

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

State of New Mexico
Energy Minerals and Natural
Resources Department

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

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

Incident ID	NAPP2201043390
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party Opal Operating Company LLC	OGRID 330887
Contact Name Craig Johnson	Contact Telephone 405-849-5606
Contact email cjohnson@opalnaturalresources.com	Incident #nAPP2201043390
Contact mailing address 4811 Gaillardia Parkway, Suite 100, Oklahoma City, OK. 73142	

Location of Release Source

Latitude 33.469808 Longitude -103.6394882
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Mescalero ARL State #2	Site Type Well Location
Date Release Discovered 01/02/2022	API#30-025-37039

Unit Letter	Section	Township	Range	County
O	2	10S	32E	Lea

Surface Owner: State Federal Tribal Private (Name: _____)

Nature and Volume of Release

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

<input checked="" type="checkbox"/> Crude Oil	Volume Released (bbls) 4	Volume Recovered (bbls) 1
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 10	Volume Recovered (bbls) 1
	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

Flow-line freeze caused poly line to split.

Incident ID	NAPP2201043390
District RP	
Facility ID	
Application ID	

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

Initial Response

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

<input checked="" type="checkbox"/> The source of the release has been stopped. <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment. <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.
If all the actions described above have <u>not</u> been undertaken, explain why:
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.
Printed Name: <u>Craig Johnson</u> Title: <u>Manager</u> Signature: <u></u> Date: <u>4/11/22</u> email: <u>cjohnson@opalnaturalresources.com</u> Telephone: <u>405-849-5606</u>
OCD Only Received by: <u>Jocelyn Harimon</u> Date: <u>06/09/2022</u>

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2201043390
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?	_____ (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 not on an exploration, development, production, or storage site?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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

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

- Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- Field data
- Data table of soil contaminant concentration data
- Depth to water determination
- Determination of water sources and significant watercourses within 1/2-mile of the lateral extents of the release
- Boring or excavation logs
- Photographs including date and GIS information
- Topographic/Aerial maps
- Laboratory data including chain of custody

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

Incident ID	NAPP2201043390
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: Craig Johnson Title: Manager
Signature: Craig Johnson Date: 4/11/22
email: cjohnson@opalnaturalresources.com Telephone: 405-849-5606

OCD Only
Received by: _____ Date: _____

Incident ID	NAPP2201043390
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: Craig Johnson Title: Manager
 Signature:  Date: 4/11/22
 email: cjohnson@opalnaturalresources.com Telephone: 405-849-5606

OCD Only

Received by: _____ Date: _____

- Approved Approved with Attached Conditions of Approval Denied Deferral Approved

Signature: _____ Date: _____

Incident ID	
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: *Each of the following items must be included in the closure report.*

- A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Craig Johnson Title: Manager
 Signature: *Craig Johnson* Date: 4/11/22
 email: cjohnson@opa.naturalresources.com Telephone: 405-849-5606

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: *Jennifer Nobui* Date: 06/13/2022
 Printed Name: Jennifer Nobui Title: Environmental Specialist A

**Opal Operating
Mescalero ARL #002**

**Remediation Report
O-02-10S-32E
Lea County, New Mexico**

NAPP2201043390

February 4, 2022



Prepared for:

**Opal Operating Company LLC
4811 Gaillardia Parkway
Oklahoma City, OK 73142**

By:

**Safety & Environmental Solutions, Inc.
703 East Clinton Street
Hobbs, New Mexico 88240**

Company Contacts

Representative	Company	Telephone	E-mail
Craig Johnson	Opal Operating	405-849-5606	cjohnson@opalnaturalresources.com
Bob Allen	SESI	575-397-0510	ballen@sesi-nm.com

Background

Safety and Environmental Solutions, Inc., hereinafter referred to as (SESI) was contracted by Opal Operating to assess the Mescalero ARL St #2 location. This site is situated in UL O, Section 2, Township 10S and Range 32E, in Lea County New Mexico.

According to the NOR for NAPP2201043390, a production line froze and ruptured, releasing 4 bbls of oil and 10 bbls of produced water. Of this release 1bbl of oil and 1 bbl of water were recovered. This report encompasses the efforts to remediate and close out this well file.

Surface and Ground Water

According to the NMOCD Oil and Gas Map, there is no surface water within 3,000 feet of this location. Depth to groundwater determination was not successfully established based on the guidelines required by NMOCD; therefore, Opal will remediate this location according to the most stringent criteria set forth by NMOCD in NMAC 19.15.29.

Characterization

The location was fully delineated, which includes establishing horizontal and vertical extent of delineation to the most stringent standard of 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene.

Investigation

SESI personnel mapped the location and sampled the area to achieve both vertical and horizontal delineation. Samples were taken at the surface and 1-foot intervals until field testing indicated the samples would meet target levels. This project used a proprietary product (Micro Blaze) to treat the affected area. No initial soil samples were obtained, only confirmation samples were captured to ensure remediation was successful. The results of the analytical are captured in the summary table below.

Opal Operating Mescalero ARL #2 Soil Sample Results: Hall Environmental Laboratories 1/6/22								
SAMPLE ID	Chloride	GRO	DRO	MRO	Benzene	Toluene	Ethyl benzene	Total Xylenes
SP-1 @ 1'	270	ND	ND	ND	ND	ND	ND	ND
SP-2 @ 6"	320	ND	ND	ND	ND	ND	ND	ND
SP-3 @ 3"	ND	ND	ND	ND	ND	ND	ND	ND
SP-4 @ 3"	ND	ND	ND	ND	ND	ND	ND	ND
West Surface	ND	ND	ND	ND	ND	ND	ND	ND
East Surface	ND	ND	ND	ND	ND	ND	ND	ND
South Surface	280	ND	ND	ND	ND	ND	ND	ND

Remediation

Based on the results of the field delineation, initial site visit, and the use of the Micro Blaze treatment, SESI, determined the best course of action is to use a second application of the Micro Blaze treatment. In January of 2022, contaminated material was removed by excavating the affected area, Confirmation samples were taken to ensure remediation was successful and that the vertical and horizontal extent of the location had been established.

Once sample results verified both successful remediation and horizontal extent, the site was backfilled with clean soil. Pictures of the remediation are included in this report.

Closure Request

Based on the confirmation and horizontal sample results, SESI believes the location to be properly remediated according to the closure criteria set forth in Table I of the Spill Rule 19.15.29 NMAC. Therefore, SESI, on behalf of Opal Operating respectfully requests closure and release of this location. Supplemental information has been included in this report to support our closure request.

Supplemental Documentation for Closure

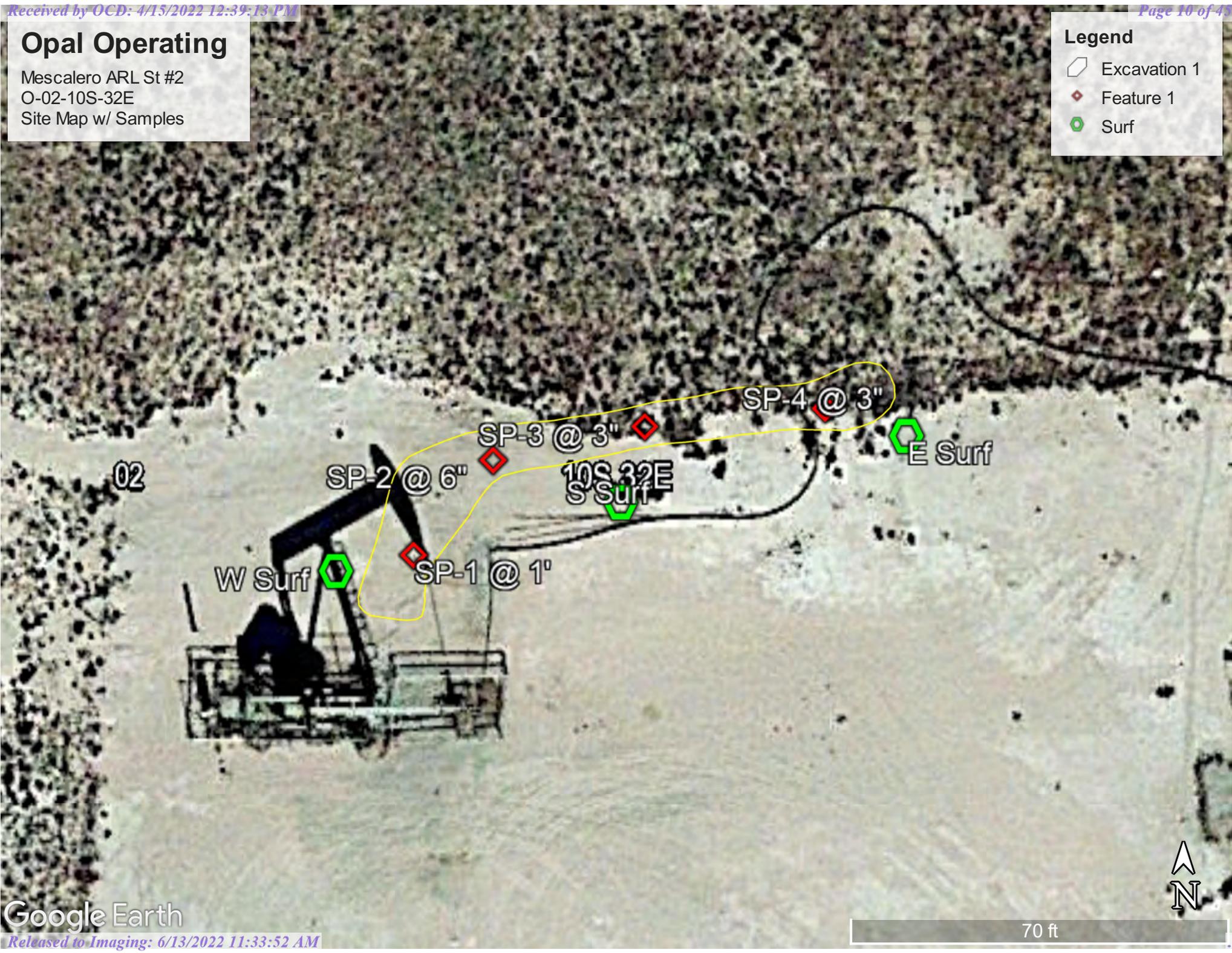
- Map of Release with sample locations
- Photos of release and remediation
- NMOCD Oil and Gas Map
- BLM Cave Karst Map
- FEMA Floodplain Map
- Laboratory Analysis

