	ure) N Date	10	5 G	ime	1	1	VG Tem	C-	U	_			

Printed: 1/16/2023 10:07:54AM

#### **Envirotech Analytical Laboratory**

Sample Receipt Checklist (SRC)

Instructions: Please take note of any NO checkmarks.

If we receive no response concerning these items within 24 hours of the date of this notice, all the samples will be analyzed as requested.

Client:	Souder Miller Associates - Carlsbad	Date Received:	01/14/23 0	8:00	Work Order ID	e: E301074
Phone:	(575) 200-5443	Date Logged In:	01/14/23 0	9:34	Logged In By:	Alexa Michaels
Email:		Due Date:	01/16/23 1	7:00 (0 day TAT)		
Chain of	Custody (COC)					
	he sample ID match the COC?		Yes			
	he number of samples per sampling site location man	tch the COC	Yes			
	amples dropped off by client or carrier?		Yes	Carrier: C	<u>Courier</u>	
	e COC complete, i.e., signatures, dates/times, reques	sted analyses?	Yes			
5. Were a	Il samples received within holding time? Note: Analysis, such as pH which should be conducted in i.e, 15 minute hold time, are not included in this disucssi		Yes		<u>Comm</u>	ents/Resolution
Sample T	Turn Around Time (TAT)					
6. Did the	e COC indicate standard TAT, or Expedited TAT?		Yes		Project South Eddy C	yro Plant has been
Sample C	<u>Cooler</u>				separated into 2 repor	ts due to sample
7. Was a	sample cooler received?		Yes		volume. Workoerders	are as follows
8. If yes,	was cooler received in good condition?		Yes		E301073 & E301074.	
9. Was th	e sample(s) received intact, i.e., not broken?		Yes		E301073 & E301074.	
10. Were	custody/security seals present?		No			
	, were custody/security seals intact?		NA			
12. Was th	he sample received on ice? If yes, the recorded temp is 4°C, Note: Thermal preservation is not required, if samples ar minutes of sampling visible ice, record the temperature. Actual sample	e received w/i 15	Yes			
		temperature. 4	<u>C</u>			
	Container queous VOC samples present?		No			
	OC samples collected in VOA Vials?		NA			
	head space less than 6-8 mm (pea sized or less)?		NA			
	trip blank (TB) included for VOC analyses?		NA			
	on-VOC samples collected in the correct containers'	9	Yes			
	appropriate volume/weight or number of sample contain		Yes			
Field Lal		iers conceteu.	103			
	field sample labels filled out with the minimum info	rmation:				
	ample ID?	THREE CHE	Yes			
	Pate/Time Collected?		Yes			
C	collectors name?		No			
Sample I	Preservation_					
	the COC or field labels indicate the samples were pr	reserved?	No			
	ample(s) correctly preserved?		NA			
24. Is lab	filteration required and/or requested for dissolved n	netals?	No			
	ase Sample Matrix					
26. Does	the sample have more than one phase, i.e., multipha	se?	No			
27. If yes	, does the COC specify which phase(s) is to be analy	yzed?	NA			
Subcontr	act Laboratory					
28. Are sa	amples required to get sent to a subcontract laborato	ry?	No			
	subcontract laboratory specified by the client and it	•	NA	Subcontract Lab	o: NA	
Client I	nstruction					
<u>enene n</u>	1957 <b>44</b> 511011					

Date



**APPENDIX C** 

Photographic Documentation

Project: South Eddy Cryo (Incident ID# nAPP2233445626)

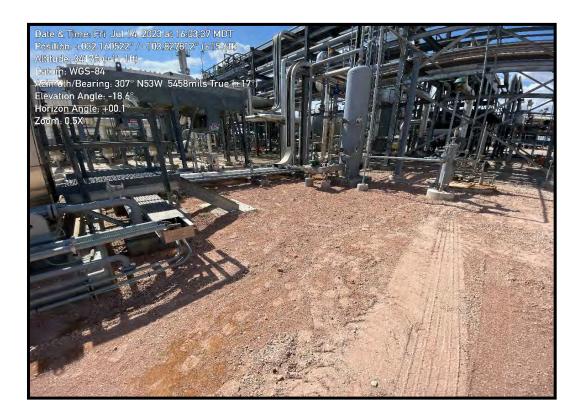
Entity: Enterprise Field Services, LLC

Project #: 03B1226303





View of historical impact area, facing southwest (07/14/2023).



View of historical impact area, facing northwest (07/14/2023).

Project: South Eddy Cryo (Incident ID# nAPP2233445626)

Entity: Enterprise Field Services, LLC

Project #: 03B1226303





View of historical impact area, facing south (07/14/2023).



View of historical impact area, facing southwest (07/14/2023).

# **ENSOLUM**

APPENDIX D

Table

## ENSOLUM

#### TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS **South Eddy Cryo** Enterprise Field Services, LLC **Eddy County, New Mexico** Ensolum Project No. 03B1226303 Total TPH Total Total Depth Benzene Toluene Ethylbenzene TPH GRO TPH DRO TPH MRO Chloride Sulfate Sam ple BTEX (GRO+DRO+MRO) **Xylenes** Designation (feet bgs) (mg/kg) (mg/kg ew Mexico Oil Conservation Division Closure Criteria for Soils Impacted by a Release NE 100 600 (≤ 50 feet) 95th Upper Tolerance Limit Calculation Composite Impact Area Soil Sample Analytical Results 01/13/2023\* 0.5 - 0.75 <0.0250 <0.0250 <50.0 628 NS <0.0250 < 0.0250 61.0 61.0 CS01 140 08/22/2023 NS NS 19 0.5 - 0.75 <0.0250 <0.0250 <0.0250 <0.0500 <20.0 28.5 <50.0 28.5 671 < 0.0250 NS CS02 NS 160 08/22/2023 10 0.5 - 0.75 01/13/2023\* < 0.0250 < 0.0250 < 0.0250 < 0.0250 < 0.0500 <20.0 <25.0 <50.0 CS03 48 550 01/13/2023\* 0.5 - 0.75 <0.0250 <0.0500 <20.0 27.6 27.6 582 NS < 0.0250 < 0.0250 <0.0250 CS04 08/22/2023 NS NS 1,000 0.5 - 0.75 <0.0250 <0.0250 <0.0250 <0.0500 <20.0 <25.0 <50.0 <50.0 1.210 <0.0250 CS05 08/22/2023 NS 49 750 1,360 01/13/2023\* 0.5 - 0.75 < 0.0250 < 0.0250 < 0.0250 <0.0250 < 0.0500 <20.0 <25.0 <50.0 <50.0 NS CS06 08/22/2023 NS 120 774 <0.0250 NS 01/13/2023 0.5 - 0.75 < 0.0250 < 0.0250 <0.0250 < 0.0500 <20.0 <25.0 <50.0 <50.0 CS07 650 08/22/2023 NS NS 50 520 0.5 - 0.75 < 0.0250 < 0.0500 <25.0 <50.0 < 0.0250 < 0.0250 < 0.0250 <20.0 CS08 NS 350 08/22/2023 NS 1.5 235 01/13/2023\* 0.5 - 0.75 < 0.0250 < 0.0250 < 0.0250 < 0.0250 < 0.0500 <20.0 <25.0 <50.0 <50.0 NS CS09 08/22/2023 1.5 NS NS NS 710 01/13/2023\* 0.5 - 0.75 < 0.0250 < 0.0250 < 0.0250 < 0.0250 < 0.0500 <20.0 <25.0 <50.0 <50.0 361 NS CS10 08/22/2023 NS NS 2.200 01/13/2023 0.5 - 0.75 < 0.0250 < 0.0250 < 0.0250 < 0.0250 < 0.0500 <20.0 <25.0 <50.0 <50.0 1.350 NS 780 08/22/2023 NS 190 01/13/2023\* 0.5 - 0.75 < 0.0250 < 0.0250 < 0.0250 < 0.0250 < 0.0500 <20.0 <25.0 <50.0 <50.0 295 NS 08/22/2023 NS NS 850 01/13/2023\* 0.5 - 0.75 < 0.0250 < 0.0250 < 0.0250 < 0.0250 < 0.0500 <20.0 <25.0 <50.0 <50.0 629 NS 08/22/202 NS 340 580 <50.0 01/13/2023\* 0.5 - 0.75 < 0.0250 < 0.0250 <0.0250 <0.0250 < 0.0500 <20.0 <25.0 <50.0 796 NS CS14 08/22/2023 1.5 NS 27 340 01/13/2023\* 0.5 - 0.75 <0.0250 <0.0250 <0.0250 <0.0500 <20.0 25.5 <50.0 25.5 1,060 NS < 0.0250 CS15 08/22/2023 1.5 NS NS 27 100 01/13/2023\* 0.5 - 0.75 < 0.0250 <0.0250 < 0.0500 <20.0 <45.0 <50.0 <50.0 978 NS < 0.0250 CS16 08/22/2023 1.5 NS NS 52 330 01/13/2023\* 0.5 - 0.75 <0.0250 <0.0250 <0.0250 <0.0500 <20.0 <45.0 <50.0 <50.0 1,140 NS < 0.0250 CS17 08/22/2023 NS 18 240 1.5 01/13/2023 0.5 - 0.75 <0.0250 <20.0 <50.0 1,210 NS CS18 08/22/2023 NS 200 1,300 01/13/2023\* 0.5 - 0.75 < 0.0250 < 0.0250 <0.0250 < 0.0250 < 0.0500 <20.0 <45.0 <50.0 <50.0 275 NS CS19 460 08/22/2023 0.5 - 0.75 <0.0250 < 0.0250 < 0.0250 <0.0250 <0.0500 <20.0 <45.0 <50.0 <50.0 274 NS CS20 730 08/22/2023 NS 0.5 - 0.75 <0.0250 <0.0250 <0.0250 <0.0250 <0.0500 <20.0 <45.0 <50.0 <50.0 1,270 NS 01/13/2023\* CS21 230 08/22/2023 1.5 NS 35 01/13/2023\* 0.5 - 0.75 < 0.0250 <0.0250 <0.0250 < 0.0250 < 0.0500 <20.0 <45.0 <50.0 <50.0 1,320 NS CS22 08/22/2023 750 NS 70 0.5 - 0.75 <0.0250 < 0.0250 <0.0250 <0.0250 <0.0500 <20.0 367 1,790 198 CS23 08/22/2023 520 NS 35 NS 1.5 <4.3 35 <46 <0.0250 <0.0500 <20.0 143 289 432 930 NS 0.5 - 0.75 <0.0250 <0.0250 <0.0250 01/13/2023 CS24 08/22/2023 NS 51 640 <9.5 <47 1.5 <4.2 <47 < 0.0250 < 0.0250 < 0.0500 233 <50.0 233 49.3 NS 01/13/2023\* 0.5 - 0.75 < 0.0250 <0.0250 <20.0 CS25 18 660 08/22/2023 1.5 NS <4.9 <46 18 NS Confirmat al Resi BG-1 08/22/2023 1.5 NS NS NS 420 Confirmation Delineation Soil Sample Analytical Results 580 North 08/22/2023 0.25 < 0.022 <0.045 <0.045 <0.090 <0.090 <4.5 <8.9 <44 <44 57 08/22/2023 < 0.015 0.061 < 0.061 9.7 <49 <49 1.700 4.900 East 09/06/2023 0.25 < 0.022 < 0.045 < 0.045 < 0.090 < 0.090 <4.5 <9.8 <49 <49 <60 NS 380 West 08/22/2023 0.25 < 0.017 < 0.035 < 0.035 < 0.070 < 0.070 < 3.5 <9.5 <47 <47 81 1.600

