

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	nAPP2110656396
District RP	
Facility ID	
Application ID	

## Release Notification

### Responsible Party

Responsible Party Hilcorp Energy Company	OGRID 372171
Contact Name Mitch Killough	Contact Telephone 713-757-5247
Contact email mkillough@hilcorp.com	Incident # nAPP2110656396
Contact mailing address 1111 Travis Street, Houston, Texas 77002	

### Location of Release Source

Latitude 36.9347992 \_\_\_\_\_ Longitude -107.5305862 \_\_\_\_\_  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name San Juan 32-7 Unit 49	Site Type Well
Date Release Discovered 4/2/2021 @ 11:00am (MT)	API# 30-045-22984

Unit Letter	Section	Township	Range	County
I	35	32N	07W	San Juan

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) 0.5 bbl	Volume Recovered (bbls) 0.5 bbl
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 7.5 bbls	Volume Recovered (bbls) 7.5 bbls
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input 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


An overflow release of approximately 8 bbls of fluid (7.5 bbls produced water, 0.5 bbl oil) occurred at an active pit tank due to operator error. The spill amount was determined by operator's monthly tank gauging data. The release remained on location and within the secondary containment wall. 8 bbls fluid was recovered via vacuum truck the same day. OCD will be notified 48 hours prior to sampling.

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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>Mitch Killough</u> Title: <u>Environmental Specialist</u>
Signature: <u></u> Date: <u>4/16/2021</u>
email: <u>mkillough@hilcorp.com</u> Telephone: <u>713-757-5247</u>
<b><u>OCD Only</u></b> Received by: _____ Date: _____

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## Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	<u>&gt;100</u> (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?	<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 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

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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: \_\_\_\_Mitch Killough\_\_\_\_ Title: \_\_\_\_Environmental Specialist\_\_\_\_

Signature: \_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_7/2/2021\_\_\_\_

email: \_\_\_\_mkillough@hilcorp.com\_\_\_\_ Telephone: \_\_\_\_ (713) 757-5247\_\_\_\_

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

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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) **Note: No excavation activities took place following initial clean-up efforts.**
- ☒ 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: Mitch Killough Title: Environmental Specialist

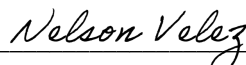
Signature:  Date: 7/2/2021

email: mkillough@hilcorp.com Telephone: 713-757-5247

### 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:  Date: 06/15/2022

Printed Name: Nelson Velez Title: Environmental Specialist – Adv

## Executive Summary

On April 2, 2021, Hilcorp Energy Company (Hilcorp) had a release of 8 bbls (7.5 bbls produced water, 0.5 bbl condensate) at the San Juan 32-7 Unit 49 (API No. 30-045-22984). The release was due to an overflow event at the 40-bbl pit tank that occurred as a direct result of operator error. The pit tank fluid level was not being monitored closely by the operator and the addition of fluids being piped to the pit tank contributed to a spilling over of product into secondary containment (14 ft x 14 ft). The released fluids remained with secondary containment and did not migrate horizontally off location. Immediately upon realizing the error that was made, the operator notified a vacuum truck service provider in the area to 1) recover the released fluids from within secondary containment and 2) remove all product from the pit tank. All response efforts took place on the same day of the release. No excavations took place following the initial cleanup efforts. The initial C-141 was submitted to the NMOCD on 4/16/2021 and was assigned Incident No. nAPP2110656396.

Refer to attached waste manifest generated from this cleanup. A total of 25 bbls of RCRA-exempt waste was transported to JFJ Landfarm / IEI for disposal via landfarm. This waste load included tank bottoms from the pit tank and fluids recovered from the bermed area.

Confirmation sampling was scheduled for Wednesday, April 28<sup>th</sup> at 9:00 am MT in accordance with NMAC 19.15.29.12.D. However, no representation from NMOCD or BLM (Farmington FO) was present at the time of the scheduled sampling. Hilcorp's Kurt Hoekstra proceeded with the confirmation sampling event.

This site is ranked > 100 ft per NMAC 19.15.29.12.E. Since the total surface area within the bermed area was less than 200 square feet, one composite soil sample was collected from within the release area. The sample came back in compliance with clean up action levels.