Opal Operating

Mescalero ARL St #2
O-02-10S-32E
Site Map w/ Samples

Legend

-  Excavation 1
-  Feature 1
-  Surf



02

SP-2 @ 6"

SP-3 @ 3"

SP-4 @ 3"

10S 32E
S Surf

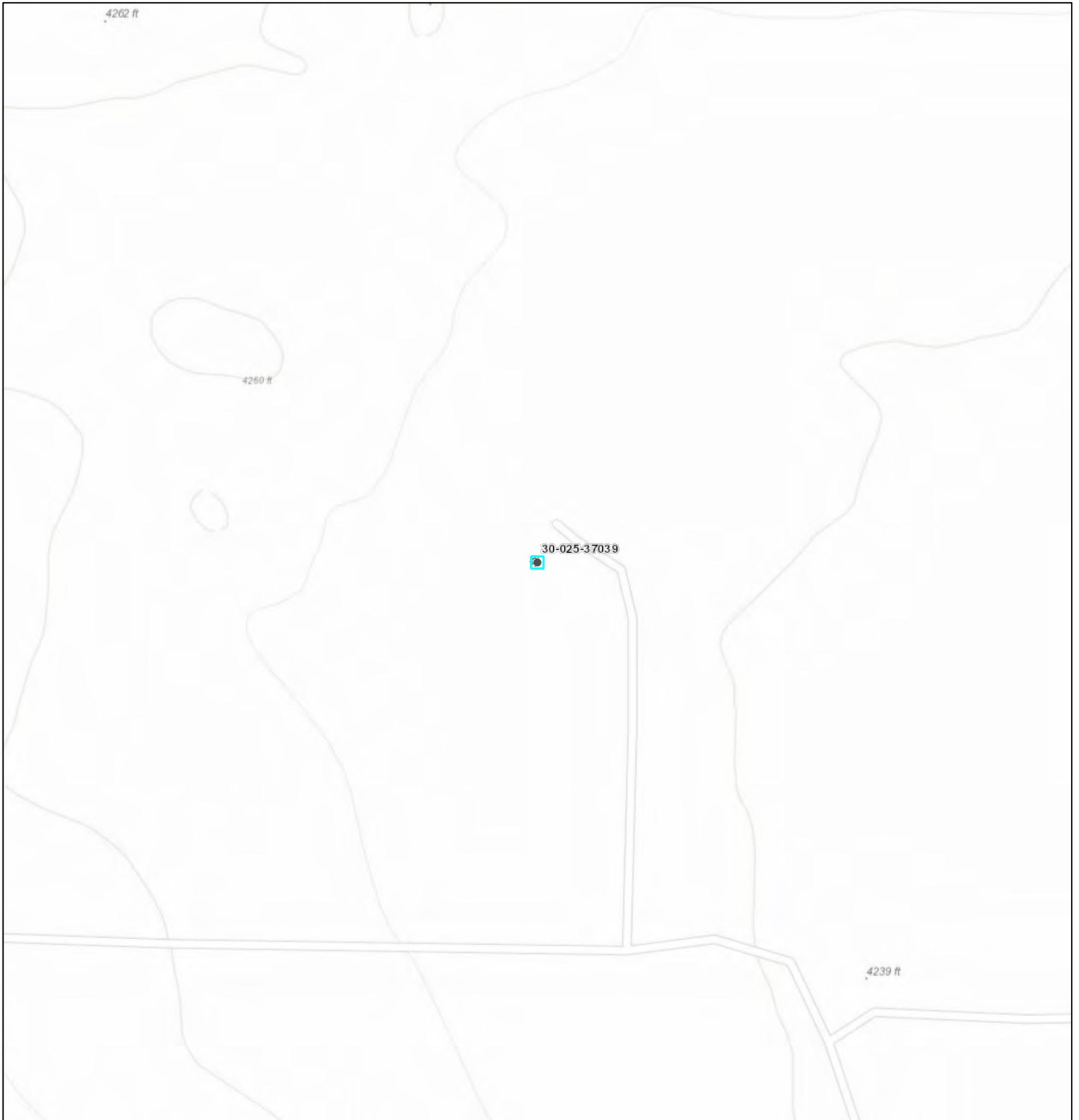
E Surf

W Surf

SP-1 @ 1"



