

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

State of New Mexico  
Energy Minerals and Natural  
Resources Department

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

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

Incident ID	nAPP2308648014
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

Responsible Party Legacy Operating LLP	OGRID
Contact Name Meredith O'Brien	Contact Telephone (720)327-1543
Contact email mobrien@revenirenergy.com	Incident # (assigned by OCD) nAPP2308648014
Contact mailing address 1400 16th Street, Suite 510, Denver CO 80202	

### Location of Release Source

Latitude 32.103964 Longitude -103.122760  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name South Justis Unit D24 Flowline	Site Type Pasture
Date Release Discovered 03/24/2023	API# (if applicable)

Unit Letter	Section	Township	Range	County
E	25	25S	37E	Lea

Surface Owner:  State  Federal  Tribal  Private (Name: \_\_\_\_\_)

### Nature and Volume of Release

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

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) 5.5	Volume Recovered (bbls) 0
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 202.5	Volume Recovered (bbls) 0
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release 2" Flowline corroded and released produced water and crude oil into pasture.

State of New Mexico  
Oil Conservation Division

Incident ID	nAPP2308648014
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?  <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, for what reason(s) does the responsible party consider this a major release? <b>Release amount larger than 25 BBLs</b>
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?	

### Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.
If all the actions described above have <u>not</u> been undertaken, explain why:
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.
Printed Name: <u>Meredith O'Brien</u> Title: <u>Sr. Environmental Engineer</u> Signature: <u>Meredith O'Brien</u> Date: <u>05/02/2023</u> email: <u>mobrien@revenirenergy.com</u> Telephone: <u>(720)327-1543</u>
<b><u>OCD Only</u></b> Received by: _____ Date: _____

Incident ID	nAPP2308648014
District RP	
Facility ID	
Application ID	

## Site Assessment/Characterization

*This information must be provided to the appropriate district office no later than 90 days after the release discovery date.*

What is the shallowest depth to groundwater beneath the area affected by the release?	69' (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?	07/24/2023 - NV <input type="checkbox"/> Yes <input type="checkbox"/> No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

**Characterization Report Checklist:** *Each of the following items must be included in the report.*

- Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- Field data
- Data table of soil contaminant concentration data
- Depth to water determination
- Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- Boring or excavation logs
- Photographs including date and GIS information
- Topographic/Aerial maps
- Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico  
Oil Conservation Division

Page 4

Incident ID	nAPP2308648014
District RP	
Facility ID	
Application ID	

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

Printed Name: Meredith O'Brien Title: Sr. Environmental Engineer  
Signature: Meredith O'Brien Date: 05/02/2023  
email: mobrien@revenirenergy.com Telephone: (720)327-1543

**OCD Only**

Received by: Jocelyn Harimon Date: 05/02/2023

Incident ID	nAPP2308648014
District RP	
Facility ID	
Application ID	

## Remediation Plan

**Remediation Plan Checklist:** Each of the following items must be included in the plan.

- Detailed description of proposed remediation technique
- Scaled sitemap with GPS coordinates showing delineation points
- Estimated volume of material to be remediated
- Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

**Deferral Requests Only:** Each of the following items must be confirmed as part of any request for deferral of remediation.

- Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- Extents of contamination must be fully delineated.
- Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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

Printed Name: Meredith O'Brien Title: Sr. Environmental Engineer  
 Signature: Meredith O'Brien Date: 05/02/2023  
 email: mobrien@revenirenergy.com Telephone: (720)327-1543

**OCD Only**

Received by: Jocelyn Harimon Date: 05/02/2023

- Approved     Approved with Attached Conditions of Approval     Denied     Deferral Approved
- See text box below - NV

Signature: Nelson Velez Date: 07/24/2023

**Remediation plan approved with attached conditions;**

1. Site characterization data to be supplied in final closure report.
2. Confirmation samples should be analyzed for BTEX per US EPA Method 8260B, Total Petroleum Hydrocarbon per US EPA Method 8015B, and chloride per US EPA Method 300.0 or SM4500.
3. Confirmation sampling per 19.15.29.12D (1a) NMAC, OCD must verbally be notified via email two (2) business days prior to conducting final sampling.
4. Submittal of Form C-138 is added to the final closure report displaying total cubic yardages disposed.
5. Remediation due date set for 60-days or September 22, 2023 for final closure report or an alternative remediation plan.