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 - Previously sampled by 3<sup>rd</sup> party consultant

bgs - below ground surface

mg/kg - milligrams per kilogram

NA - Not Applicable

NE - Not Established

NS - Not Sampled

BTEX - Benzene, Toluene, Ethylbenzene, and Xylenes

GRO - Gasoline Range Organics

DRO - Diesel Range Organics

MRO - Motor Oil/Lube Oil Range Organics

TPH - Total Petroleum Hydrocarbon



## **APPENDIX E**

Laboratory Analytical Reports & Chain-of-Custody Documentation



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

August 30, 2023

Kelly Lowery Ensolum LLC 601 Marrenfield #400 Midland, TX 79701 TEL: (214) 733-3165

FAX:

RE: South Eddy Cryo OrderNo.: 2308C96

#### Dear Kelly Lowery:

Hall Environmental Analysis Laboratory received 30 sample(s) on 8/24/2023 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

Date Reported: 8/30/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: CS01

 Project:
 South Eddy Cryo
 Collection Date: 8/22/2023 9:45:00 AM

 Lab ID:
 2308C96-001
 Matrix: SOIL
 Received Date: 8/24/2023 7:25:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	19	7.5	mg/Kg	5	8/24/2023 1:38:41 PM
Sulfate	140	7.5	mg/Kg	5	8/24/2023 1:38:41 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 1 of 37

Date Reported: 8/30/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: CS02

 Project:
 South Eddy Cryo
 Collection Date: 8/22/2023 9:50:00 AM

 Lab ID:
 2308C96-002
 Matrix: SOIL
 Received Date: 8/24/2023 7:25:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	10	7.5	mg/Kg	5	8/24/2023 2:28:20 PM
Sulfate	160	7.5	mg/Kg	5	8/24/2023 2:28:20 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 2 of 37

Date Reported: 8/30/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: CS03

 Project:
 South Eddy Cryo
 Collection Date: 8/22/2023 9:55:00 AM

 Lab ID:
 2308C96-003
 Matrix: SOIL
 Received Date: 8/24/2023 7:25:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	48	7.5	mg/Kg	5	8/24/2023 3:42:48 PM
Sulfate	550	7.5	mg/Kg	5	8/24/2023 3:42:48 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 3 of 37

Date Reported: 8/30/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: CS04

 Project:
 South Eddy Cryo
 Collection Date: 8/22/2023 10:00:00 AM

 Lab ID:
 2308C96-004
 Matrix: SOIL
 Received Date: 8/24/2023 7:25:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS					Analyst: SNS
Sulfate	1000	30	mg/Kg	20	8/24/2023 4:20:01 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 4 of 37

Date Reported: 8/30/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: CS05

 Project:
 South Eddy Cryo
 Collection Date: 8/22/2023 10:05:00 AM

 Lab ID:
 2308C96-005
 Matrix: SOIL
 Received Date: 8/24/2023 7:25:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	49	7.5	mg/Kg	5	8/24/2023 4:32:26 PM
Sulfate	750	7.5	mg/Kg	5	8/24/2023 4:32:26 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 5 of 37

Date Reported: 8/30/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: CS06

 Project:
 South Eddy Cryo
 Collection Date: 8/22/2023 10:10:00 AM

 Lab ID:
 2308C96-006
 Matrix: SOIL
 Received Date: 8/24/2023 7:25:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	9.2	7.5	mg/Kg	5	8/24/2023 4:57:16 PM
Sulfate	120	7.5	mg/Kg	5	8/24/2023 4:57:16 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

 $ND \qquad Not \ Detected \ at \ the \ Reporting \ Limit$ 

PQL Practical Quanitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 6 of 37

Date Reported: 8/30/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: CS07

 Project:
 South Eddy Cryo
 Collection Date: 8/22/2023 10:15:00 AM

 Lab ID:
 2308C96-007
 Matrix: SOIL
 Received Date: 8/24/2023 7:25:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	50	7.5	mg/Kg	5	8/24/2023 5:22:05 PM
Sulfate	650	7.5	mg/Kg	5	8/24/2023 5:22:05 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 8/30/2023

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: CS08

 Project:
 South Eddy Cryo
 Collection Date: 8/22/2023 10:20:00 AM

 Lab ID:
 2308C96-008
 Matrix: SOIL
 Received Date: 8/24/2023 7:25:00 AM

 Analyses
 Result
 RL Qual Units
 DF
 Date Analyzed

 EPA METHOD 300.0: ANIONS
 Analyst: SNS

 Sulfate
 350
 7.5
 mg/Kg
 5
 8/24/2023 6:11:44 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 8/30/2023

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: CS09

 Project:
 South Eddy Cryo
 Collection Date: 8/22/2023 10:25:00 AM

 Lab ID:
 2308C96-009
 Matrix: SOIL
 Received Date: 8/24/2023 7:25:00 AM

 Analyses
 Result
 RL Qual Units
 DF
 Date Analyzed

 EPA METHOD 300.0: ANIONS
 Analyst: SNS

 Sulfate
 710
 30
 mg/Kg
 20
 8/24/2023 6:48:57 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

 $ND \qquad Not \ Detected \ at \ the \ Reporting \ Limit$ 

QL Practical Quanitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 8/30/2023

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: CS10

 Project:
 South Eddy Cryo
 Collection Date: 8/22/2023 10:30:00 AM

 Lab ID:
 2308C96-010
 Matrix: SOIL
 Received Date: 8/24/2023 7:25:00 AM

 Analyses
 Result
 RL
 Qual
 Units
 DF
 Date Analyzed

 EPA METHOD 300.0: ANIONS
 Analyst: SNS

 Sulfate
 2200
 30
 mg/Kg
 20
 8/24/2023 7:13:46 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 8/30/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: CS11

 Project:
 South Eddy Cryo
 Collection Date: 8/22/2023 10:35:00 AM

 Lab ID:
 2308C96-011
 Matrix: SOIL
 Received Date: 8/24/2023 7:25:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	190	7.5	mg/Kg	5	8/24/2023 7:26:11 PM
Sulfate	780	30	mg/Kg	20	8/24/2023 7:38:35 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 8/30/2023

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: CS12

 Project:
 South Eddy Cryo
 Collection Date: 8/22/2023 10:40:00 AM

 Lab ID:
 2308C96-012
 Matrix: SOIL
 Received Date: 8/24/2023 7:25:00 AM

 Analyses
 Result
 RL
 Qual
 Units
 DF
 Date Analyzed

 EPA METHOD 300.0: ANIONS
 Analyst: SNS

 Sulfate
 850
 30
 mg/Kg
 20
 8/24/2023 8:03:25 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 8/30/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: CS13

 Project:
 South Eddy Cryo
 Collection Date: 8/22/2023 10:45:00 AM

 Lab ID:
 2308C96-013
 Matrix: SOIL
 Received Date: 8/24/2023 7:25:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	340	30	mg/Kg	20	8/24/2023 8:53:03 PM
Sulfate	580	7.5	mg/Kg	5	8/24/2023 8:40:39 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 8/30/2023

## Hall Environmental Analysis Laboratory, Inc.

**CLIENT:** Ensolum LLC **Client Sample ID:** CS14

South Eddy Cryo **Project:** Collection Date: 8/22/2023 10:50:00 AM 2308C96-014 Lab ID: Matrix: SOIL **Received Date: 8/24/2023 7:25:00 AM** 

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	27	7.5	mg/Kg	5	8/24/2023 9:05:27 PM
Sulfate	340	7.5	mg/Kg	5	8/24/2023 9:05:27 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

Н Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

Practical Quanitative Limit

% Recovery outside of standard limits. If undiluted results may be estimated.