OCD Well Locations

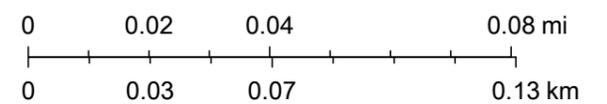


1/16/2022, 7:37:08 PM

Wells - Large Scale

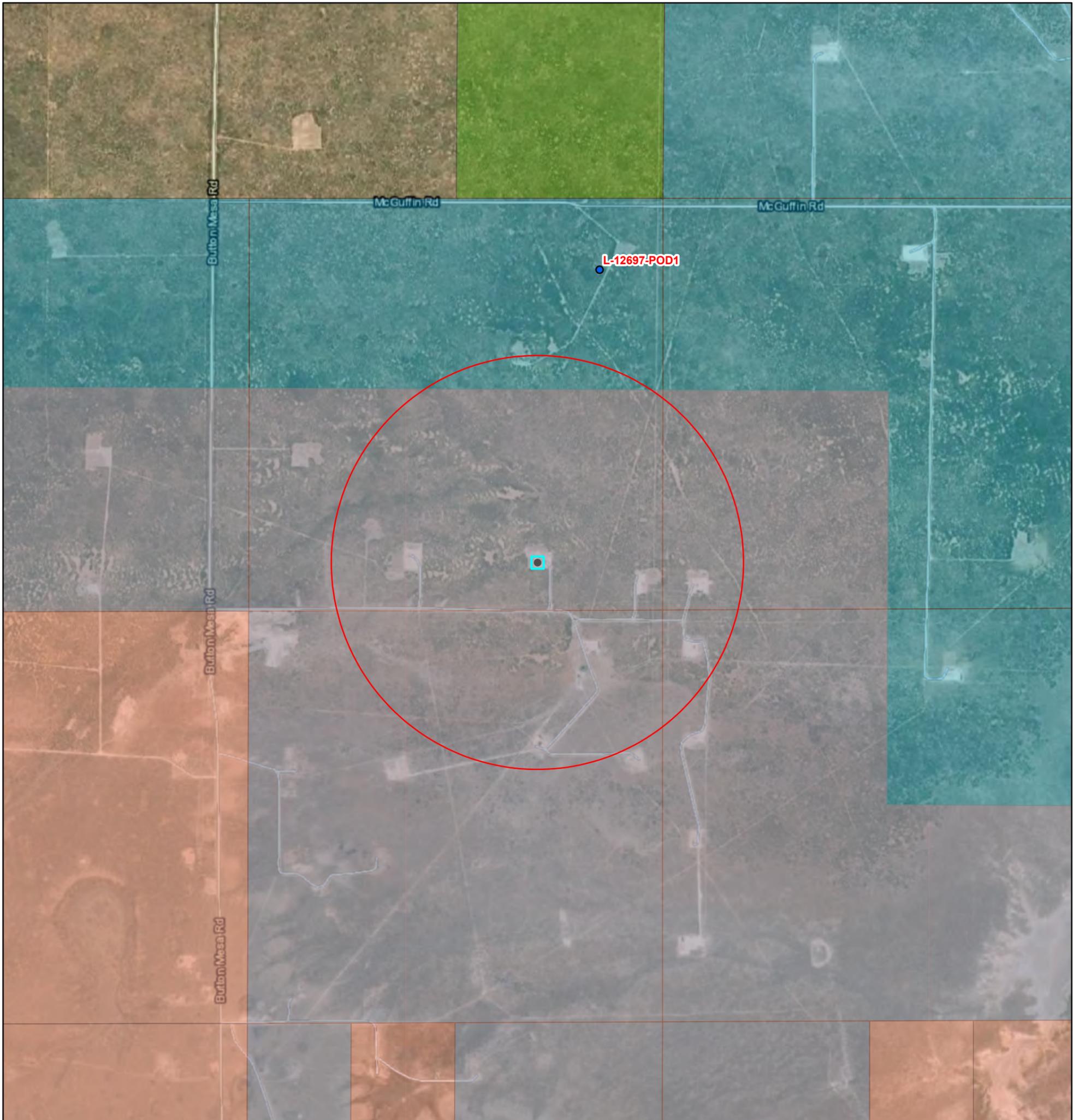
- | | | | | | |
|---|----------------------------|---|----------------------------------|---|---|
| ? | undefined | ☼ | Gas, Temporarily Abandoned | ▲ | Salt Water Injection, Active |
| ● | Miscellaneous | ⚙ | Injection, Active | △ | Salt Water Injection, Cancelled |
| ☼ | CO2, Active | ⚙ | Injection, Cancelled | ▲ | Salt Water Injection, New |
| ☼ | CO2, Cancelled | ⚙ | Injection, New | ▲ | Salt Water Injection, Plugged |
| ☼ | CO2, New | ⚙ | Injection, Plugged | ▲ | Salt Water Injection, Temporarily Abandoned |
| ☼ | CO2, Plugged | ⚙ | Injection, Temporarily Abandoned | ● | Water, Active |
| ☼ | CO2, Temporarily Abandoned | ● | Oil, Active | ● | Water, Cancelled |
| ☼ | Gas, Active | ● | Oil, Cancelled | ● | Water, New |
| ☼ | Gas, Cancelled | ● | Oil, New | ● | Water, Plugged |
| ☼ | Gas, New | ● | Oil, Plugged | ● | Water, Temporarily Abandoned |
| ☼ | Gas, Plugged | ● | Oil, Temporarily Abandoned | ★ | OCD District Offices |

1:2,257



Oil Conservation Division of the New Mexico Energy, Minerals and Natural Resources Department., OCD, Bureau of Land Management, Texas Parks & Wildlife, Esri, HERE, Garmin, INCREMENT P, USGS, EPA, USDA

OSE POD Locations Map



1/16/2022, 7:30:59 PM

GIS WATERS PODs

● Active

□ OSE District Boundary

Water Right Regulations

□ Critical Management Area - Guidelines

New Mexico State Trust Lands

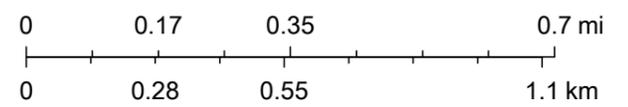
□ Subsurface Estate

□ Surface Estate

□ Both Estates

□ SiteBoundaries

1:18,056



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

National Water Information System: Web Interface

USGS Water Resources

Data Category: Geographic Area:

Click to hide News Bulletins

- Explore the [NEW USGS National Water Dashboard](#) interactive map to access real-time water data from over 13,500 stations nationwide.
- [Full News](#)

Groundwater levels for New Mexico

Click to hide state-specific text

Important: [Next Generation Monitoring Location Page](#)

Site Selection Results -- 11 sites found

Site name contains string = 10S.32E

Minimum number of levels = 1

[Save file of selected sites](#) to local disk for future upload

Data for individual sites can be obtained by selecting the site number below

Agency	Site Number	Site Name	Period of Record		
			Begin Date	End Date	Levels
USGS	332348103403501	10S.32E.33.324134	1970-07-27	1996-01-31	4
USGS	332402103420301	10S.32E.31.244242	1970-07-27	1976-03-12	3
USGS	332439103373901	10S.32E.25.31441	1930-07-20	1996-01-31	4
USGS	332511103415601	10S.32E.29.113212	1971-04-01	1981-02-11	2
USGS	332524103414101	10S.32E.20.34321	1930-08-07	1930-08-07	1
USGS	332526103413801	10S.32E.20.342331	1970-07-27	1981-02-11	4
USGS	332619103422901	10S.32E.18.43134	1971-04-01	1981-02-10	3
USGS	332656103414301	10S.32E.17.12310	1954-09-17	1996-01-17	7
USGS	332658103385101	10S.32E.14.111343	1957-06-13	1996-01-31	7
USGS	332658103392901	10S.32E.15.122344	1930-08-07	1957-06-13	2
USGS	332658103392902	10S.32E.15.122433	1954-09-17	1981-02-11	2

[Questions about sites/data?](#)

[Feedback on this web site](#)

[Automated retrievals](#)

[Help](#)

[Data Tips](#)

[Explanation of terms](#)

[Subscribe for system changes](#)

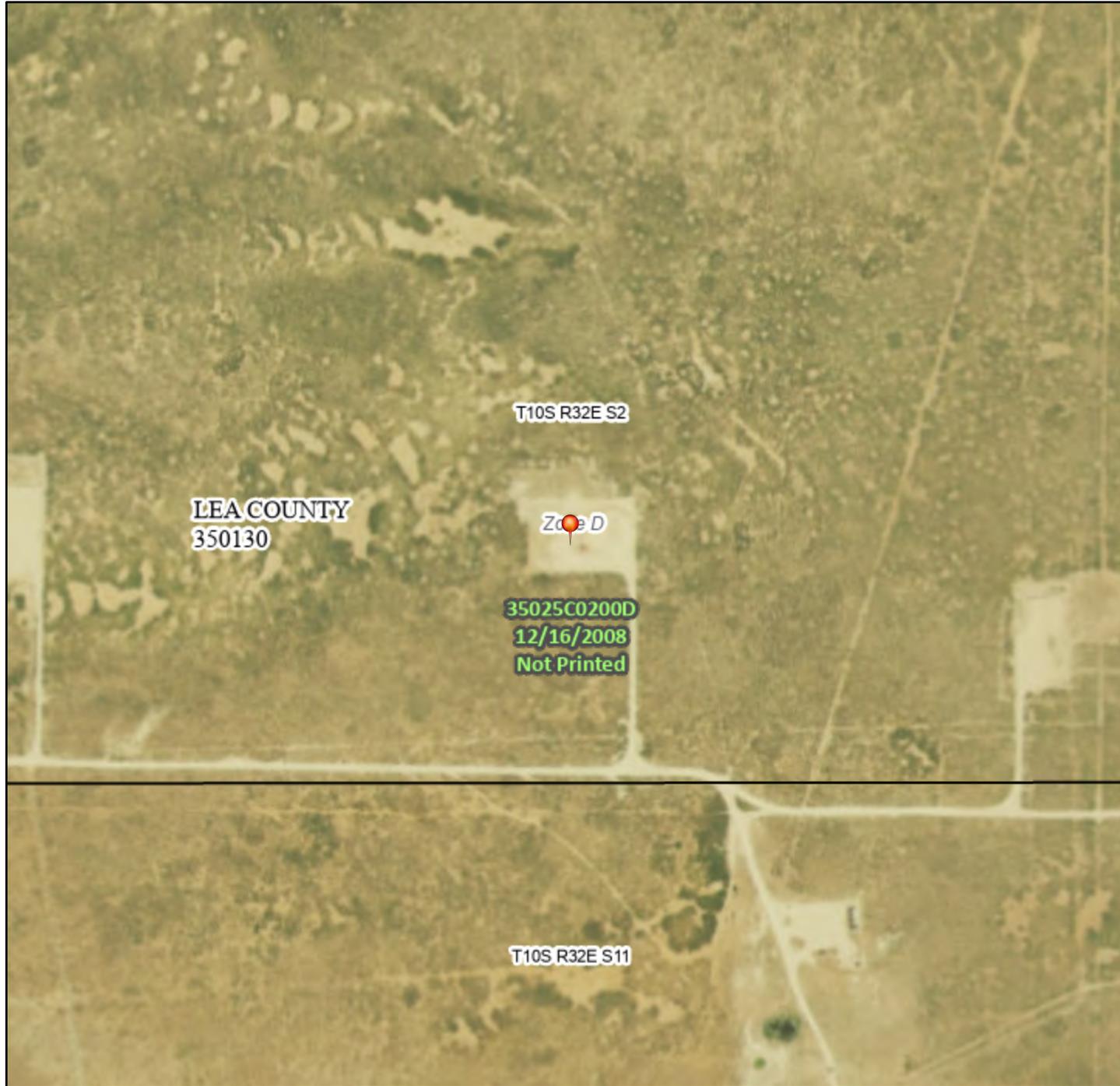
[News](#)