Characterization and Remediation Workplan  
South Justis Unit D24 Flowline Failure  
Produced Water and Crude Oil Release  
Lea County, New Mexico  
nAPP2308648014

Latitude: 32.103904  
Longitude: -103.122760

April 26, 2023

Prepared by:  
Meredith O'Brien, PE  
Revenir Energy  
1400 16<sup>th</sup> street Suite 510  
Denver, CO 80202

## Project Information

On March 24, 2023, a release was discovered due to corrosion of a 2" steel flowline. The flowline is in Lea County, NM and is used to transport wellbore fluids from the South Justis Unit D24 (API 30-025-11794). The release location, (Lat: 32.103904, Long: -103.122760) is identified in Figure 1 and measures roughly 3925 sqft.

## Field and Contaminant Concentration Data

On April 10, 2023, soil samples were collected and submitted to Cardinal Laboratories. The analysis, including the chain of custody is attached in Appendix A and summarized in the table below.

Sample Name	Sample Depth	Chloride (ppm)	TPH (ppm)
S1	4'	ND	ND
S2	4'	2,280	ND
S3	4'	1,390	12.3
S4	6'	608	440.8
S5	5'	10,000	4,395

Additional samples will be collected as excavation begins to determine the horizontal bounds of the release area. (Figure 2)

## Depth to Water Determination & Water Source Data

- There are no surface water features within 1,000 ft of the site
- There are no fresh water wells within 1,000 ft of the site (Figure 3)
- There are several groundwater monitoring wells to the east of the project within 1,000 ft
- Depth to water is approximately 70' according to the New Mexico Office of the State Engineer (NMOSE) (See Appendix B)

## Remediation Levels and Plan

Contaminated soil above NMOCD specified threshold will be excavated and hauled to an approved facility for disposal. Work at this project is anticipated to begin Monday, May 1, 2023, and will take approximately 1 week to complete excavation of contaminated soil as identified below. The total amount of soil to be excavated is approximately 930 cubic yards and is dependent on additional lab analysis as the project progresses.

- For the area designated by S1, visible surface contamination will be excavated to approximately 1' bgs and soil samples will be collected and analyzed for chloride (EPA Method 300) to confirm concentration below 600 ppm with possible removal of additional soil to achieve closure criteria as shown below in Table I. Approximately 23 cubic yards of soil to be removed from the project area.
- For the areas designated by S2-S4, contaminated soils will be excavated to 4' bgs and soil samples will be collected and analyzed for chloride (EPA Method 300) and TPH (EPA SW-846 Method 8015M) to confirm concentration below 10,000 ppm chlorides and 2,500 ppm TPH. Approximately 741 cubic yards of soil to be removed from the project area.

- For the area designated by S5, contaminated soils will be excavated to between 6-8’ bgs and soil samples will be collected and analyzed for chloride (EPA Method 300) and TPH (EPA SW-846 Method 8015M) to confirm concentration below 10,000 ppm chlorides and 2,500 ppm TPH with possible removal of additional soil to achieve closure criteria as shown below in Table I. Approximately 164 cubic yards of soil to be removed from the project area.
- Additional soil samples will be collected as shown in Figure 2 to determine the horizontal extent of the release area. Pending results, additional soil may be excavated.

Groundwater in this area averages 70 feet bgs as shown in Appendix B, and current lab results show levels of Chlorides and TPH below closure criteria, with exception of Sample Area 5. After completion of excavations, Revenir Energy proposes confirmation samples in areas S1-S4 will be taken representing no more than 600 sqft each for the floors and no more than 200 sqft on the sidewalls. For the area of S5, samples will be taken representing no more than 200 sqft.

Minimum depth below any point within the horizontal boundary of the release to ground water less than 10,000 mg/l TDS	Constituent	Method*	Limit**
≤ 50 feet	Chloride***	EPA 300.0 or SM4500 Cl B	600 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	100 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg
51 feet-100 feet	Chloride***	EPA 300.0 or SM4500 Cl B	10,000 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	2,500 mg/kg
	GRO+DRO	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg
>100 feet	Chloride***	EPA 300.0 or SM4500 Cl B	20,000 mg/kg
	TPH (GRO+DRO+MRO)	EPA SW-846 Method 8015M	2,500 mg/kg
	GRO+DRO	EPA SW-846 Method 8015M	1,000 mg/kg
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg
	Benzene	EPA SW-846 Method 8021B or 8260B	10 mg/kg

\*Or other test methods approved by the division.