Analyte detected in the associated Method Blank

Above Quantitation Range/Estimated Value Ε

J Analyte detected below quantitation limits

Sample pH Not In Range RL

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Date Reported: 8/30/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: CS15

 Project:
 South Eddy Cryo
 Collection Date: 8/22/2023 10:55:00 AM

 Lab ID:
 2308C96-015
 Matrix: SOIL
 Received Date: 8/24/2023 7:25:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	27	7.5	mg/Kg	5	8/24/2023 9:30:16 PM
Sulfate	100	7.5	mg/Kg	5	8/24/2023 9:30:16 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 8/30/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: CS16

 Project:
 South Eddy Cryo
 Collection Date: 8/22/2023 11:00:00 AM

 Lab ID:
 2308C96-016
 Matrix: SOIL
 Received Date: 8/24/2023 7:25:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	52	7.5	mg/Kg	5	8/24/2023 9:55:05 PM
Sulfate	330	7.5	mg/Kg	5	8/24/2023 9:55:05 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

QL Practical Quanitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 8/30/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: CS17

 Project:
 South Eddy Cryo
 Collection Date: 8/22/2023 11:05:00 AM

 Lab ID:
 2308C96-017
 Matrix: SOIL
 Received Date: 8/24/2023 7:25:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	18	7.5	mg/Kg	5	8/24/2023 10:19:54 PM
Sulfate	240	7.5	mg/Kg	5	8/24/2023 10:19:54 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 8/30/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: CS18

 Project:
 South Eddy Cryo
 Collection Date: 8/22/2023 11:10:00 AM

 Lab ID:
 2308C96-018
 Matrix: SOIL
 Received Date: 8/24/2023 7:25:00 AM

Analyses	Result	RL Qua	al Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	200	7.5	mg/Kg	5	8/24/2023 11:09:33 PM
Sulfate	1300	30	mg/Kg	20	8/24/2023 11:21:58 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

QL Practical Quanitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 8/30/2023

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: CS19

 Project:
 South Eddy Cryo
 Collection Date: 8/22/2023 11:15:00 AM

 Lab ID:
 2308C96-019
 Matrix: SOIL
 Received Date: 8/24/2023 7:25:00 AM

 Analyses
 Result
 RL Qual Units
 DF
 Date Analyzed

 EPA METHOD 300.0: ANIONS
 Analyst: SNS

 Sulfate
 460
 7.5
 mg/Kg
 5
 8/24/2023 11:34:23 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

\* Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 8/30/2023

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: CS20

 Project:
 South Eddy Cryo
 Collection Date: 8/22/2023 11:20:00 AM

 Lab ID:
 2308C96-020
 Matrix: SOIL
 Received Date: 8/24/2023 7:25:00 AM

 Analyses
 Result
 RL
 Qual
 Units
 DF
 Date Analyzed

 EPA METHOD 300.0: ANIONS
 Sulfate
 730
 7.5
 mg/Kg
 5
 8/24/2023 11:59:12 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

QL Practical Quanitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 8/30/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: CS21

 Project:
 South Eddy Cryo
 Collection Date: 8/22/2023 11:25:00 AM

 Lab ID:
 2308C96-021
 Matrix: SOIL
 Received Date: 8/24/2023 7:25:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	35	7.5	mg/Kg	5	8/25/2023 1:07:13 AM
Sulfate	230	7.5	mg/Kg	5	8/25/2023 1:07:13 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 8/30/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: CS22

 Project:
 South Eddy Cryo
 Collection Date: 8/22/2023 11:30:00 AM

 Lab ID:
 2308C96-022
 Matrix: SOIL
 Received Date: 8/24/2023 7:25:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed		
EPA METHOD 300.0: ANIONS					Analyst: SNS		
Chloride	70	7.5	mg/Kg	5	8/25/2023 1:56:52 AM		
Sulfate	750	30	mg/Kg	20	8/25/2023 2:34:06 AM		

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

QL Practical Quanitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 8/30/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: CS23

 Project:
 South Eddy Cryo
 Collection Date: 8/22/2023 11:35:00 AM

 Lab ID:
 2308C96-023
 Matrix: SOIL
 Received Date: 8/24/2023 7:25:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS					Analyst: <b>JME</b>
Diesel Range Organics (DRO)	35	9.1	mg/Kg	1	8/24/2023 5:36:16 PM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	8/24/2023 5:36:16 PM
Surr: DNOP	98.9	69-147	%Rec	1	8/24/2023 5:36:16 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.3	mg/Kg	1	8/25/2023 1:32:00 AM
Surr: BFB	96.8	15-244	%Rec	1	8/25/2023 1:32:00 AM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Sulfate	520	7.5	mg/Kg	5	8/25/2023 2:46:30 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 8/30/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: CS24

 Project:
 South Eddy Cryo
 Collection Date: 8/22/2023 11:40:00 AM

 Lab ID:
 2308C96-024
 Matrix: SOIL
 Received Date: 8/24/2023 7:25:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE	ORGANICS				Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	8/24/2023 5:47:14 PM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	8/24/2023 5:47:14 PM
Surr: DNOP	109	69-147	%Rec	1	8/24/2023 5:47:14 PM
EPA METHOD 8015D: GASOLINE RANGI	E				Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.2	mg/Kg	1	8/25/2023 1:53:00 AM
Surr: BFB	96.8	15-244	%Rec	1	8/25/2023 1:53:00 AM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	51	7.5	mg/Kg	5	8/25/2023 3:36:08 AM
Sulfate	640	7.5	mg/Kg	5	8/25/2023 3:36:08 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 8/30/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: CS25

 Project:
 South Eddy Cryo
 Collection Date: 8/22/2023 11:45:00 AM

 Lab ID:
 2308C96-025
 Matrix: SOIL
 Received Date: 8/24/2023 7:25:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OF	RGANICS				Analyst: <b>JME</b>
Diesel Range Organics (DRO)	18	9.3	mg/Kg	1	8/24/2023 5:58:18 PM
Motor Oil Range Organics (MRO)	ND	46	mg/Kg	1	8/24/2023 5:58:18 PM
Surr: DNOP	116	69-147	%Rec	1	8/24/2023 5:58:18 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.9	mg/Kg	1	8/25/2023 11:24:44 AM
Surr: BFB	96.9	15-244	%Rec	1	8/25/2023 11:24:44 AM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Sulfate	660	7.5	mg/Kg	5	8/25/2023 4:00:57 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 8/30/2023

#### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: BG-1

 Project:
 South Eddy Cryo
 Collection Date: 8/22/2023 11:50:00 AM

 Lab ID:
 2308C96-026
 Matrix: SOIL
 Received Date: 8/24/2023 7:25:00 AM

 Analyses
 Result
 RL Qual Units
 DF
 Date Analyzed

 EPA METHOD 300.0: ANIONS
 Analyst: SNS

 Sulfate
 420
 7.5
 mg/Kg
 5
 8/25/2023 4:25:46 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

 $ND \qquad Not \ Detected \ at \ the \ Reporting \ Limit$ 

PQL Practical Quanitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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Date Reported: 8/30/2023

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: North

 Project:
 South Eddy Cryo
 Collection Date: 8/22/2023 12:00:00 PM

 Lab ID:
 2308C96-027
 Matrix: MEOH (SOIL)
 Received Date: 8/24/2023 7:25:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	GANICS				Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	8.9	mg/Kg	1	8/24/2023 6:09:27 PM
Motor Oil Range Organics (MRO)	ND	44	mg/Kg	1	8/24/2023 6:09:27 PM
Surr: DNOP	103	69-147	%Rec	1	8/24/2023 6:09:27 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	4.5	mg/Kg	1	8/25/2023 2:15:00 AM
Surr: BFB	94.0	15-244	%Rec	1	8/25/2023 2:15:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: CCM
Benzene	ND	0.022	mg/Kg	1	8/25/2023 2:15:00 AM
Toluene	ND	0.045	mg/Kg	1	8/25/2023 2:15:00 AM
Ethylbenzene	ND	0.045	mg/Kg	1	8/25/2023 2:15:00 AM
Xylenes, Total	ND	0.090	mg/Kg	1	8/25/2023 2:15:00 AM
Surr: 4-Bromofluorobenzene	91.0	39.1-146	%Rec	1	8/25/2023 2:15:00 AM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	57	7.5	mg/Kg	5	8/25/2023 4:50:36 AM
Sulfate	580	7.5	mg/Kg	5	8/25/2023 4:50:36 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 8/30/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: East