Received by OCD: 4/15/2022 12:39:13 PM

National Flood Hazard Layer FIRMette



103°38'41"W 33°28'26"N



Legend

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

- SPECIAL FLOOD HAZARD AREAS**
 - Without Base Flood Elevation (BFE) Zone A, V, A99
 - With BFE or Depth Zone AE, AO, AH, VE, AR
 - Regulatory Floodway
- OTHER AREAS OF FLOOD HAZARD**
 - 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
 - Area with Flood Risk due to Levee Zone D
- OTHER AREAS**
 - NO SCREEN Area of Minimal Flood Hazard Zone X
 - Effective LOMRs
 - Area of Undetermined Flood Hazard Zone D
- GENERAL STRUCTURES**
 - Channel, Culvert, or Storm Sewer
 - Levee, Dike, or Floodwall
- OTHER FEATURES**
 - Cross Sections with 1% Annual Chance Water Surface Elevation
 - Coastal Transect
 - Base Flood Elevation Line (BFE)
 - Limit of Study
 - Jurisdiction Boundary
 - Coastal Transect Baseline
 - Profile Baseline
 - Hydrographic Feature
- MAP PANELS**
 - Digital Data Available
 - No Digital Data Available
 - Unmapped



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 1/16/2022 at 9:37 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.

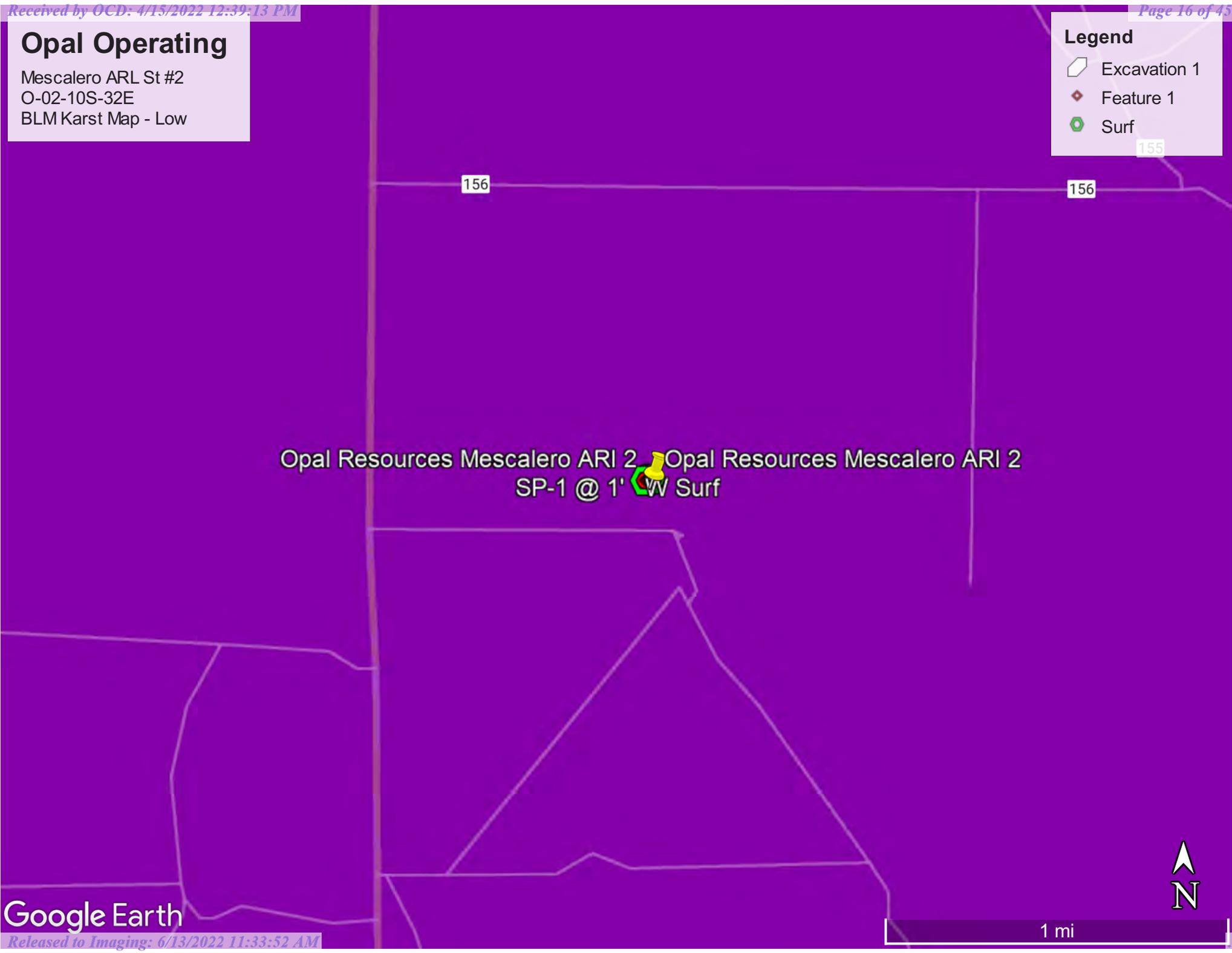
This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory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

Opal Operating

Mescalero ARL St #2
O-02-10S-32E
BLM Karst Map - Low

Legend

-  Excavation 1
-  Feature 1
-  Surf

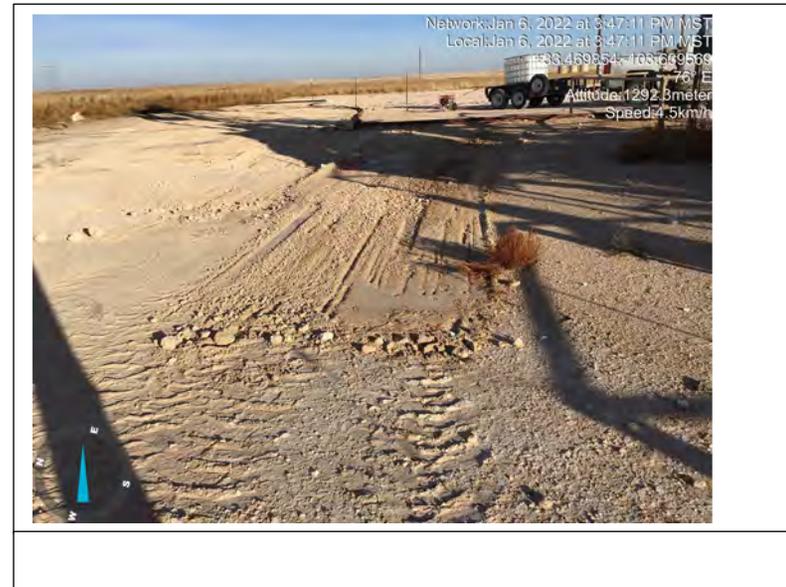


Opal Resources Mescalero ARI 2  Opal Resources Mescalero ARI 2
SP-1 @ 1'  W Surf



1 mi

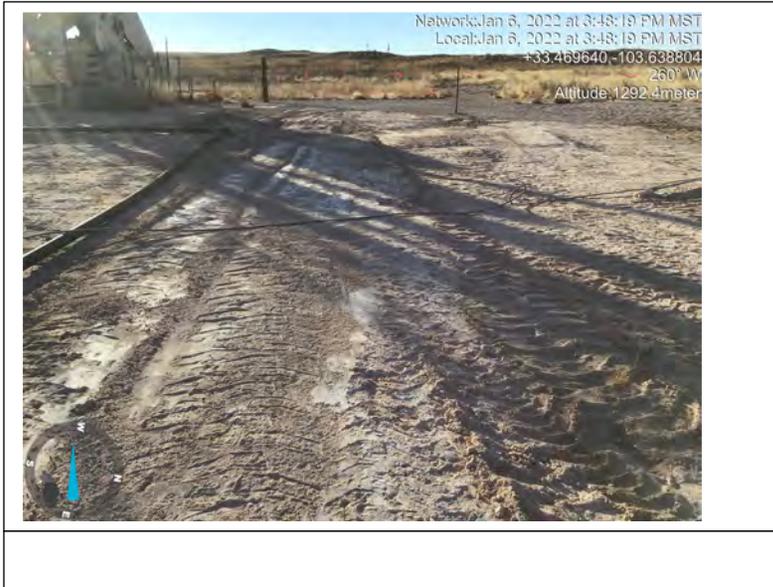
Opal Operating – Mescalero ARL St #2 Site Photos – Excavation & Remediation