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

Form C-138  
Revised August 1, 2011  
\*Surface Waste Management Facility Operator  
and Generator shall maintain and make this  
documentation available for Division inspection

## REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. **Generator Name and Address:**  
Hilcorp Energy Company  
382 Rd 3100  
Aztec, NM 87410

2. **Originating Site:**  
SAN JUAN 32-7 UNIT 49 (Other) API# 3004522984 Area:05

**Billing Information:** Requested by: Clara Cardoza

3. **Location of Material (Street Address, City, State or ULSTR):**  
Unit I, Section 35, T032N, R007W  
SAN JUAN, NM

4. **Source and Description of Waste:**  
Tank Bottoms Tank wash from cleaning out produced water pit tank  
Estimated Volume 25 US bbl Known Volume (to be entered by the operator at the end of the haul) \_\_\_\_\_ yd3 / bbls

### 5. GENERATOR CERTIFICATION STATEMENT OF WASTE STATUS

I, Clara Cardoza representative or authorized agent for Hilcorp Energy Company do hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste is: (Check the appropriate classification)

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. Operator Use Only: Waste Acceptance Frequency ☒ Monthly ☐ Weekly ☐ Per Load

☐ RCRA Non-Exempt: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261.24, or listed hazardous waste as defined in 40 CFR, part 261, subpart D, as amended. The following documentation is attached to demonstrate the above-described waste is non-hazardous. (Check the appropriate items)

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis ☐ Process Knowledge ☐ Other (Provide description in Box 4)

### GENERATOR 19.15.36.15 WASTE TESTING CERTIFICATION STATEMENT FOR LANDFARMS

I, Clara Cardoza representative for Hilcorp Energy Company authorize JFJ/IEI to complete the required testing/sign the Generator Waste Testing Certification.

I, \_\_\_\_\_, representative for Industrial Ecosystems, Inc. do hereby certify that representative samples of the **Representative / Agent Signature** oil field waste have been subjected to the paint filter test and tested for chloride content and that the samples have been found to conform to the specific requirements applicable to landfarms pursuant to Section 15 of 19.15.36 NMAC. The results of the representative samples are attached to demonstrate the above-described waste conform to the requirements of Section 15 of 19.15.36 NMAC.

### 6. **Transporter:** M&R Trucking

### OCD Permitted Surface Waste Management Facility

Name and Facility Permit #: **JFJ Landfarm / Industrial Ecosystems, Inc. \* Permit #: NM 01-0010B**

Address of Facility: **# 49 CR 3150 Aztec, NM 87410**

Method of Treatment and/or Disposal:

☐ Evaporation ☐ Injection ☐ Treating Plant ☒ Landfarm ☐ Landfill ☐ Other

**Waste Acceptance Status:** ☐ **APPROVED** ☐ **DENIED (Must Be Maintained As Permanent Record)**

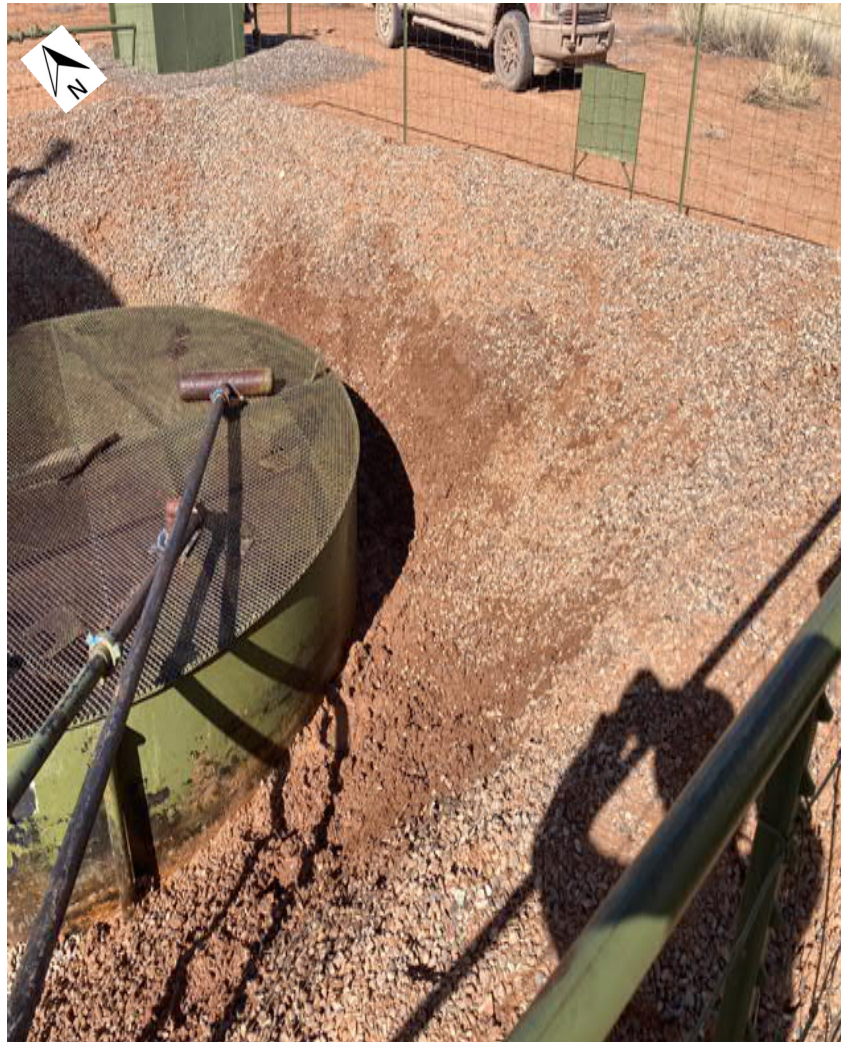
PRINT NAME: \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_ TELEPHONE NO.: 505-632-1782