 Project:
 South Eddy Cryo
 Collection Date: 8/22/2023 12:15:00 PM

 Lab ID:
 2308C96-028
 Matrix: MEOH (SOIL)
 Received Date: 8/24/2023 7:25:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	9.7	mg/Kg	1	8/24/2023 6:20:37 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	8/24/2023 6:20:37 PM
Surr: DNOP	106	69-147	%Rec	1	8/24/2023 6:20:37 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	3.1	mg/Kg	1	8/25/2023 2:37:00 AM
Surr: BFB	95.3	15-244	%Rec	1	8/25/2023 2:37:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: CCM
Benzene	ND	0.015	mg/Kg	1	8/25/2023 2:37:00 AM
Toluene	ND	0.031	mg/Kg	1	8/25/2023 2:37:00 AM
Ethylbenzene	ND	0.031	mg/Kg	1	8/25/2023 2:37:00 AM
Xylenes, Total	ND	0.061	mg/Kg	1	8/25/2023 2:37:00 AM
Surr: 4-Bromofluorobenzene	92.0	39.1-146	%Rec	1	8/25/2023 2:37:00 AM
EPA METHOD 300.0: ANIONS					Analyst: JTT
Chloride	1700	75	mg/Kg	50	8/25/2023 9:27:38 PM
Sulfate	4900	75	mg/Kg	50	8/25/2023 9:27:38 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

ple pH Not In Range Page 28 of 37

Date Reported: 8/30/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: West

**Project:** South Eddy Cryo Collection Date: 8/22/2023 12:05:00 PM

**Lab ID:** 2308C96-029 **Matrix:** MEOH (SOIL) **Received Date:** 8/24/2023 7:25:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE OR	GANICS				Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	9.5	mg/Kg	1	8/25/2023 11:02:22 AM
Motor Oil Range Organics (MRO)	ND	47	mg/Kg	1	8/25/2023 11:02:22 AM
Surr: DNOP	92.8	69-147	%Rec	1	8/25/2023 11:02:22 AM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	3.5	mg/Kg	1	8/25/2023 2:59:00 AM
Surr: BFB	94.4	15-244	%Rec	1	8/25/2023 2:59:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: CCM
Benzene	ND	0.017	mg/Kg	1	8/25/2023 2:59:00 AM
Toluene	ND	0.035	mg/Kg	1	8/25/2023 2:59:00 AM
Ethylbenzene	ND	0.035	mg/Kg	1	8/25/2023 2:59:00 AM
Xylenes, Total	ND	0.070	mg/Kg	1	8/25/2023 2:59:00 AM
Surr: 4-Bromofluorobenzene	90.6	39.1-146	%Rec	1	8/25/2023 2:59:00 AM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	81	7.5	mg/Kg	5	8/25/2023 12:48:50 AM
Sulfate	1600	30	mg/Kg	20	8/25/2023 1:01:14 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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Date Reported: 8/30/2023

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: South

 Project:
 South Eddy Cryo
 Collection Date: 8/22/2023 12:10:00 PM

 Lab ID:
 2308C96-030
 Matrix: MEOH (SOIL)
 Received Date: 8/24/2023 7:25:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	SANICS				Analyst: <b>JME</b>
Diesel Range Organics (DRO)	ND	8.9	mg/Kg	1	8/24/2023 6:43:01 PM
Motor Oil Range Organics (MRO)	ND	44	mg/Kg	1	8/24/2023 6:43:01 PM
Surr: DNOP	105	69-147	%Rec	1	8/24/2023 6:43:01 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: CCM
Gasoline Range Organics (GRO)	ND	5.0	mg/Kg	1	8/25/2023 3:42:00 AM
Surr: BFB	95.9	15-244	%Rec	1	8/25/2023 3:42:00 AM
EPA METHOD 8021B: VOLATILES					Analyst: CCM
Benzene	ND	0.014	mg/Kg	1	8/25/2023 3:42:00 AM
Toluene	ND	0.029	mg/Kg	1	8/25/2023 3:42:00 AM
Ethylbenzene	ND	0.029	mg/Kg	1	8/25/2023 3:42:00 AM
Xylenes, Total	ND	0.057	mg/Kg	1	8/25/2023 3:42:00 AM
Surr: 4-Bromofluorobenzene	89.7	39.1-146	%Rec	1	8/25/2023 3:42:00 AM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	46	7.5	mg/Kg	5	8/25/2023 1:38:29 AM
Sulfate	380	7.5	mg/Kg	5	8/25/2023 1:38:29 AM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- S % Recovery outside of standard limits. If undiluted results may be estimated.
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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#### Hall Environmental Analysis Laboratory, Inc.

WO#: 2308C96 30-Aug-23

**Client:** Ensolum LLC **Project:** South Eddy Cryo

Sample ID: MB-77075 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: **PBS** Batch ID: 77075 RunNo: 99227

8/24/2023 Analysis Date: 8/24/2023 SeqNo: 3618404 Prep Date: Units: mg/Kg

SPK value SPK Ref Val %RPD **RPDLimit** Analyte PQL %REC LowLimit HighLimit Qual

Chloride ND 1.5 Sulfate ND 1.5

Sample ID: LCS-77075 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 77075 RunNo: 99227

Prep Date: Analysis Date: 8/24/2023 SeqNo: 3618405 Units: mg/Kg 8/24/2023

Analyte Result PQL SPK value SPK Ref Val %REC I owl imit HighLimit %RPD **RPDLimit** Qual

14 1.5 15.00 94.8 90 110 Chloride Sulfate 29 30.00 0 96.8 90 1.5 110

Sample ID: 2308C96-001AMS SampType: MS TestCode: EPA Method 300.0: Anions

Client ID: **CS01** Batch ID: 77075 RunNo: 99227

Prep Date: 8/24/2023 Analysis Date: 8/24/2023 SeqNo: 3618407 Units: mg/Kg

SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte Result **PQL** LowLimit HighLimit Qual Chloride 32 7.5 15.00 19.05 87.0 50 150

Sulfate 160 7.5 30.00 136.1 76.3 50 150

Sample ID: 2308C96-001AMSD SampType: MSD TestCode: EPA Method 300.0: Anions

Batch ID: 77075 Client ID: **CS01** RunNo: 99227

Prep Date: 8/24/2023 Analysis Date: 8/24/2023 SeqNo: 3618408 Units: mg/Kg

Analyte **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Chloride 36 7.5 19.05 113 50 20 15.00 150 11.5 Sulfate 180 7.5 30.00 136.1 144 50 150 12.1 20

Sample ID: 2308C96-002AMS SampType: MS TestCode: EPA Method 300.0: Anions

Client ID: **CS02** Batch ID: 77075 RunNo: 99227

Prep Date: Analysis Date: 8/24/2023 SeqNo: 3618411 8/24/2023 Units: mg/Kg

Analyte Result SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual

28 7.5 15.00 9.956 50 Chloride 123 150

Sample ID: 2308C96-002AMSD SampType: MSD TestCode: EPA Method 300.0: Anions

Client ID: **CS02** Batch ID: 77075 RunNo: 99227

Prep Date: 8/24/2023 Analysis Date: 8/24/2023 SeqNo: 3618412 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual

44 7.5 15.00 9.956 224 50 150 42.2 20 RS Chloride

#### Qualifiers:

- Value exceeds Maximum Contaminant Level
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- POL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated
- Analyte detected in the associated Method Blank
- Above Quantitation Range/Estimated Value
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RL Reporting Limit

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#### Hall Environmental Analysis Laboratory, Inc.

WO#: **2308C96 30-Aug-23** 

Client:	Ensolum LLC
Project:	South Eddy Cryo

Sample ID: MB-77090 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 77090 RunNo: 99227

Prep Date: 8/24/2023 Analysis Date: 8/25/2023 SeqNo: 3618458 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

 Chloride
 ND
 1.5

 Sulfate
 ND
 1.5

Sample ID: LCS-77090 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 77090 RunNo: 99227

Prep Date: 8/24/2023 Analysis Date: 8/25/2023 SeqNo: 3618459 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 14 1.5 15.00 94.3 90 110 Chloride Sulfate 29 30.00 0 96.3 90 1.5 110

Sample ID: MB-77090 SampType: MBLK TestCode: EPA Method 300.0: Anions

Client ID: PBS Batch ID: 77090 RunNo: 99222

Prep Date: **8/24/2023** Analysis Date: **8/24/2023** SeqNo: **3618946** Units: **mg/Kg** 

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual
Chloride ND 1.5

Sulfate ND 1.5

Sample ID: LCS-77090 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 77090 RunNo: 99222

Prep Date: 8/24/2023 Analysis Date: 8/24/2023 SeqNo: 3618947 Units: mg/Kg

Analyte **PQL** SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Chloride 15 1.5 15.00 97.4 90 O 110

Sulfate 30 1.5 30.00 0 99.7 90 110

Sample ID: 2308C96-021AMS SampType: MS TestCode: EPA Method 300.0: Anions

Client ID: **CS21** Batch ID: **77090** RunNo: **99222** 

Batch ID: 77090

Prep Date: 8/24/2023 Analysis Date: 8/25/2023 SeqNo: 3618956 Units: mg/Kg

Analyte Result SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual 38 7.5 15.00 35.14 50 Chloride 17.0 150 S

Sample ID: 2308C96-021AMSD SampType: MSD TestCode: EPA Method 300.0: Anions

Prep Date: **8/24/2023** Analysis Date: **8/25/2023** SeqNo: **3618957** Units: **mg/Kg** 

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

 Chloride
 50
 7.5
 15.00
 35.14
 97.7
 50
 150
 27.7
 20
 R

#### Qualifiers:

Client ID:

- Value exceeds Maximum Contaminant Level
- D Sample Diluted Due to Matrix

**CS21** 

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- B Analyte detected in the associated Method Blank

RunNo: 99222

- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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#### Hall Environmental Analysis Laboratory, Inc.