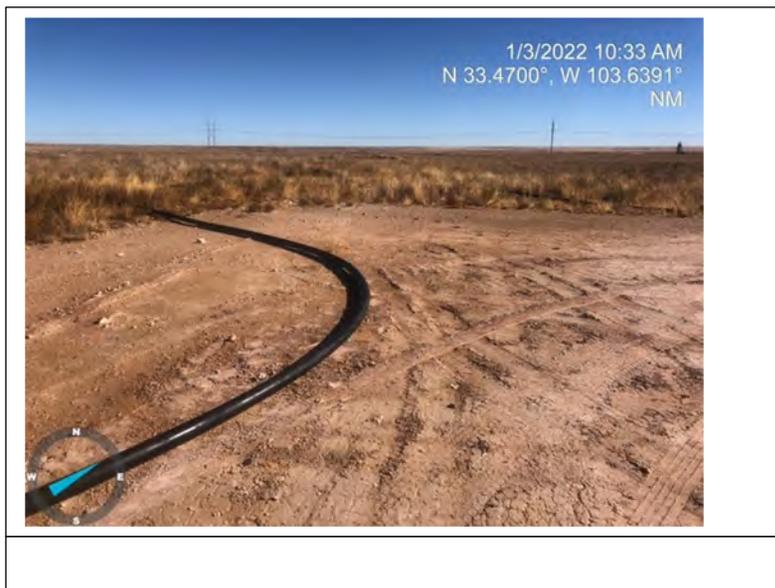
Opal Operating – Mescalero ARL St #2 Site Photos – Excavation & Remediation



Opal Operating – Mescalero ARL St #2 Site Photos – Excavation & Remediation



Opal Operating – Mescalero ARL St #2 Site Photos – Excavation & Remediation



Opal Operating – Mescalero ARL St #2 Site Photos – Excavation & Remediation



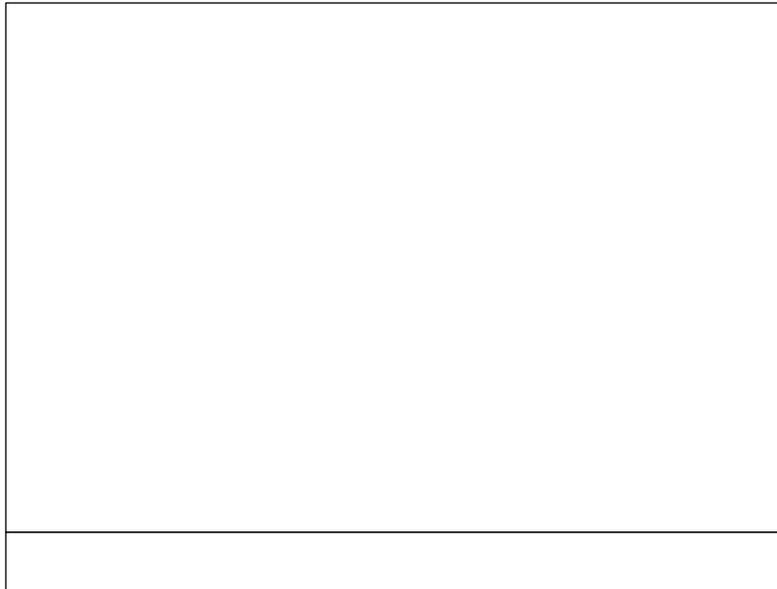
Opal Operating – Mescalero ARL St #2 Site Photos – Excavation & Remediation



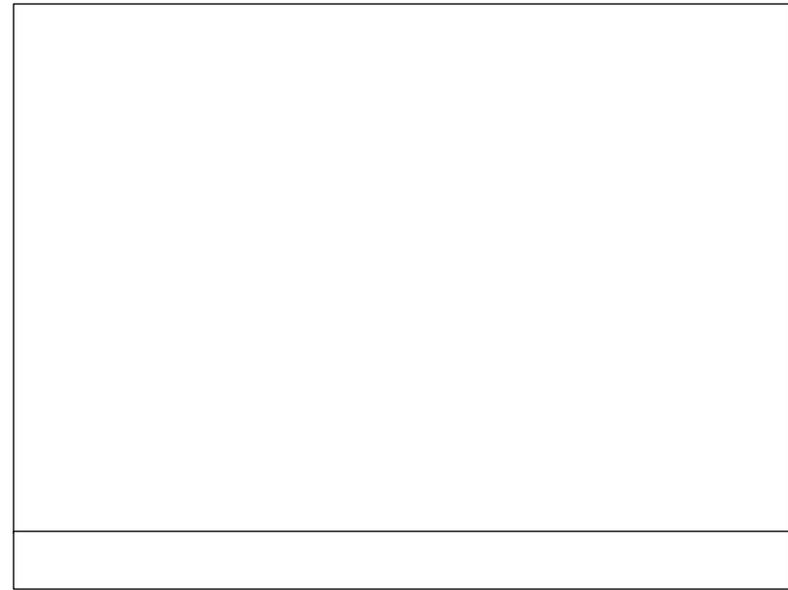
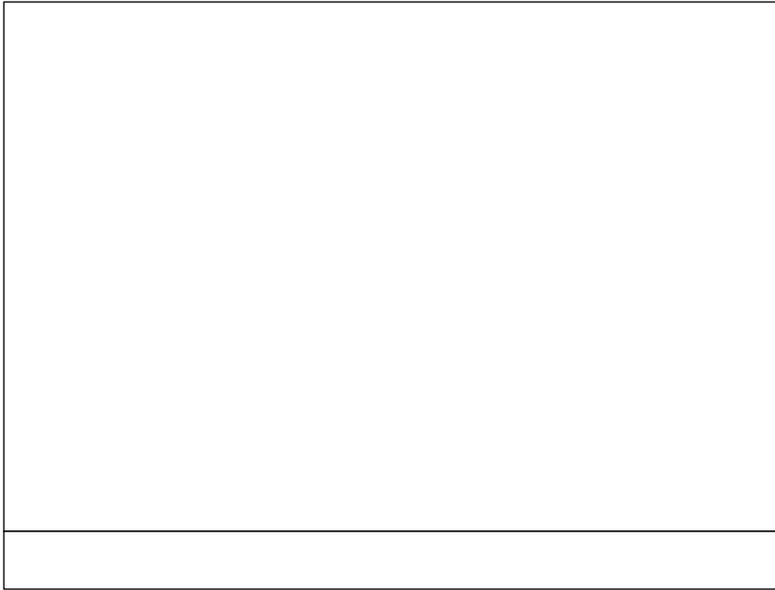
Opal Operating – Mescalero ARL St #2 Site Photos – Excavation & Remediation