Surface Waste Management Facility Authorized Agent



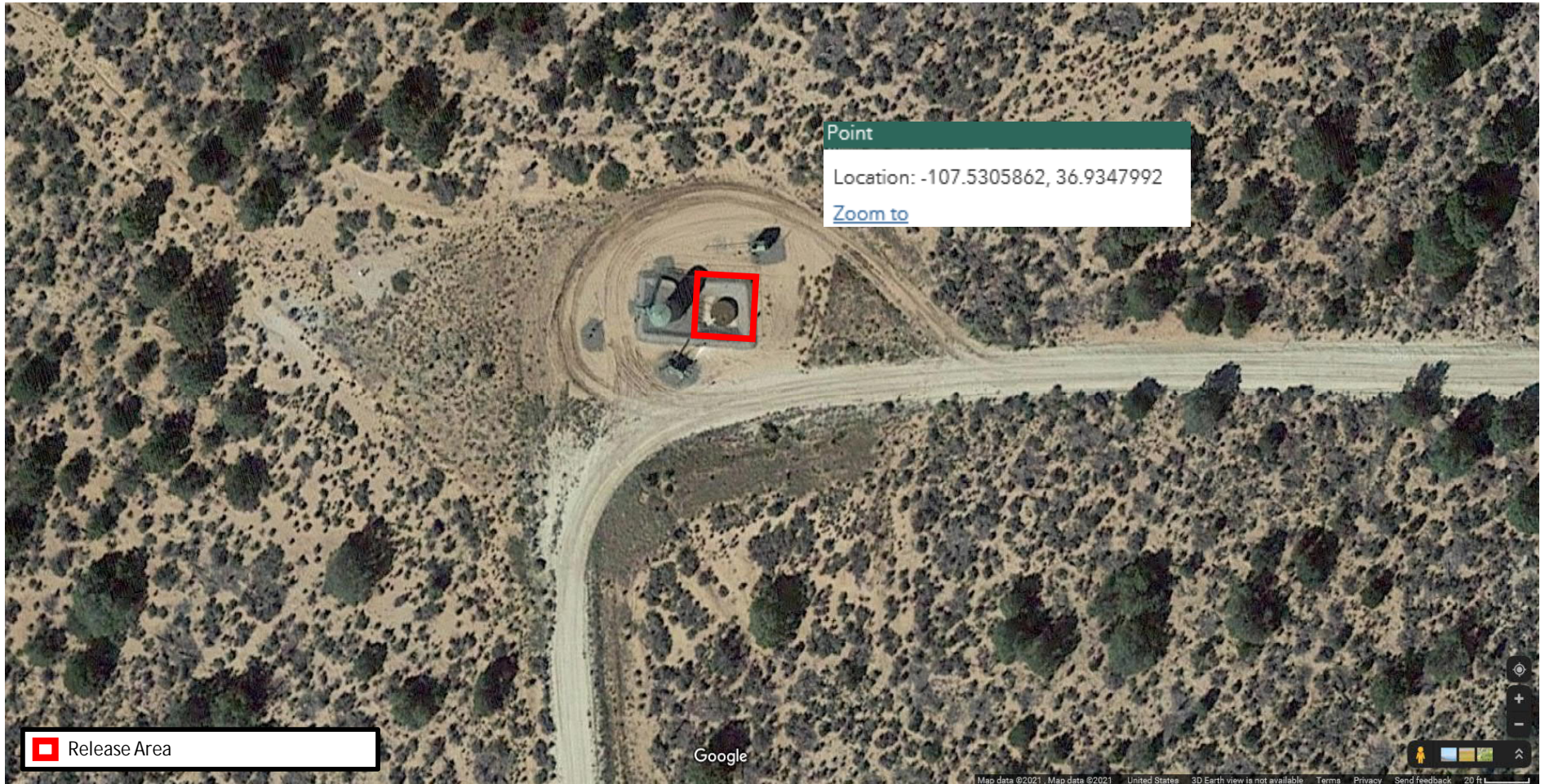
## Post-cleanup photograph



Photograph No. 1  
After Cleanup Efforts (4/2/21)