WO#: **2308C96** *30-Aug-23* 

Client: Ensolum LLC
Project: South Eddy Cryo

Sample ID: 2308C96-022AMS SampType: MS TestCode: EPA Method 300.0: Anions

Client ID: CS22 Batch ID: 77090 RunNo: 99222

Prep Date: **8/24/2023** Analysis Date: **8/25/2023** SeqNo: **3618960** Units: **mg/Kg** 

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 86 7.5 15.00 70.00 107 50 150

Sample ID: 2308C96-022AMSD SampType: MSD TestCode: EPA Method 300.0: Anions

Client ID: **CS22** Batch ID: **77090** RunNo: **99222** 

Prep Date: 8/24/2023 Analysis Date: 8/25/2023 SeqNo: 3618961 Units: mg/Kg

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

Chloride 86 7.5 15.00 70.00 105 50 150 0.206 20

#### Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quantitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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## Hall Environmental Analysis Laboratory, Inc.

WO#: 2308C96

30-Aug-23

Client:	Ensolum LLC
Project:	South Eddy Cryo

Sample ID: <b>MB-77052</b>	SampType: N	/IBLK	Tes	tCode: <b>EP</b>	A Method	8015M/D: Diesel Range Organics					
Client ID: PBS	Batch ID: 7	Batch ID: <b>77052</b> RunNo: <b>99199</b>									
Prep Date: 8/23/2023	Analysis Date:	8/24/2023	5	SeqNo: 36	17393	Units: %Rec					
Analyte	Result PQL	. SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual		
Surr: DNOP	9.8	10.00		97.8	69	147					

Sample ID: LCS-77052	SampType: <b>LCS</b>	TestCode: EPA Method	8015M/D: Diesel Range Organics
Client ID: LCSS	Batch ID: 77052	RunNo: 99199	
Prep Date: 8/23/2023	Analysis Date: 8/24/2023	SeqNo: <b>3617395</b>	Units: %Rec
Analyte	Result PQL SPK value	SPK Ref Val %REC LowLimit	HighLimit %RPD RPDLimit Qual
Surr: DNOP	5.0 5.000	99.2 69	147

Sample ID: <b>MB-77076</b>	SampT	уре: МВ	LK	Tes	tCode: <b>EF</b>	PA Method	8015M/D: Die	sel Range	Organics	
Client ID: PBS	Batch	1D: <b>770</b>	76	F	RunNo: 99	9199				
Prep Date: <b>8/24/2023</b>	Analysis D	ate: 8/2	24/2023	5	SeqNo: 36	617818	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								
Surr: DNOP	9.2		10.00		92.4	69	147			

Sample ID: LCS-77076	SampT	ype: <b>LC</b>	S	TestCode: EPA Method 8015M/D: Diesel Range Organics							
Client ID: LCSS	Batch	n ID: <b>770</b>	076	F	RunNo: 99	9199					
Prep Date: 8/24/2023	Analysis D	ate: <b>8/</b> 2	24/2023	9	SeqNo: 30	617821	Units: mg/K	g			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range Organics (DRO)	48	10	50.00	0	95.2	61.9	130				
Surr: DNOP	4.8		5.000		95.0	69	147				

Sample ID:	2308C96-030AMS	Samp1	Type: MS	3	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	Organics	
Client ID:	South	Batcl	h ID: <b>77</b> (	076	F	RunNo: 99	9199				
Prep Date:	8/24/2023	Analysis [	Date: <b>8/</b>	24/2023	5	SeqNo: 30	617893	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range C	Organics (DRO)	45	8.7	43.71	0	104	54.2	135			
Surr: DNOP		5.0		4.371		114	69	147			

Sample ID:	2308C96-030AMSD	SampTy	/pe: <b>MS</b>	SD .	Tes	tCode: El	PA Method	8015M/D: Die	sel Range	Organics	
Client ID:	South	Batch	ID: <b>77</b> 0	076	F	RunNo: 9	9199				
Prep Date:	8/24/2023	Analysis Da	ate: <b>8/</b> 2	24/2023	(	SeqNo: 30	617895	Units: mg/K	g		
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range (	Organics (DRO)	45	8.8	44.13	0	101	54.2	135	1.75	29.2	

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated.
- Analyte detected in the associated Method Blank
- Above Quantitation Range/Estimated Value
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RL Reporting Limit

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### Hall Environmental Analysis Laboratory, Inc.

4.6

WO#: **2308C96 30-Aug-23** 

Client: Ensolum LLC
Project: South Eddy Cryo

Surr: DNOP

Sample ID: 2308C96-030AMSD SampType: MSD TestCode: EPA Method 8015M/D: Diesel Range Organics

Client ID: South Batch ID: 77076 RunNo: 99199

Prep Date: 8/24/2023 Analysis Date: 8/24/2023 SeqNo: 3617895 Units: mg/Kg

4.413

Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD RPDLimit Qual

103

69

147

0

0

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

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## Hall Environmental Analysis Laboratory, Inc.

WO#: **2308C96** *30-Aug-23* 

Client: Ensolum LLC
Project: South Eddy Cryo

Sample ID: 2 Fire are les 2	Samn	ype: <b>LC</b>		Too	tCodo: El	DA Mathad	904ED: Casa	lina Danas		
Sample ID: 2.5ug gro lcs 2	•	,, -					8015D: Gaso	line Kange	!	
Client ID: LCSS	Batc	n ID: <b>G9</b>	9229	F	RunNo: 99	9229				
Prep Date:	Analysis [	Date: 8/	24/2023	Ş	SeqNo: 30	618726	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	86.8	70	130			
Surr: BFB	2000		1000		204	15	244			
Sample ID: mb 2	Samp	уре: МЕ	BLK	Tes	stCode: EF	PA Method	8015D: Gaso	line Range	ı	
Client ID: PBS	Batc	n ID: <b>G</b> 9	9229	F	RunNo: 99	9229				
Prep Date:	Analysis [	Date: 8/	24/2023		SeqNo: 30	618727	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	1000		1000		102	15	244			
Sample ID: Ics-77074	Samp <sup>1</sup>	ype: <b>LC</b>	s	Tes	stCode: EF	PA Method	8015D: Gaso	line Range	ı	
Client ID: LCSS	Batc	n ID: <b>77</b> 0	074	F	RunNo: 99	9233				
Prep Date: 8/24/2023	Analysis [	Date: <b>8/</b>	25/2023		SeqNo: 30	618989	Units: mg/k	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	89.1	70	130			
Surr: BFB	1800		1000		184	15	244			

Sample ID: mb-77074	Samp	Гуре: МЕ	BLK	Tes	tCode: EF	PA Method	8015D: Gasol	line Range	•	
Client ID: PBS	Batcl	h ID: 77(	074	F	RunNo: 99	9233				
Prep Date: 8/24/2023	Analysis [	Date: <b>8/</b> 2	25/2023	5	SeqNo: 36	618990	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	920		1000		92.3	15	244			

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

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## Hall Environmental Analysis Laboratory, Inc.

2308C96 30-Aug-23

WO#:

Client: Ensolum LLC
Project: South Eddy Cryo

Sample ID: 100ng btex Ics	Samp <sup>-</sup>	Гуре: <b>LC</b>	S	Tes	tCode: EF	iles				
Client ID: LCSS	Batc	h ID: <b>B9</b>	9229	F	RunNo: 99	9229				
Prep Date:	Analysis I	Date: <b>8/</b> 2	24/2023	5	SeqNo: 36	618770	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	1.0	0.025	1.000	0	103	70	130			
Toluene	1.0	0.050	1.000	0	104	70	130			
Ethylbenzene	1.1	0.050	1.000	0	106	70	130			
Xylenes, Total	3.2	0.10	3.000	0	107	70	130			
Surr: 4-Bromofluorobenzene	0.95		1.000		94.9	39.1	146			

Sample ID: mb 2	SampType: MBLK			Tes	tCode: EF	les				
Client ID: PBS	Batch	n ID: <b>B9</b> 9	9229	F	RunNo: 99	9229				
Prep Date:	Analysis D	Date: 8/2	24/2023	5	SeqNo: 36	618771	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.95		1.000		95.2	39.1	146			

Sample ID: LCS-77074	SampT	ype: <b>LC</b>	S	Tes	tCode: El	PA Method	8021B: Volati	les		
Client ID: LCSS	Batch	1D: <b>77</b> 0	074	F	RunNo: 9	9233				
Prep Date: 8/24/2023	Analysis D	ate: <b>8/</b> 2	25/2023	5	SeqNo: 30	618992	Units: %Rec	;		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000	<u> </u>	105	39.1	146			