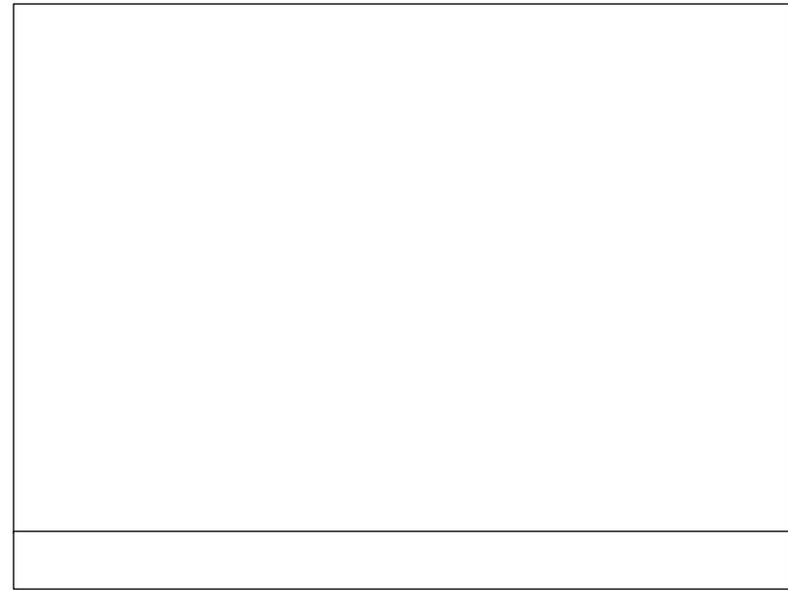
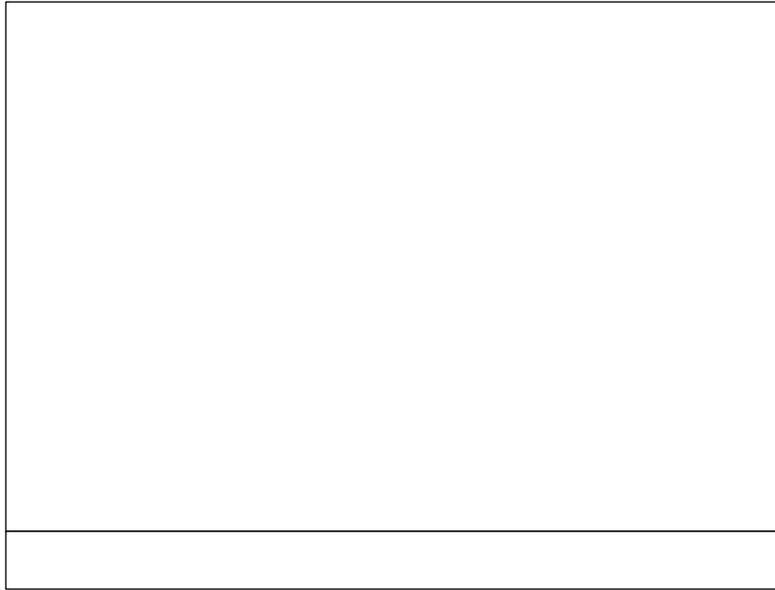
Opal Operating – Mescalero ARL St #2 Site Photos – Excavation & Remediation



Opal Operating – Mescalero ARL St #2 Site Photos – Excavation & Remediation



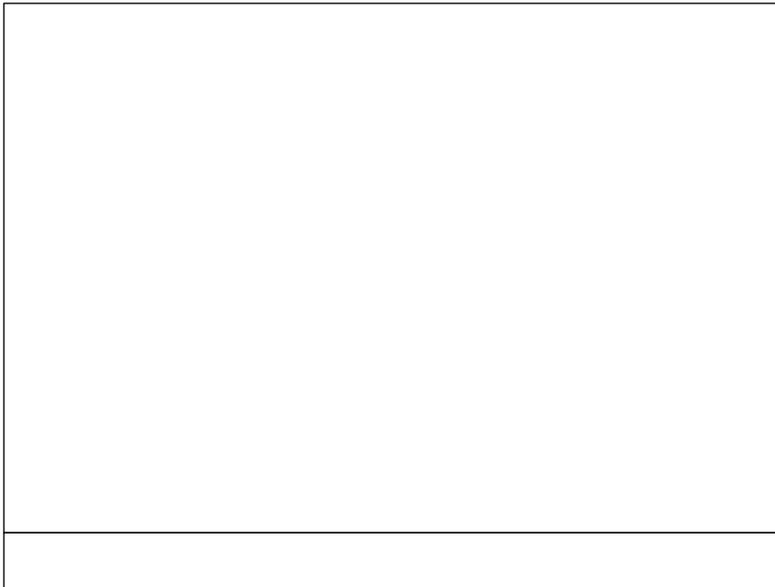
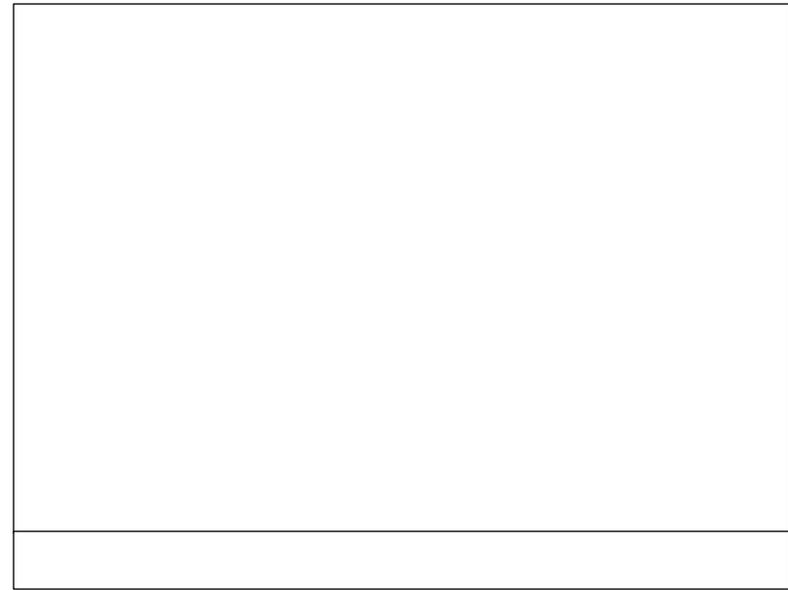
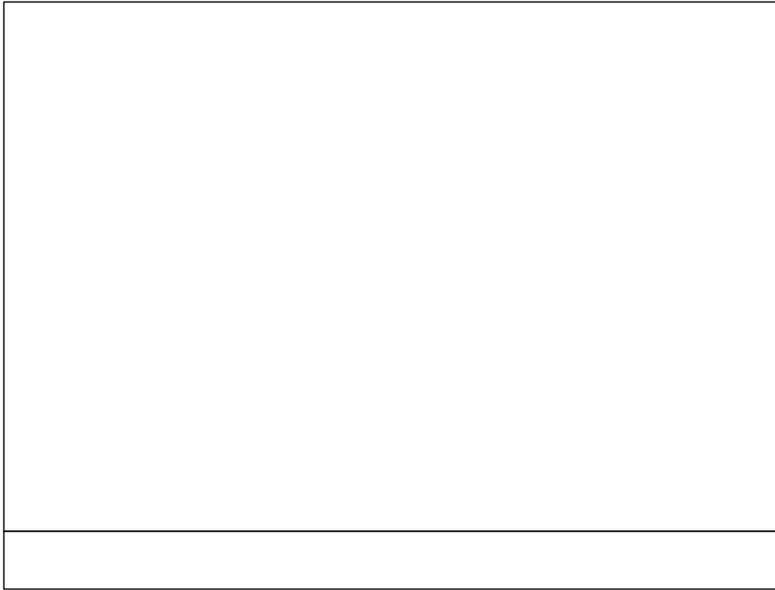
Opal Operating – Mescalero ARL St #2 Site Photos – Excavation & Remediation



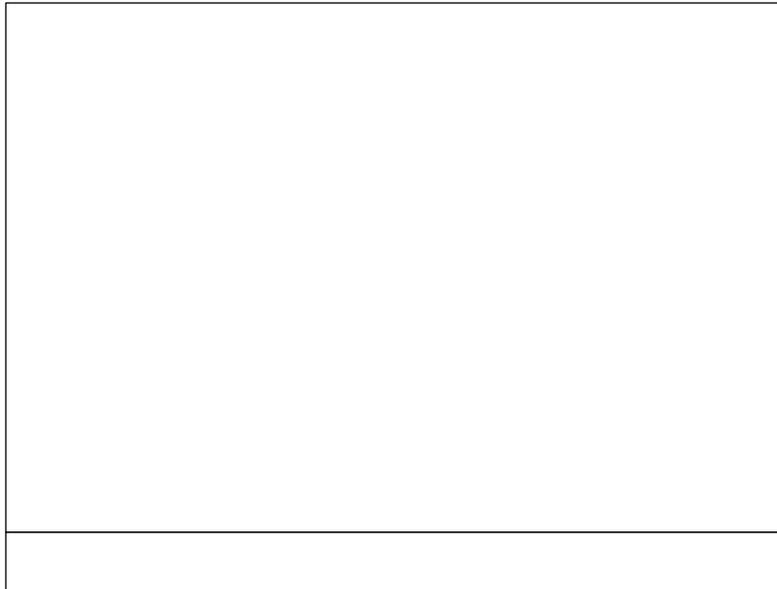
Opal Operating – Mescalero ARL St #2 Site Photos – Excavation & Remediation



Opal Operating – Mescalero ARL St #2 Site Photos – Excavation & Remediation



Opal Operating – Mescalero ARL St #2 Site Photos – Excavation & Remediation



Opal Operating – Mescalero ARL St #2 Site Photos – Excavation & Remediation





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

January 14, 2022

Bob Allen
Safety & Environmental Solutions
PO Box 1613
Hobbs, NM 88241
TEL: (575) 397-0510
FAX: (575) 393-4388

RE: Opal Operating Mescalero ST 2

OrderNo.: 2201364

Dear Bob Allen:

Hall Environmental Analysis Laboratory received 7 sample(s) on 1/11/2022 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,

A handwritten signature in black ink, appearing to read 'Andy Freeman', is written over a white background.