\*\*Numerical limits or natural background level, whichever is greater.

\*\*\*This applies to releases of produced water or other fluids, which may contain chloride.

[19.15.29.12 NMAC - N, 8/14/2018]

### Restoration, Reclamation, and Re-Vegetation

Once all contaminant levels are confirmed below closure criteria, the excavation will be backfilled with non-waste containing, uncontaminated, earthen material. The area will be re-seeded in the first favorable growing season following closure of the site.

### Maps

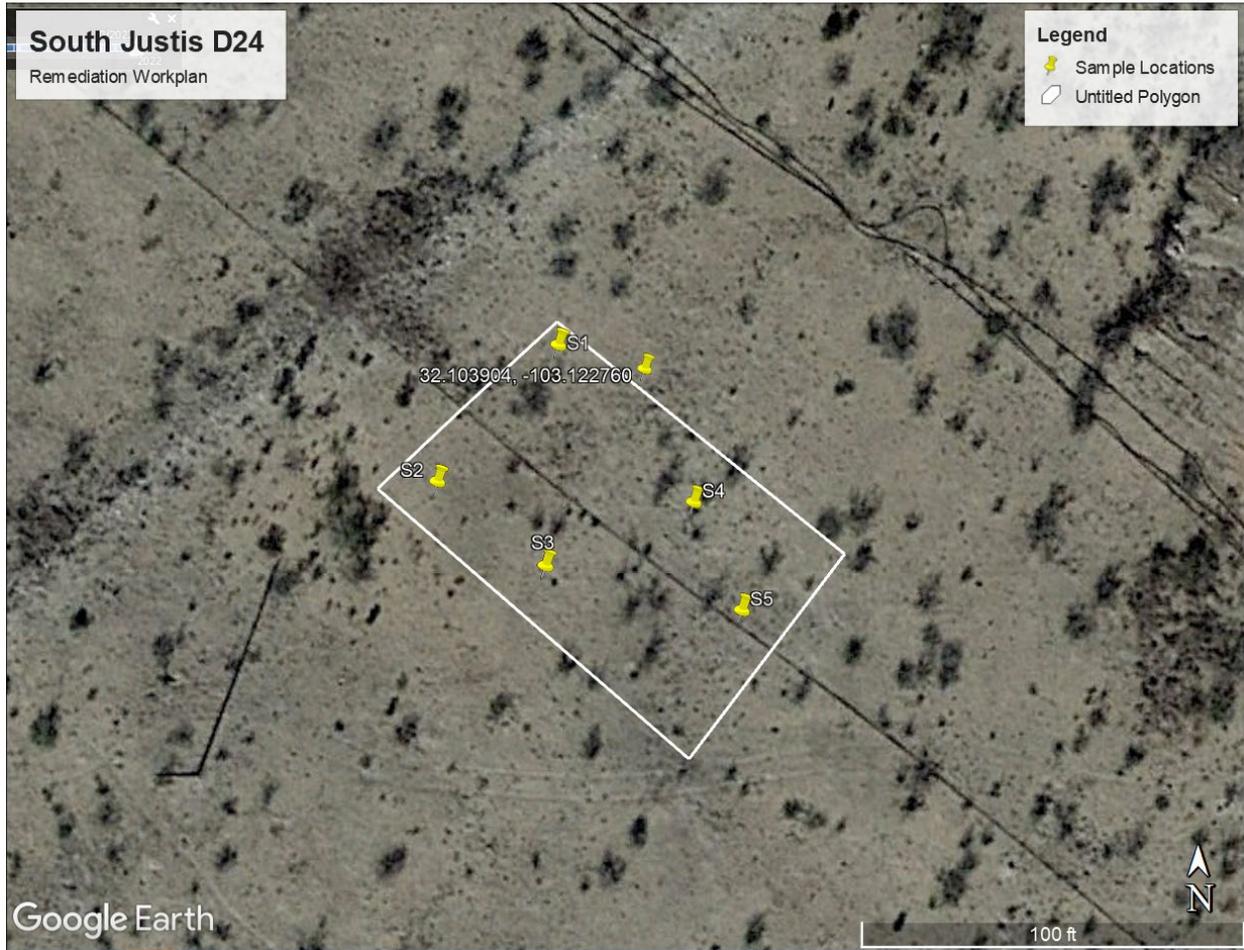


Figure 1: South Justis Unit D 24 Release Area

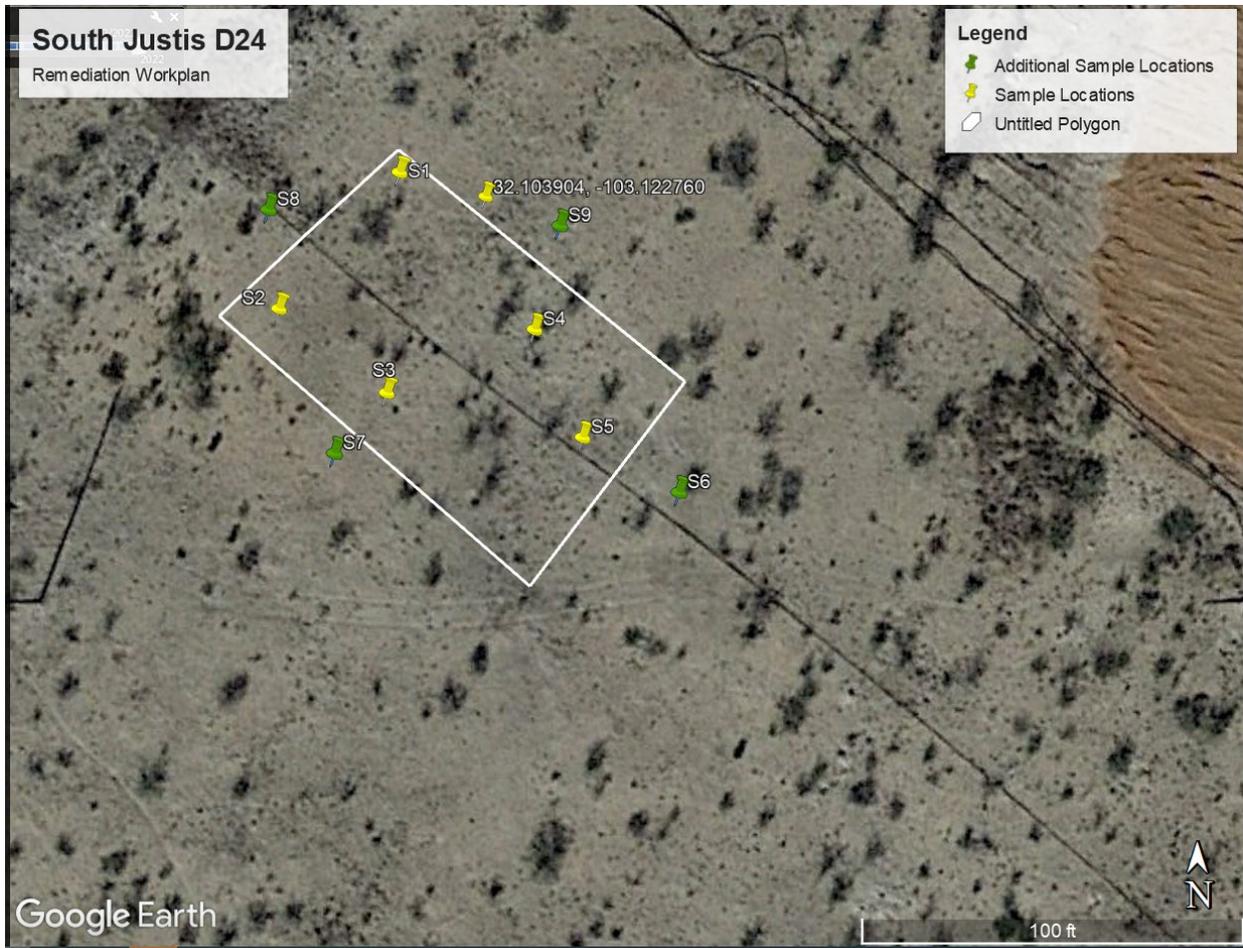
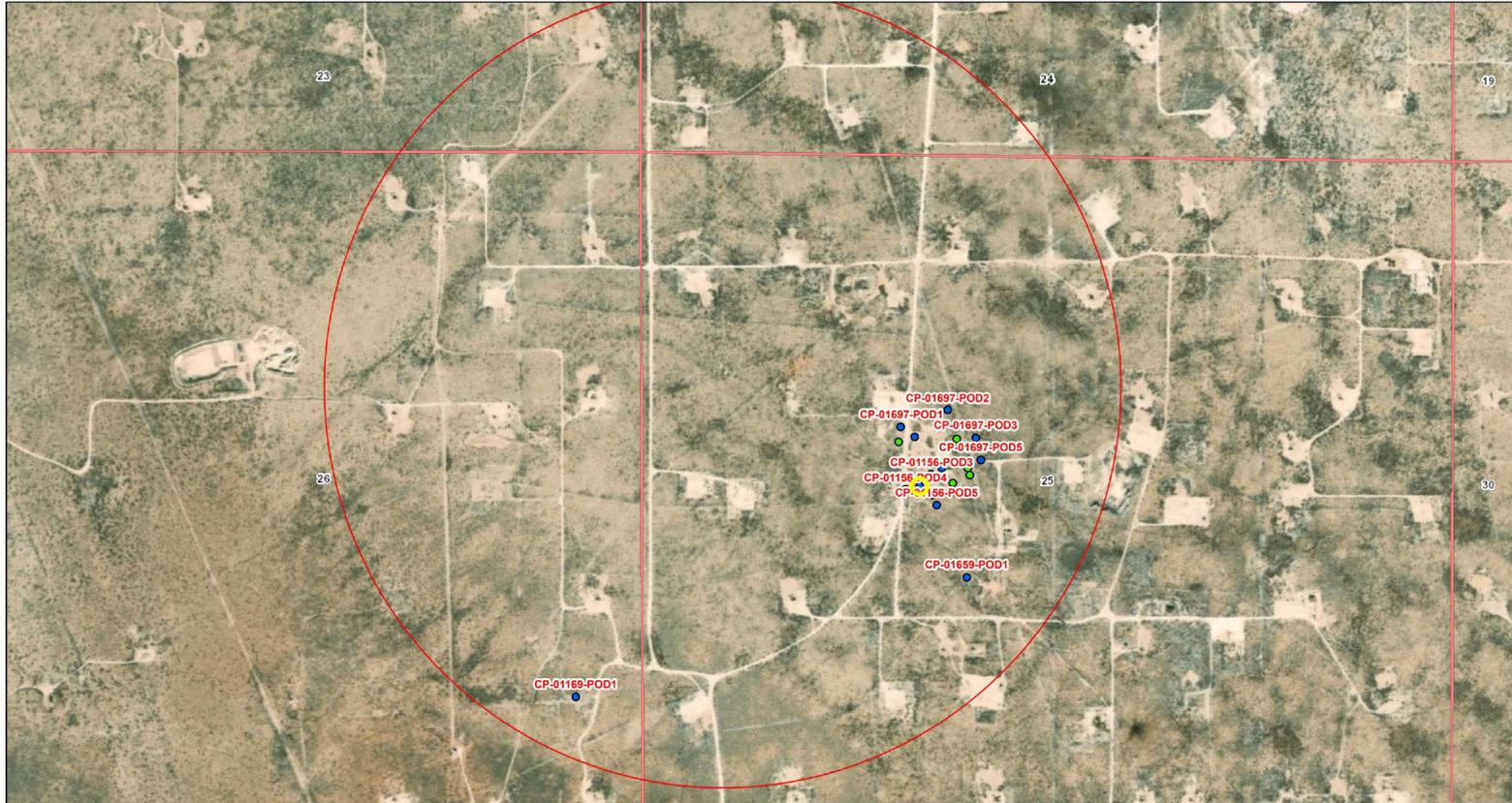