Sample ID: mb-77074	SampT	ype: <b>ME</b>	BLK	Tes	tCode: EF	PA Method	8021B: Volati	les		
Client ID: PBS	Batch	n ID: <b>77</b> 0	074	F	RunNo: 9	9233				
Prep Date: 8/24/2023	Analysis D	ate: <b>8/</b> 2	25/2023	5	SeqNo: 30	618993	Units: %Rec			
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	1.0		1.000		104	39.1	146			

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

Page 37 of 37

Hall Environmental Analysis Laboratory 4901 Hankins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107

## Sample Log-In Check List

Released to Imaging: 3/7/2025 1:23:57 PM

300 F00	Website: www.ha	llenvironmeni	tal.com		
Client Name: Ensolum LLC	Work Order Number:	2308C96		RcptNo:	1
Received By: Tracy Casarrubias	8/24/2023 7:25:00 AM				
Completed By: Tracy Casarrubias	8/24/2023 8:09:30 AM				
Reviewed By: 8-21-23					
Chain of Custody					
1. Is-Chain of Custody complete?		Yes 🗸	No 🗌	Not Present	
2. How was the sample delivered?		Courier			
<u>Log In</u>					
3. Was an attempt made to cool the samples	?	Yes 🗹	No 🗌	NA 🗌	
4. Were all samples received at a temperature	e of >0° C to 6.0°C	Yes 🗹	No 🗌	NA 🗆	
5. Sample(s) in proper container(s)?		Yes 🗸	No 🗌		
6. Sufficient sample volume for indicated test(	s)?	Yes 🔽	No 🗌		
$7_{\circ}$ Are samples (except VOA and ONG) prope	rly preserved?	Yes 🗹	No 🗌		
8. Was preservative added to bottles?		Yes 🗌	No 🗹	NA 🗌	
9. Received at least 1 vial with headspace <1/	4" for AQ VOA?	Yes 🗌	No 🗌	NA 🗹	
10. Were any sample containers received brok	en?	Yes $\square$	No 🔽	# of preserved	
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes 🗸	No 🗌	bottles checked for pH: (<2 or	>12 unless noted)
12. Are matrices correctly identified on Chain o	f Custody?	Yes 🗹	No 🗌	Adjusted?	
13. Is it clear what analyses were requested?	,	Yes 🗹	No 🗌		chub
14. Were all holding times able to be met? (If no. notify customer for authorization.)		Yes 🔽	No 🗆	Checked by:	14512412
Special Handling (if applicable)					
15. Was client notified of all discrepancies with	this order?	Yes 🗌	No 🗌	NA 🗹	
Person Notified:	Date:				
By Whom:	Via:	eMail	Phone Fax	_ In Person	
Regarding:					
Client Instructions:					
16. Additional remarks:					
17. Cooler Information					
Cooler No Temp °C Condition		eal Date	Signed By		
1 5.3 Good Ye					
2 5.9 Good Ye	es Yogi				

Received by OCD: 3/4/2024 9:35:13 AM

ANALYSIS LABORATORY HALL ENVIRONMENTAL 4901 Hawkins NE - Albuquerque, NM 87109 S 00 C X Fax 505-345-4107 www.hallenvironmental.com **Analysis Request** Γ<del>otal Coliform (Present/Absent)</del> NO3<sup>1</sup> NO2, PO4, SO4 Tel. 505-345-3975 PAHs by 8310 or 82705IMS EDB (Method 504.1) FPH:8015D(GRO / DRO / MRO) B1EX + W1BE + 1MB, 2 (8051) 7308097 HEAL No. 700 007 MA 003 000 500 900 200 010 Kelly Lowery **≗** □ 2 10 N Rush Preservative | 21/52 03 R 1226367 () ) ( to 1Ce Cooler Temp(induding CF): S S Yes 20 100 Type South Gody Turn-Around Time Project Manager: Project Name: □ Standard # of Coolers: Type and # Container Sampler: Project #: On Ice: 402 402 707 7 402 707 40% Hoz 7 407 5 □ Level 4 (Full Validation) 5 Ÿ Si Sample Name | Depth 601 N. Marienfeld St. Suite 400 Chain-of-Custody Record klowery@ensolum.com CS07 CSID **CS05** CSOY CSO6 CS09 505 CSOS **CS03** Cs11 □ Az Compliance C S0 Other 214-733-3165 Matrix Ensolum, LLC Mailing Address: QA/QC Package: 8/12/20 955 10 20 dry13 10 30 8/12/13/0945 8/22/01010 02/2/23 0950 8/22/23 10 25 18/2413 1035 EDD (Type) 0001 /2/22/8 2101 email or Fax#: grd23 (005 Time Accreditation: □ Standard □ NELAC Phone #: grap 8/22/13 Client: Date 

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report. OMerca

Email: tjlong@epord.com Enterprise Field Services, LLC

Bill to: Tom Long

Remarks:

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Mailing Address:		601 N. Marienfeld St. Sui	Suite 400	South	Eddy	Caro		490	1 Hay	4901 Hawkins NE		- Albu	Idner	Albuquerque, NM 87109	IM 87	109			
				Project #:	0	ס		Te	. 505	Tel. 505-345-3975	3975	ιĽ	Fax 50	505-345-4107	2410	7			-
Phone #: 214-	214-733-3165	S		03812	226363						4	Analysis Request	sis Re	sanba	بد				
email or Fax#:	klowery	klowery@ensolum.com		Project Manager:		Kelly Lowery	- (+					VOS	-	(jue		-			-
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Accreditation:	□ Az Cc	☐ Az Compliance		Sampler: TNG	27/51		9447					3ON			2008	X)8			
□ NELAC	□ Other			On Ice:	₩ Yes	□ No						1 .8	· · ·			= <			
□ EDD (Type)			-	# of Coolers:	2		<del>3</del> 8.					ON			9+	501			
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If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice

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	Ensolu	Ensolum, LLC			□ Standard	Z Rush	2-1 hrs	Star saadin	П	AN	LY	SIS	ANALYSIS LABORATORY	BO	RA	0	RY	
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/ailing	failing Address:		601 N. Marienfeld St. Sui	Suite 400	South	Eddy (	Cro	490	1 Haw	4901 Hawkins NE		ənbnqı	Albuquerque, NM 87109	NM 87	109			
					Project #:		9	<u> </u>	. 505-	Tel. 505-345-3975		Fax	Fax 505-345-4107	5-410	_			
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mailc	mail or Fax#:	klowery	klowery@ensolum.com		Project Manager:		Kelly Lowery		_		ro:		(tu	(ni	_	_		
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If necessary, samples submitted to Hall Environmental ringy be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

September 12, 2023

Kelly Lowery Ensolum LLC 601 Marrenfield #400 Midland, TX 79701 TEL: (214) 733-3165

FAX:

RE: South Eddy Cryo OrderNo.: 2309272

Dear Kelly Lowery:

Hall Environmental Analysis Laboratory received 1 sample(s) on 9/7/2023 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman

Laboratory Manager

andyl

4901 Hawkins NE

Albuquerque, NM 87109

## Analytical Report Lab Order 2309272

Date Reported: 9/12/2023

### Hall Environmental Analysis Laboratory, Inc.

CLIENT: Ensolum LLC Client Sample ID: East

 Project:
 South Eddy Cryo
 Collection Date: 9/6/2023 1:40:00 PM

 Lab ID:
 2309272-001
 Matrix: MEOH (SOIL)
 Received Date: 9/7/2023 7:30:00 AM

Analyses	Result	RL Qu	al Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RANGE ORG	ANICS				Analyst: PRD
Diesel Range Organics (DRO)	ND	9.8	mg/Kg	1	9/7/2023 9:18:07 PM
Motor Oil Range Organics (MRO)	ND	49	mg/Kg	1	9/7/2023 9:18:07 PM
Surr: DNOP	103	69-147	%Rec	1	9/7/2023 9:18:07 PM
EPA METHOD 8015D: GASOLINE RANGE					Analyst: KMN
Gasoline Range Organics (GRO)	ND	4.5	mg/Kg	1	9/7/2023 12:33:00 PM
Surr: BFB	100	15-244	%Rec	1	9/7/2023 12:33:00 PM
EPA METHOD 8021B: VOLATILES					Analyst: KMN
Benzene	ND	0.022	mg/Kg	1	9/7/2023 12:33:00 PM
Toluene	ND	0.045	mg/Kg	1	9/7/2023 12:33:00 PM
Ethylbenzene	ND	0.045	mg/Kg	1	9/7/2023 12:33:00 PM
Xylenes, Total	ND	0.090	mg/Kg	1	9/7/2023 12:33:00 PM
Surr: 4-Bromofluorobenzene	90.8	39.1-146	%Rec	1	9/7/2023 12:33:00 PM
EPA METHOD 300.0: ANIONS					Analyst: SNS
Chloride	ND	60	mg/Kg	20	9/7/2023 8:44:54 PM

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

Value exceeds Maximum Contaminant Level.

D Sample Diluted Due to Matrix

H Holding times for preparation or analysis exceeded

ND Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

S % Recovery outside of standard limits. If undiluted results may be estimated.