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report

Lab Order **2201364**

Date Reported: **1/14/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions

Client Sample ID: SP-1 1ft

Project: Opal Operating Mescalero ST 2

Collection Date: 1/6/2022 10:05:00 AM

Lab ID: 2201364-001

Matrix: SOIL

Received Date: 1/11/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	270	60		mg/Kg	20	1/13/2022 6:26:31 PM	65009
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.4		mg/Kg	1	1/13/2022 6:17:16 PM	64980
Motor Oil Range Organics (MRO)	ND	47		mg/Kg	1	1/13/2022 6:17:16 PM	64980
Surr: DNOP	103	70-130		%Rec	1	1/13/2022 6:17:16 PM	64980
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.6		mg/Kg	1	1/12/2022 1:34:00 PM	64958
Surr: BFB	112	70-130		%Rec	1	1/12/2022 1:34:00 PM	64958
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.023		mg/Kg	1	1/12/2022 1:34:00 PM	64958
Toluene	ND	0.046		mg/Kg	1	1/12/2022 1:34:00 PM	64958
Ethylbenzene	ND	0.046		mg/Kg	1	1/12/2022 1:34:00 PM	64958
Xylenes, Total	ND	0.093		mg/Kg	1	1/12/2022 1:34:00 PM	64958
Surr: 4-Bromofluorobenzene	94.5	70-130		%Rec	1	1/12/2022 1:34:00 PM	64958

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report

Lab Order **2201364**

Date Reported: **1/14/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions

Client Sample ID: SP-2 6 inches

Project: Opal Operating Mescalero ST 2

Collection Date: 1/6/2022 10:20:00 AM

Lab ID: 2201364-002

Matrix: SOIL

Received Date: 1/11/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	320	60		mg/Kg	20	1/13/2022 7:03:45 PM	65009
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	1/13/2022 6:27:51 PM	64980
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/13/2022 6:27:51 PM	64980
Surr: DNOP	105	70-130		%Rec	1	1/13/2022 6:27:51 PM	64980
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/12/2022 1:54:00 PM	64958
Surr: BFB	94.5	70-130		%Rec	1	1/12/2022 1:54:00 PM	64958
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.025		mg/Kg	1	1/12/2022 1:54:00 PM	64958
Toluene	ND	0.049		mg/Kg	1	1/12/2022 1:54:00 PM	64958
Ethylbenzene	ND	0.049		mg/Kg	1	1/12/2022 1:54:00 PM	64958
Xylenes, Total	ND	0.099		mg/Kg	1	1/12/2022 1:54:00 PM	64958
Surr: 4-Bromofluorobenzene	91.2	70-130		%Rec	1	1/12/2022 1:54:00 PM	64958

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report

Lab Order **2201364**

Date Reported: **1/14/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions

Client Sample ID: SP-3 3 inches

Project: Opal Operating Mescalero ST 2

Collection Date: 1/6/2022 10:40:00 AM

Lab ID: 2201364-003

Matrix: SOIL

Received Date: 1/11/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	ND	60		mg/Kg	20	1/13/2022 8:18:12 PM	65019
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	1/13/2022 6:38:26 PM	64980
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/13/2022 6:38:26 PM	64980
Surr: DNOP	80.5	70-130		%Rec	1	1/13/2022 6:38:26 PM	64980
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/12/2022 2:13:00 PM	64958
Surr: BFB	94.2	70-130		%Rec	1	1/12/2022 2:13:00 PM	64958
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	1/12/2022 2:13:00 PM	64958
Toluene	ND	0.048		mg/Kg	1	1/12/2022 2:13:00 PM	64958
Ethylbenzene	ND	0.048		mg/Kg	1	1/12/2022 2:13:00 PM	64958
Xylenes, Total	ND	0.096		mg/Kg	1	1/12/2022 2:13:00 PM	64958
Surr: 4-Bromofluorobenzene	89.7	70-130		%Rec	1	1/12/2022 2:13:00 PM	64958

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report

Lab Order **2201364**

Date Reported: **1/14/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions

Client Sample ID: SP-4 3 inches

Project: Opal Operating Mescalero ST 2

Collection Date: 1/6/2022 11:05:00 AM

Lab ID: 2201364-004

Matrix: SOIL

Received Date: 1/11/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	ND	60		mg/Kg	20	1/13/2022 9:20:14 PM	65019
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.5		mg/Kg	1	1/13/2022 6:49:00 PM	64980
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/13/2022 6:49:00 PM	64980
Surr: DNOP	89.4	70-130		%Rec	1	1/13/2022 6:49:00 PM	64980
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	5.0		mg/Kg	1	1/12/2022 2:33:00 PM	64958
Surr: BFB	90.9	70-130		%Rec	1	1/12/2022 2:33:00 PM	64958
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.025		mg/Kg	1	1/12/2022 2:33:00 PM	64958
Toluene	ND	0.050		mg/Kg	1	1/12/2022 2:33:00 PM	64958
Ethylbenzene	ND	0.050		mg/Kg	1	1/12/2022 2:33:00 PM	64958
Xylenes, Total	ND	0.10		mg/Kg	1	1/12/2022 2:33:00 PM	64958
Surr: 4-Bromofluorobenzene	89.0	70-130		%Rec	1	1/12/2022 2:33:00 PM	64958

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report

Lab Order **2201364**

Date Reported: **1/14/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions

Client Sample ID: West Surface

Project: Opal Operating Mescalero ST 2

Collection Date: 1/6/2022 11:30:00 AM

Lab ID: 2201364-005

Matrix: SOIL

Received Date: 1/11/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	ND	59		mg/Kg	20	1/13/2022 9:57:29 PM	65019
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.9		mg/Kg	1	1/13/2022 6:59:35 PM	64980
Motor Oil Range Organics (MRO)	ND	49		mg/Kg	1	1/13/2022 6:59:35 PM	64980
Surr: DNOP	85.7	70-130		%Rec	1	1/13/2022 6:59:35 PM	64980
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/12/2022 2:53:00 PM	64958
Surr: BFB	91.9	70-130		%Rec	1	1/12/2022 2:53:00 PM	64958
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	1/12/2022 2:53:00 PM	64958
Toluene	ND	0.048		mg/Kg	1	1/12/2022 2:53:00 PM	64958
Ethylbenzene	ND	0.048		mg/Kg	1	1/12/2022 2:53:00 PM	64958
Xylenes, Total	ND	0.095		mg/Kg	1	1/12/2022 2:53:00 PM	64958
Surr: 4-Bromofluorobenzene	91.6	70-130		%Rec	1	1/12/2022 2:53:00 PM	64958

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report

Lab Order **2201364**

Date Reported: **1/14/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions

Client Sample ID: East Surface

Project: Opal Operating Mescalero ST 2

Collection Date: 1/6/2022 12:05:00 PM

Lab ID: 2201364-006

Matrix: SOIL

Received Date: 1/11/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	ND	60		mg/Kg	20	1/13/2022 10:09:53 PM	65019
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	1/13/2022 7:10:10 PM	64980
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/13/2022 7:10:10 PM	64980
Surr: DNOP	82.1	70-130		%Rec	1	1/13/2022 7:10:10 PM	64980
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.8		mg/Kg	1	1/12/2022 3:13:00 PM	64958
Surr: BFB	90.6	70-130		%Rec	1	1/12/2022 3:13:00 PM	64958
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.024		mg/Kg	1	1/12/2022 3:13:00 PM	64958
Toluene	ND	0.048		mg/Kg	1	1/12/2022 3:13:00 PM	64958
Ethylbenzene	ND	0.048		mg/Kg	1	1/12/2022 3:13:00 PM	64958
Xylenes, Total	ND	0.096		mg/Kg	1	1/12/2022 3:13:00 PM	64958
Surr: 4-Bromofluorobenzene	91.7	70-130		%Rec	1	1/12/2022 3:13:00 PM	64958