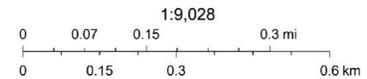
Figure 2: Location of Additional Soil Samples to be Taken

### OSE POD Locations Map



4/27/2023, 4:03:18 PM

GIS WATERS PODs    ● Pending    ■ SiteBoundaries  
● Active    □ OSE District Boundary    □ Sections



Esri, HERE, IPC, OSE SLO, U.S. Department of Energy, Office of Legacy Management, Esri, HERE, Garmin, IPC, Maxar

Web Generated Map  
Map is generated by web users.

Figure 3: NMOSE POD Map

# Photographs

## Planimeter Measurement Report

**Project Name:**  
SJU D24

**Project Description:**  
Steel Flowline Leak

**Measurement Date:** 24-Mar-2023 10:37 MDT

Distance : 348.68 feet  
Area : 3924.96 feet<sup>2</sup>  
Perimeter : 109.81 m  
Number of points : 17  
Location : 32.103799, -103.122691

### Points:

Num, Lat, Lng, Note

=====

- #1: 32.103799, -103.122691,
- #2: 32.103783, -103.122702,
- #3: 32.103819, -103.122756,
- #4: 32.103809, -103.122822,
- #5: 32.103774, -103.122741,
- #6: 32.103748, -103.122656,
- #7: 32.103675, -103.122681,
- #8: 32.103678, -103.122752,
- #9: 32.103742, -103.122787,
- #10: 32.103744, -103.122841,
- #11: 32.103795, -103.122873,
  
- #12: 32.103829, -103.122938,
- #13: 32.103884, -103.122913,
- #14: 32.103904, -103.122841,
- #15: 32.103904, -103.122760,
- #16: 32.103872, -103.122706,
- #17: 32.103830, -103.122684,







# Appendix A

Laboratory Analysis



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

---

April 14, 2023

MELECIO OROZCO  
SUPERIOR OILFIELD SERVICE  
P. O. BOX 73  
EUNICE, NM 88231

RE: LMPSU D24

Enclosed are the results of analyses for samples received by the laboratory on 04/10/23 15:47.

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

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene  
Lab Director/Quality Manager



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

**Analytical Results For:**

SUPERIOR OILFIELD SERVICE  
 MELECIO OROZCO  
 P. O. BOX 73  
 EUNICE NM, 88231  
 Fax To:

Received:	04/10/2023	Sampling Date:	04/10/2023
Reported:	04/14/2023	Sampling Type:	Soil
Project Name:	LMPDU D24	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY		

**Sample ID: S 1 - 4' (H231676-01)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	04/13/2023	ND	416	104	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/13/2023	ND	192	96.1	200	3.61	
DRO >C10-C28*	<10.0	10.0	04/13/2023	ND	189	94.3	200	4.80	
EXT DRO >C28-C36	<10.0	10.0	04/13/2023	ND					
Surrogate: 1-Chlorooctane	91.7 %	48.2-134							
Surrogate: 1-Chlorooctadecane	97.5 %	49.1-148							

**Sample ID: S 2 - 4' (H231676-02)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<b>2280</b>	16.0	04/13/2023	ND	416	104	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/13/2023	ND	192	96.1	200	3.61	
DRO >C10-C28*	<10.0	10.0	04/13/2023	ND	189	94.3	200	4.80	
EXT DRO >C28-C36	<10.0	10.0	04/13/2023	ND					
Surrogate: 1-Chlorooctane	95.0 %	48.2-134							
Surrogate: 1-Chlorooctadecane	104 %	49.1-148							

Cardinal Laboratories

\*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

SUPERIOR OILFIELD SERVICE  
 MELECIO OROZCO  
 P. O. BOX 73  
 EUNICE NM, 88231  
 Fax To:

Received:	04/10/2023	Sampling Date:	04/10/2023
Reported:	04/14/2023	Sampling Type:	Soil
Project Name:	LMPUSU D24	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY		

**Sample ID: S 3 - 4' (H231676-03)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>1390</b>	16.0	04/13/2023	ND	416	104	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/13/2023	ND	192	96.1	200	3.61	
<b>DRO &gt;C10-C28*</b>	<b>12.3</b>	10.0	04/13/2023	ND	189	94.3	200	4.80	
EXT DRO >C28-C36	<10.0	10.0	04/13/2023	ND					
<i>Surrogate: 1-Chlorooctane</i>	98.7 %	48.2-134							
<i>Surrogate: 1-Chlorooctadecane</i>	109 %	49.1-148							

**Sample ID: S 4 - 6' (H231676-04)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>608</b>	16.0	04/13/2023	ND	416	104	400	0.00	
TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	04/13/2023	ND	192	96.1	200	3.61	
<b>DRO &gt;C10-C28*</b>	<b>383</b>	10.0	04/13/2023	ND	189	94.3	200	4.80	
<b>EXT DRO &gt;C28-C36</b>	<b>57.8</b>	10.0	04/13/2023	ND					
<i>Surrogate: 1-Chlorooctane</i>	105 %	48.2-134							
<i>Surrogate: 1-Chlorooctadecane</i>	117 %	49.1-148							

Cardinal Laboratories

\* = Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

SUPERIOR OILFIELD SERVICE  
 MELECIO OROZCO  
 P. O. BOX 73  
 EUNICE NM, 88231  
 Fax To:

Received:	04/10/2023	Sampling Date:	04/10/2023
Reported:	04/14/2023	Sampling Type:	Soil
Project Name:	LMPSU D24	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Tamara Oldaker
Project Location:	LEGACY		