B Analyte detected in the associated Method Blank

E Above Quantitation Range/Estimated Value

J Analyte detected below quantitation limits

P Sample pH Not In Range

RL Reporting Limit

ple pH Not In Range
Orting Limit Page 1 of 5

### Hall Environmental Analysis Laboratory, Inc.

2309272

WO#:

12-Sep-23

**Client:** Ensolum LLC **Project:** South Eddy Cryo

Sample ID: MB-77361 SampType: MBLK TestCode: EPA Method 300.0: Anions

PBS Client ID: Batch ID: 77361 RunNo: 99536

Prep Date: 9/7/2023 Analysis Date: 9/7/2023 SeqNo: 3634768 Units: mg/Kg

Analyte PQL SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Qual Result LowLimit

Chloride ND 1.5

Sample ID: LCS-77361 SampType: LCS TestCode: EPA Method 300.0: Anions

Client ID: LCSS Batch ID: 77361 RunNo: 99536

Prep Date: 9/7/2023 Analysis Date: 9/7/2023 SeqNo: 3634769 Units: mg/Kg

SPK value SPK Ref Val %REC %RPD **RPDLimit** Analyte LowLimit HighLimit Qual

Chloride 15.00 93.8 110

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated.
- Analyte detected in the associated Method Blank
- Above Quantitation Range/Estimated Value
- Analyte detected below quantitation limits
- Sample pH Not In Range
- RL Reporting Limit

Page 2 of 5

## Hall Environmental Analysis Laboratory, Inc.

9.4

2309272 12-Sep-23

WO#:

**Client:** Ensolum LLC **Project:** South Eddy Cryo

Sample ID: LCS-77349	SampT	ype: <b>LC</b>	s	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	Organics	
Client ID: LCSS	Batch	n ID: <b>773</b>	349	F	RunNo: 99	9538				
Prep Date: 9/7/2023	Analysis D	)ate: <b>9/</b>	7/2023	9	SeqNo: 30	634982	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	46	10	50.00	0	91.6	61.9	130			
Surr: DNOP	4.5		5.000		90.4	69	147			

Sample ID: <b>MB-77349</b>	SampT	уре: МЕ	BLK	Tes	tCode: EF	PA Method	8015M/D: Die	sel Range	Organics	
Client ID: PBS	Batch	1D: <b>77</b> 3	349	F	RunNo: 99	9538				
Prep Date: 9/7/2023	Analysis D	ate: <b>9/</b> 7	7/2023	9	SeqNo: 30	634985	Units: mg/K	(g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	ND	10								
Motor Oil Range Organics (MRO)	ND	50								

93.7

147

10.00

#### Qualifiers:

Surr: DNOP

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- Н Holding times for preparation or analysis exceeded
- Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- % Recovery outside of standard limits. If undiluted results may be estimated.
- Analyte detected in the associated Method Blank
- Above Quantitation Range/Estimated Value
- Analyte detected below quantitation limits
- Sample pH Not In Range
- Reporting Limit

Page 3 of 5

### Hall Environmental Analysis Laboratory, Inc.

2309272 12-Sep-23

WO#:

**Client:** Ensolum LLC **Project:** South Eddy Cryo

Sample ID: 2.5ug gro Ics SampType: LCS TestCode: EPA Method 8015D: Gasoline Range Client ID: LCSS Batch ID: R99508 RunNo: 99508 Units: mg/Kg Prep Date: Analysis Date: 9/7/2023 SeqNo: 3632992 Analyte PQL SPK value SPK Ref Val %REC HighLimit %RPD **RPDLimit** Qual Result LowLimit Gasoline Range Organics (GRO) 24 5.0 25.00 0 96.0 70 130 Surr: BFB 2200 1000 215 15 244

Sample ID: mb SampType: MBLK TestCode: EPA Method 8015D: Gasoline Range Client ID: Batch ID: **R99508** PBS RunNo: 99508 Prep Date: Analysis Date: 9/7/2023 SeqNo: 3632993 Units: mg/Kg Analyte Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit %RPD **RPDLimit** Qual Gasoline Range Organics (GRO) ND 5.0

Surr: BFB

1100

1000

109

15

244

Qualifiers:

Value exceeds Maximum Contaminant Level

D Sample Diluted Due to Matrix

Н Holding times for preparation or analysis exceeded

Not Detected at the Reporting Limit

PQL Practical Quanitative Limit

% Recovery outside of standard limits. If undiluted results may be estimated.

Analyte detected in the associated Method Blank

Above Quantitation Range/Estimated Value

Analyte detected below quantitation limits

Sample pH Not In Range

RL Reporting Limit Page 4 of 5

## Hall Environmental Analysis Laboratory, Inc.

WO#: **2309272** *12-Sep-23* 

Client: Ensolum LLC
Project: South Eddy Cryo

Sample ID: 100ng btex Ics	Samp	Гуре: <b>LC</b>	S	Tes	tCode: EF	PA Method	8021B: Volati	les		
Client ID: LCSS	Batc	h ID: <b>B9</b>	9508	F	RunNo: 99	9508				
Prep Date:	Analysis [	Date: <b>9/</b> 7	7/2023	5	SeqNo: 30	632987	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.89	0.025	1.000	0	88.6	70	130			
Toluene	0.89	0.050	1.000	0	89.1	70	130			
Ethylbenzene	0.92	0.050	1.000	0	91.7	70	130			
Xylenes, Total	2.8	0.10	3.000	0	91.8	70	130			
Surr: 4-Bromofluorobenzene	1.0		1.000		99.7	39.1	146			

Sample ID: mb	Samp	Гуре: <b>МЕ</b>	BLK	Tes	tCode: EF	PA Method	8021B: Volati	les		
Client ID: PBS	Batc	h ID: <b>B9</b>	9508	F	RunNo: 99	9508				
Prep Date:	Analysis [	Date: <b>9/</b>	7/2023	5	SeqNo: 30	632988	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Xylenes, Total	ND	0.10								
Surr: 4-Bromofluorobenzene	0.97		1.000		96.8	39.1	146			

#### Qualifiers:

- Value exceeds Maximum Contaminant Level.
- D Sample Diluted Due to Matrix
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- PQL Practical Quanitative Limit
- B Analyte detected in the associated Method Blank
- E Above Quantitation Range/Estimated Value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

Page 5 of 5



Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109

TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

## Sample Log-In Check List

Released to Imaging: 3/7/2025 1:23:57 PM

Client Name: Ensolum LLC	Work Order Number:	2309272		RcptNo	: 1
Received By: Juan Rojas  Completed By: Tracy Casarrubias  Reviewed By: 9/7/6	9/7/2023 7:30:00 AM 9/7/2023 8:11:31 AM		Juan 3 g		
Chain of Custody		Yes <b>⊻</b>	No 🗌	Not Present	
Is Chain of Custody complete?     How was the sample delivered?		Courier	INO []	Not Flesciit 🗀	
Z. How was the sample delivered?		Counter			
<u>Log In</u> 3. Was an attempt made to cool the samples?		Yes 🗹	No 🗆	na 🗆	
4. Were all samples received at a temperature of	of >0° C to 6.0°C	Yes 🗸	No 🗌	NA 🗀	
5. Sample(s) in proper container(s)?		Yes 🗹	No 🗌		
6. Sufficient sample volume for indicated test(s)	?	Yes 🗹	No 🗌		
7. Are samples (except VOA and ONG) properly	preserved?	Yes 🗸	No 🗌		
8. Was preservative added to bottles?		Yes 🗌	No 🗹	NA 🗆	
9. Received at least 1 vial with headspace <1/4"	for AQ VOA?	Yes 🗌	No 🗌	NA 🗹	
10. Were any sample containers received broker		Yes	No 🗹		
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody)		Yes 🗹	No 🗌	# of preserved bottles checked for pH: (<2.0	or >12 upless noted)
12. Are matrices correctly identified on Chain of C	Custody?	Yes 🗸	No 🗌	Adjusted?	
13. Is it clear what analyses were requested?	•	Yes 🗹	No 🗌		4. 0 -10 =
14. Were all holding times able to be met? (If no, notify customer for authorization.)		Yes 🗹	No 🗆	Checked by:	yu 9/7/23
Special Handling (if applicable)					
15. Was client notified of all discrepancies with the	his order?	Yes 🗌	No 🗌	NA 🗹	
Person Notified:	Date:		A CONTRACTOR AND A STREET		
By Whom:	Via: [	eMail	Phone  Fax	☐ In Person	
Regarding:	AND STREET, STATE OF STREET, STATE OF				
Client Instructions:					
16. Additional remarks:					
17. Cooler Information Cooler No Temp °C Condition Set 1 4.5 Good Yes		Seal Date	Signed By		