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

Analytical Report

Lab Order **2201364**

Date Reported: **1/14/2022**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Safety & Environmental Solutions

Client Sample ID: South Surface

Project: Opal Operating Mescalero ST 2

Collection Date: 1/6/2022 12:30:00 PM

Lab ID: 2201364-007

Matrix: SOIL

Received Date: 1/11/2022 8:00:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS							Analyst: CAS
Chloride	280	60		mg/Kg	20	1/13/2022 10:22:18 PM	65019
EPA METHOD 8015M/D: DIESEL RANGE ORGANICS							Analyst: JME
Diesel Range Organics (DRO)	ND	9.6		mg/Kg	1	1/13/2022 7:20:45 PM	64980
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	1/13/2022 7:20:45 PM	64980
Surr: DNOP	96.2	70-130		%Rec	1	1/13/2022 7:20:45 PM	64980
EPA METHOD 8015D: GASOLINE RANGE							Analyst: mb
Gasoline Range Organics (GRO)	ND	4.9		mg/Kg	1	1/12/2022 3:33:00 PM	64958
Surr: BFB	93.7	70-130		%Rec	1	1/12/2022 3:33:00 PM	64958
EPA METHOD 8021B: VOLATILES							Analyst: mb
Benzene	ND	0.025		mg/Kg	1	1/12/2022 3:33:00 PM	64958
Toluene	ND	0.049		mg/Kg	1	1/12/2022 3:33:00 PM	64958
Ethylbenzene	ND	0.049		mg/Kg	1	1/12/2022 3:33:00 PM	64958
Xylenes, Total	ND	0.098		mg/Kg	1	1/12/2022 3:33:00 PM	64958
Surr: 4-Bromofluorobenzene	92.6	70-130		%Rec	1	1/12/2022 3:33:00 PM	64958

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

Qualifiers:	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Estimated value
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
	PQL	Practical Quantitative Limit	RL	Reporting Limit
	S	% Recovery outside of range due to dilution or matrix interference		

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2201364

14-Jan-22

Client: Safety & Environmental Solutions

Project: Opal Operating Mescalero ST 2

Sample ID: MB-65009	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 65009	RunNo: 85140								
Prep Date: 1/13/2022	Analysis Date: 1/13/2022	SeqNo: 2995864	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-65009	SampType: ics	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 65009	RunNo: 85140								
Prep Date: 1/13/2022	Analysis Date: 1/13/2022	SeqNo: 2995865	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.3	90	110			

Sample ID: MB-65019	SampType: mblk	TestCode: EPA Method 300.0: Anions								
Client ID: PBS	Batch ID: 65019	RunNo: 85140								
Prep Date: 1/13/2022	Analysis Date: 1/13/2022	SeqNo: 2995907	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

Sample ID: LCS-65019	SampType: ics	TestCode: EPA Method 300.0: Anions								
Client ID: LCSS	Batch ID: 65019	RunNo: 85140								
Prep Date: 1/13/2022	Analysis Date: 1/13/2022	SeqNo: 2995908	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	94.0	90	110			

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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2201364

14-Jan-22

Client: Safety & Environmental Solutions

Project: Opal Operating Mescalero ST 2

Sample ID: MB-64980	SampType: MBLK	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: PBS	Batch ID: 64980	RunNo: 85152								
Prep Date: 1/12/2022	Analysis Date: 1/13/2022	SeqNo: 2995661	Units: mg/Kg							
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	8.9		10.00		89.2	70	130			

Sample ID: LCS-64980	SampType: LCS	TestCode: EPA Method 8015M/D: Diesel Range Organics								
Client ID: LCSS	Batch ID: 64980	RunNo: 85152								
Prep Date: 1/12/2022	Analysis Date: 1/13/2022	SeqNo: 2995662	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	47	10	50.00	0	93.4	68.9	135			
Surr: DNOP	4.6		5.000		91.8	70	130			

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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2201364

14-Jan-22

Client: Safety & Environmental Solutions

Project: Opal Operating Mescalero ST 2

Sample ID: mb-64958	SampType: MBLK	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: PBS	Batch ID: 64958	RunNo: 85110								
Prep Date: 1/11/2022	Analysis Date: 1/12/2022	SeqNo: 2994495	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	890		1000		88.9	70	130			

Sample ID: lcs-64958	SampType: LCS	TestCode: EPA Method 8015D: Gasoline Range								
Client ID: LCSS	Batch ID: 64958	RunNo: 85110								
Prep Date: 1/11/2022	Analysis Date: 1/12/2022	SeqNo: 2994497	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	25	5.0	25.00	0	98.4	78.6	131			
Surr: BFB	1000		1000		102	70	130			

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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit

QC SUMMARY REPORT

Hall Environmental Analysis Laboratory, Inc.

WO#: 2201364

14-Jan-22

Client: Safety & Environmental Solutions

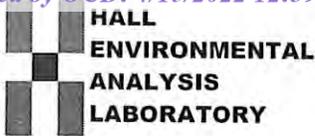
Project: Opal Operating Mescalero ST 2

Sample ID: mb-64958	SampType: MBLK	TestCode: EPA Method 8021B: Volatiles								
Client ID: PBS	Batch ID: 64958	RunNo: 85110								
Prep Date: 1/11/2022	Analysis Date: 1/12/2022	SeqNo: 2994523	Units: mg/Kg							
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	0.92		1.000		91.7	70	130			

Sample ID: ics-64958	SampType: LCS	TestCode: EPA Method 8021B: Volatiles								
Client ID: LCSS	Batch ID: 64958	RunNo: 85110								
Prep Date: 1/11/2022	Analysis Date: 1/12/2022	SeqNo: 2994524	Units: mg/Kg							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.94	0.025	1.000	0	94.4	80	120			
Toluene	0.95	0.050	1.000	0	94.7	80	120			
Ethylbenzene	0.94	0.050	1.000	0	94.4	80	120			
Xylenes, Total	2.8	0.10	3.000	0	92.9	80	120			
Surr: 4-Bromofluorobenzene	0.91		1.000		91.4	70	130			

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 range due to dilution or matrix interference
- B Analyte detected in the associated Method Blank
- E Estimated value
- J Analyte detected below quantitation limits
- P Sample pH Not In Range
- RL Reporting Limit



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

Sample Log-In Check List

Client Name: Safety & Environmental Solutions
Work Order Number: 2201364
RcptNo: 1

Received By: Cheyenne Cason 1/11/2022 8:00:00 AM

Completed By: Sean Livingston 1/11/2022 8:43:52 AM

Reviewed By: KPG 1/11/22 9:45

Handwritten signatures: Cason, Sean Livingston

Chain of Custody

- 1. Is Chain of Custody complete? Yes [checked] No [] Not Present []
2. How was the sample delivered? Courier

Log In

- 3. Was an attempt made to cool the samples? Yes [checked] No [] NA []
4. Were all samples received at a temperature of >0° C to 6.0°C Yes [] No [checked] NA []
5. Sample(s) in proper container(s)? Yes [checked] No []
6. Sufficient sample volume for indicated test(s)? Yes [checked] No []
7. Are samples (except VOA and ONG) properly preserved? Yes [checked] No []
8. Was preservative added to bottles? Yes [] No [checked] NA []
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes [] No [] NA [checked]
10. Were any sample containers received broken? Yes [] No [checked]
11. Does paperwork match bottle labels? (Note discrepancies on chain of custody) Yes [checked] No []
12. Are matrices correctly identified on Chain of Custody? Yes [checked] No []
13. Is it clear what analyses were requested? Yes [checked] No []
14. Were all holding times able to be met? (If no, notify customer for authorization.) Yes [checked] No []

of preserved bottles checked for pH: (<2 or >12 unless noted)
Adjusted?
Checked by: Cason 1/11/22

Special Handling (if applicable)

- 15. Was client notified of all discrepancies with this order? Yes [] No [] NA [checked]

Person Notified: [] Date: []
By Whom: [] Via: [] eMail [] Phone [] Fax [] In Person []
Regarding: []
Client Instructions: []

16. Additional remarks:

17. Cooler Information

Table with 7 columns: Cooler No, Temp °C, Condition, Seal Intact, Seal No, Seal Date, Signed By. Row 1: 1, -0.4, Good, [], [], [], []

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 94800

CONDITIONS

Operator: Opal Operating Company LLC 4811 Gaillardia Parkway Oklahoma City, OK 73142	OGRID: 330887
	Action Number: 94800
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Report Approved.	6/13/2022