**Sample ID: S 5 - 5' (H231676-05)**

**Chloride, SM4500Cl-B** **Analyzed By: AC**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>10000</b>	16.0	04/13/2023	ND	416	104	400	0.00	

**TPH 8015M** **Analyzed By: MS**

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>GRO C6-C10*</b>	<b>39.9</b>	10.0	04/14/2023	ND	192	96.1	200	3.61	
<b>DRO &gt;C10-C28*</b>	<b>3560</b>	10.0	04/14/2023	ND	189	94.3	200	4.80	
<b>EXT DRO &gt;C28-C36</b>	<b>795</b>	10.0	04/14/2023	ND					

Surrogate: 1-Chlorooctane 111 % 48.2-134

Surrogate: 1-Chlorooctadecane 129 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND Analyte NOT DETECTED at or above the reporting limit
RPD Relative Percent Difference
\*\* Samples not received at proper temperature of 6°C or below.
\*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

\*=Accredited Analyte

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

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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

### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <i>Superior Oilfield Services</i>		<b>BILL TO</b>		<b>ANALYSIS REQUEST</b>											
Project Manager: <i>Melecio Orozco</i>		P.O. #:													
Address: <i>3326 W Bender</i>		Company: <i>Legacy Res.</i>													
City: <i>Hobbs</i> State: <i>NM</i> Zip: <i>88240</i>		Attn: <i>Manuel Soriano</i>													
Phone #: <i>575-631-1217</i> Fax #:		Address: <i>15 Smith Rd</i>													
Project #: _____ Project Owner: <i>Legacy</i>		City: <i>Midland Tx</i>													
Project Name: <i>LMPSU D24</i>		State: <i>Tx</i> Zip: <i>79705</i>													
Project Location:		Phone #: <i>432-269-8800</i>													
Sampler Name:		Fax #:													

FOR LAB USE ONLY		(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX					PRESERV.		SAMPLING		TRH	Chlorides	
Lab I.D.	Sample I.D.			GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	ACID/BASE:	ICE / COOL	OTHER			DATE
<i>H231676</i>															
	<i>1 51 - 4'</i>											<i>4-10</i>	<i>1:40</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<i>2 52 - 4'</i>											<i>4-10</i>	<i>1:45</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<i>3 53 - 4'</i>											<i>4-10</i>	<i>1:50</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<i>4 54 - 6'</i>											<i>4-10</i>	<i>1:55</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	<i>5 55 - 5'</i>											<i>4-10</i>	<i>2:00</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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

Relinquished By: <i>Melicio Orozco</i>	Date: <i>4-10-23</i>	Received By: <i>Manuel Soriano</i>	Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #:
	Time: <i>1547</i>		All Results are emailed. Please provide Email address:
Relinquished By:	Date:	Received By:	<i>JSoriano@legacylp.com</i>
	Time:		REMARKS:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C <i>59</i>	Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Turnaround Time: <input checked="" type="checkbox"/> Standard <input type="checkbox"/> Rush
	Corrected Temp. °C <i>53</i>	CHECKED BY: (Initials) <i>YO</i>	Bacteria (only) Sample Condition Cool Intact Observed Temp. °C <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No Corrected Temp. °C