			:35:13 AM ustody Rec	ord	Turn-Around		U-1000000000000000000000000000000000000			M									ige 173	
		m, LLC	uotouy moo		☐ Standard	d ⊠ Rush e:	29 MW Cryo 303	_ [			A	N	AL	<b>/S</b> ]	[S	LAI	воі	RAT		
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Phone #	#: 214-	-733-316			0	3 1 1 2 6 6	503	(6)					-		is Red	ques	t	-		
email or			@ensolum.com		Project Mana	ager: Kelly I	Lowery	21)	8					SO <sub>4</sub>		ent)				1
QA/QC F □ Stan	Package: dard		□ Level 4 (Full Va	alidation)				TMB's (8021)	SO / MI	PCB's		8270SIMS		PQ4,		nt/Abs				
Accredit		☐ Az Co	ompliance r		Sampler: 1	eter la	r Patter		O / DF	s/8082	04.1)			, NO <sub>2</sub> ,	3	Coliform (Present/Absent)				
□ EDD					# of Coolers		Youi	出	(GR	ide	od 5	310	etals	ِيُّا ر	<u> </u>	Ę				
Date	Time	Matrix	Sample Name	Depth	Cooler Temp Container Type and #	Preservative Type	HEAL NO. 7309272	BTEX / MTBE /	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310	RCRA 8 Metals	CNF, Br, NO <sub>3</sub> ,	8270 (Semi-VOA)	Total Colifo				
9-6-23	1340	soil	East	0.75'	Glass, 1	Ice	001	/					7	7						
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Date:	Time:	Relinquish	ned by:	1	Received by:	Via:	Date Time 9/6/23 920	Ren	nark		Ema	il: tjlo		epor	d.com					
Date:	Time: 1900	Relinquist	ned by:		Received by:	Via:	Date Time 7/237.13	Pay	/key/			rpris nAFE		a Se	rvices	s, LLC	<i>.</i>			

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

QUESTIONS

Action 314127

#### **QUESTIONS**

Operator:	OGRID:
Enterprise Field Services, LLC	241602
PO Box 4324	Action Number:
Houston, TX 77210	314127
	Action Type:
	[C-141] Deferral Request C-141 (C-141-v-Deferral)

#### QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2233445626
Incident Name	NAPP2233445626 SOUTH EDDY CRYO @ 0
Incident Type	Release Other
Incident Status	Deferral Request Received
Incident Facility	[fAPP2122928745] Enterprise Carlsbad GS

Location of Release Source	
Please answer all the questions in this group.	
Site Name	SOUTH EDDY CRYO
Date Release Discovered	11/30/2022
Surface Owner	Private

Incident Details		
Please answer all the questions in this group.		
Incident Type	Release Other	
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	Not answered.	
Natural Gas Vented (Mcf) Details	Not answered.	
Natural Gas Flared (Mcf) Details	Not answered.	
Other Released Details	Cause: Overflow - Tank, Pit, Etc.   Gas Plant   Chemical (Specify)   Released: 8 BBL   Recovered: 4 BBL   Lost: 4 BBL.	
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	A failed pump caused a sump to overflow 8 bbl of amine. No offsite impacts.	

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

QUESTIONS, Page 2

Action 314127

QUESTIONS (co	ntinued)
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Operator: Enterprise Field Services, LLC	OGRID: 241602
PO Box 4324	Action Number:
Houston, TX 77210	314127
	Action Type:  [C-141] Deferral Request C-141 (C-141-v-Deferral)
QUESTIONS	
Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	No
Reasons why this would be considered a submission for a notification of a major release	Unavailable.
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e.	e. gas only) are to be submitted on the C-129 form.
Initial Response	
The responsible party must undertake the following actions immediately unless they could create a s	afety hazard that would result in injury.
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	Not answered.
	ation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative o ed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of valuation in the follow-up C-141 submission.
to report and/or file certain release notifications and perform corrective actions for relea the OCD does not relieve the operator of liability should their operations have failed to a	nowledge and understand that pursuant to OCD rules and regulations all operators are required uses which may endanger public health or the environment. The acceptance of a C-141 report by idequately investigate and remediate contamination that pose a threat to groundwater, surface a does not relieve the operator of responsibility for compliance with any other federal, state, or
I hereby agree and sign off to the above statement	Name: Robert Dunaway Title: Environmental Manager Email: rhdunaway@eprod.com Date: 02/14/2024

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QUESTIONS

A 100-year floodplain

storage site

Did the release impact areas not on an exploration, development, production, or

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

QUESTIONS, Page 3

Action 314127

**QUESTIONS** (continued)

Operator:	OGRID:
Enterprise Field Services, LLC	241602
PO Box 4324	Action Number:
Houston, TX 77210	314127
	Action Type:
	[C-141] Deferral Request C-141 (C-141-v-Deferral)

#### 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 What is the shallowest depth to groundwater beneath the area affected by the Between 100 and 500 (ft.) release in feet below ground surface (ft bgs) What method was used to determine the depth to ground water NM OSE iWaters Database Search Did this release impact groundwater or surface water What is the minimum distance, between the closest lateral extents of the release and the following surface areas: A continuously flowing watercourse or any other significant watercourse Greater than 5 (mi.) Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark) Greater than 5 (mi.) An occupied permanent residence, school, hospital, institution, or church Greater than 5 (mi.) A spring or a private domestic fresh water well used by less than five households Between 1 and 5 (mi.) for domestic or stock watering purposes Any other fresh water well or spring Between 200 and 300 (ft.) Incorporated municipal boundaries or a defined municipal fresh water well field Greater than 5 (mi.) Between 200 and 300 (ft.) A subsurface mine Greater than 5 (mi.) An (non-karst) unstable area Greater than 5 (mi.) Categorize the risk of this well / site being in a karst geology

No

Between ½ and 1 (mi.)

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 vertica	l 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 CI B)	1360
TPH (GRO+DRO+MRO)	(EPA SW-846 Method 8015M)	2157
GRO+DRO	(EPA SW-846 Method 8015M)	367
BTEX	(EPA SW-846 Method 8021B or 8260B)	0
Benzene	(EPA SW-846 Method 8021B or 8260B)	0
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	Il the remediation commence	01/13/2023
On what date will (or did) the	ne final sampling or liner inspection occur	09/06/2023
On what date will (or was) t	the remediation complete(d)	
What is the estimated surfa	ice area (in square feet) that will be reclaimed	5707
What is the estimated volur	ne (in cubic yards) that will be reclaimed	8560
What is the estimated surfa	ce area (in square feet) that will be remediated	5707
What is the estimated volur	ne (in cubic yards) that will be remediated	8560
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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## State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. Santa Fe, NM 87505

QUESTIONS, Page 4

Action 314127

QUESTIONS (continued)

Operator:	OGRID:
Enterprise Field Services, LLC	241602
PO Box 4324	Action Number:
Houston, TX 77210	314127
	Action Type:
	[C-141] Deferral Request C-141 (C-141-v-Deferral)

#### QUESTIONS

Remediation Plan (continued)		
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.		
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:		
(Select all answers below that apply.)		
Yes		
LEA LAND LANDFILL [fEEM0112342028]		
Not answered.		

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

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

I hereby agree and sign off to the above statement

I hereby agree and sign off to the above statement

Title: Environmental Manager
Email: rhdunaway@eprod.com
Date: 03/04/2024

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.

Enterprise Field Services, LLC

Sante Fe Main Office Phone: (505) 476-3441

General Information Phone: (505) 629-6116

Operator:

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

QUESTIONS, Page 5

Action 314127

**QUESTIONS** (continued)

OGRID:

241602

Houston TV 77010	Action Number.
Houston, TX 77210	314127
	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	th 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	S 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	Per Enterprise's safety procedures regarding the restriction to utilize heavy equipment/machinery inside a facility due to risks to human health and safety which prohibits the further excavation of soil remaining in place, a deferral request for remediation is required in these areas.
What is the remaining surface area (in square feet) that will still need to be remediated if a deferral is granted	5707
What is the remaining volume (in cubic yards) that will still need to be remediated if a deferral is granted	8560
	nediately under or around production equipment such as production tanks, wellheads and pipelines where tion may be deferred with division written approval until the equipment is removed during other operations, or when
Enter the facility ID (f#) on which this deferral should be granted	Enterprise Carlsbad GS [fAPP2122928745]
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 which includes the anticipated timelines for beginning and completing the remediation.	d efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC
to report and/or file certain release notifications and perform corrective actions for re the OCD does not relieve the operator of liability should their operations have failed	ny knowledge and understand that pursuant to OCD rules and regulations all operators are required eleases which may endanger public health or the environment. The acceptance of a C-141 report by to adequately investigate and remediate contamination that pose a threat to groundwater, surface port does not relieve the operator of responsibility for compliance with any other federal, state, or
I hereby agree and sign off to the above statement	Name: Robert Dunaway Title: Environmental Manager Email: rhdunaway@eprod.com

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

QUESTIONS, Page 6

Action 314127

QUESTIONS (continued)		
Operator:	OGRID:	
Enterprise Field Services, LLC	241602	
PO Box 4324	Action Number:	
Houston, TX 77210	314127	
	Action Type:	
	[C-141] Deferral Request C-141 (C-141-v-Deferral)	

## QUESTIONS Sampling Event Information Last sampling notification (C-141N) recorded {Unavailable.}

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

CONDITIONS

Action 314127

#### **CONDITIONS**

Operator:	OGRID:
Enterprise Field Services, LLC	241602
PO Box 4324	Action Number:
Houston, TX 77210	314127
	Action Type:
	[C-141] Deferral Request C-141 (C-141-v-Deferral)

#### CONDITIONS

Created By		Condition Date
rhamlet	Enterprise's deferral requests final remediation for (Incident Number NAPP2233445626) until final reclamation of the well pad or major construction, whichever comes first. Ensolum and Enterprise do not believe deferment will result in imminent risk to human health, the environment, or groundwater. The impacted soil is the area in orange on Figure 3, where remediation would require a major facility deconstruction. At this time, OCD approves this request. The Deferral Request and C-141 will be accepted for record. The release will remain open in OCD database files and reflect an open environmental issue.	3/7/2025