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

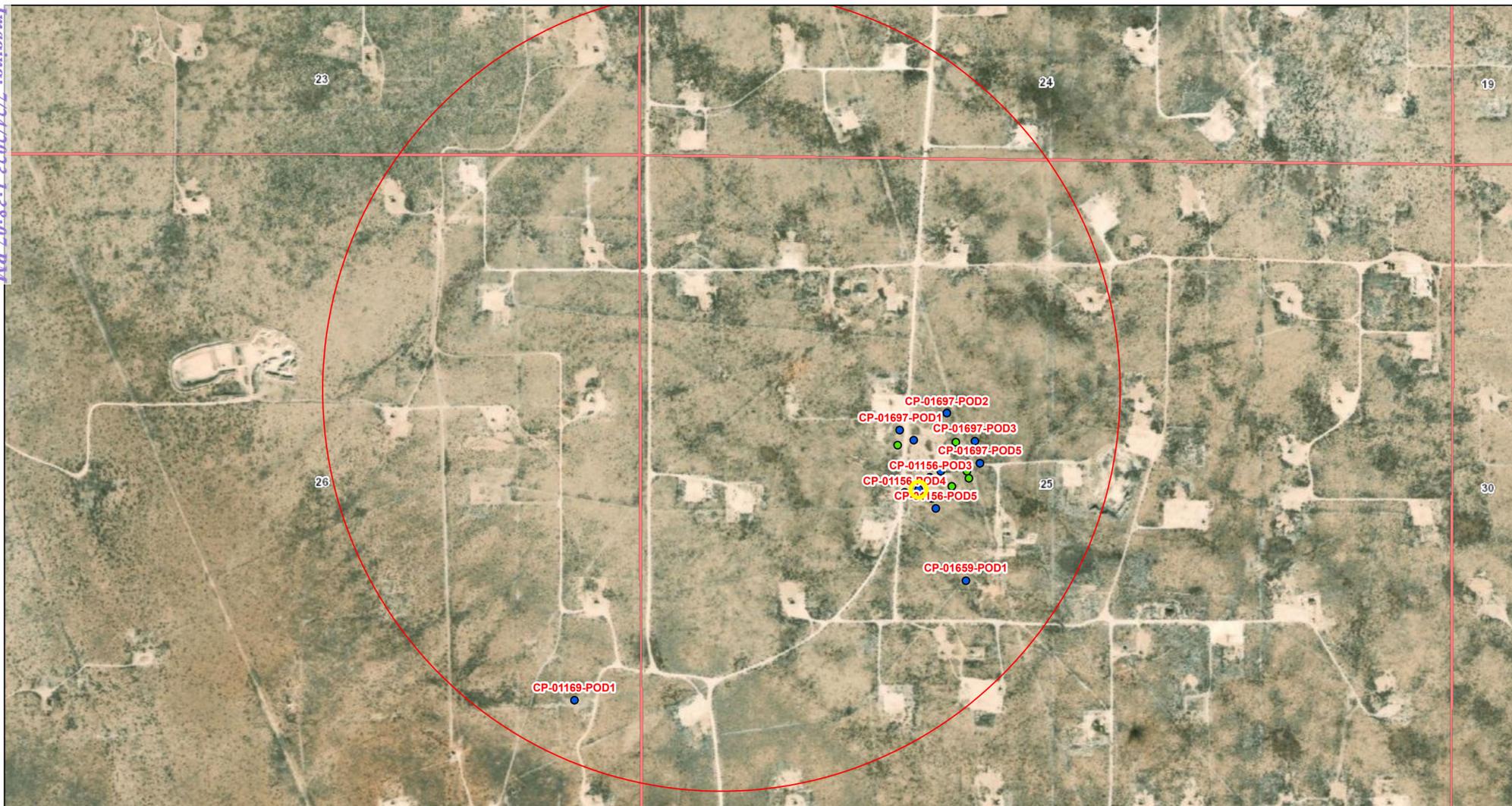
# Appendix B

Groundwater Data

# OSE POD Locations Map

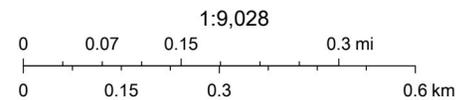
Released to Imaging: 7/24/2023 1:38:07 PM

Received by OCD: 5/2/2023 1:31:10 PM



4/27/2023, 4:03:18 PM

- GIS WATERS PODs
- Active
- Pending
- SiteBoundaries
- OSE District Boundary
- Sections



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

Web Generated Map  
Map is generated by web users.

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

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

CONDITIONS

Action 212732

**CONDITIONS**

Operator: LEGACY RESERVES OPERATING, LP 15 Smith Road Midland, TX 79705	OGRID: 240974
	Action Number: 212732
	Action Type: [C-141] Release Corrective Action (C-141)

**CONDITIONS**

Created By	Condition	Condition Date
nvez	Remediation plan approved with attached conditions; 1. Site characterization data to be supplied in final closure report. 2. Confirmation samples should be analyzed for BTEX per US EPA Method 8260B, Total Petroleum Hydrocarbon per US EPA Method 8015B, and chloride per US EPA Method 300.0 or SM4500. 3. Confirmation sampling per 19.15.29.12D (1a) NMAC, OCD must verbally be notified via email two (2) business days prior to conducting final sampling. 4. Submittal of Form C-138 is added to the final closure report displaying total cubic yardages disposed. 5. Remediation due date set for 60-days or September 22, 2023 for final closure report or an alternative remediation plan.	7/24/2023