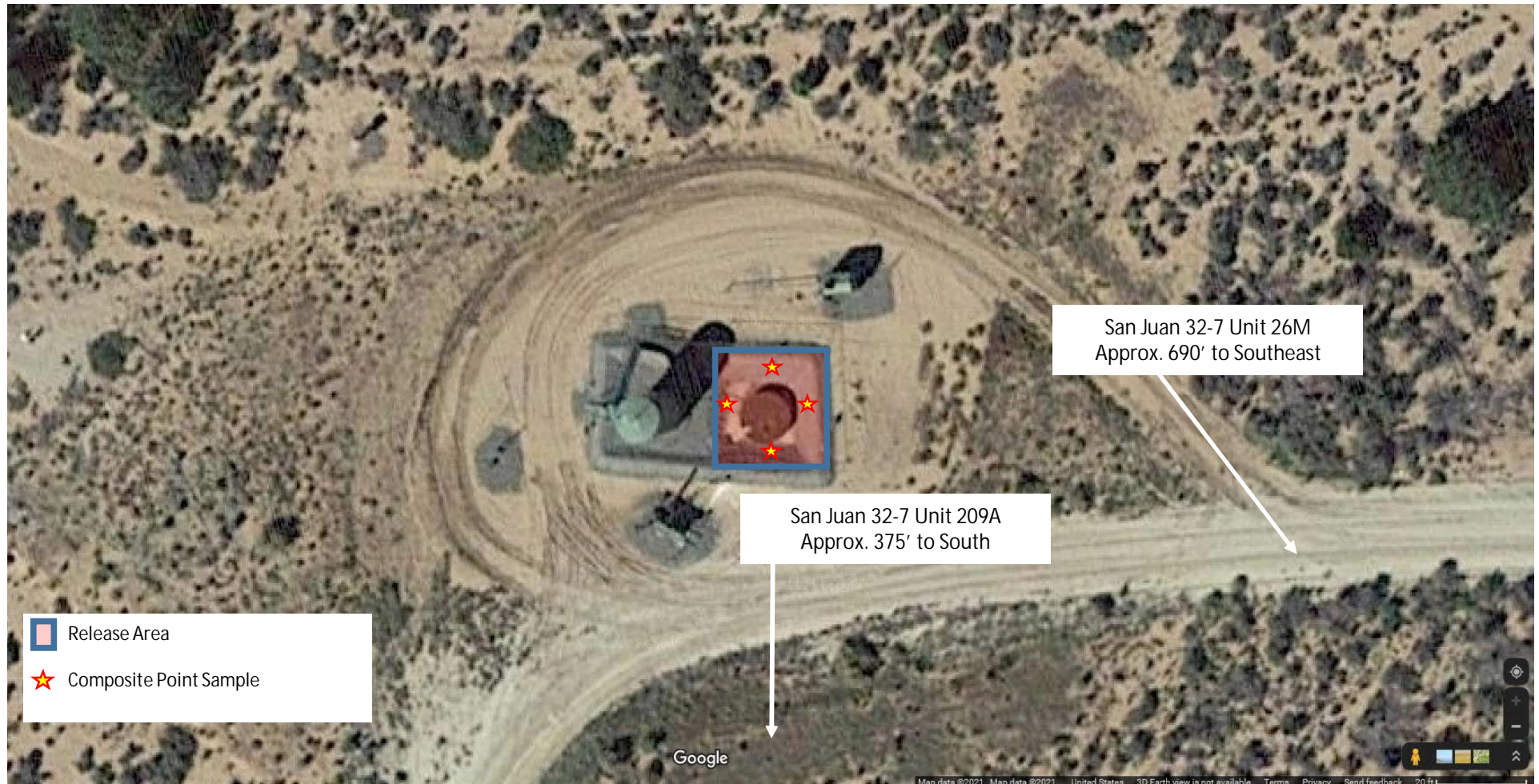
## Scaled Map



Note: San Juan 32-7 Unit 49 well location is located in San Juan County, NM at the following coordinates: 36.9347992, -107.5305862 (GCS WGS 1984). The site consists of a meter run, 40-bbl pit tank, 3-phase separator, and 210-bbl condensate storage tank.



## Scaled Map – Close-up

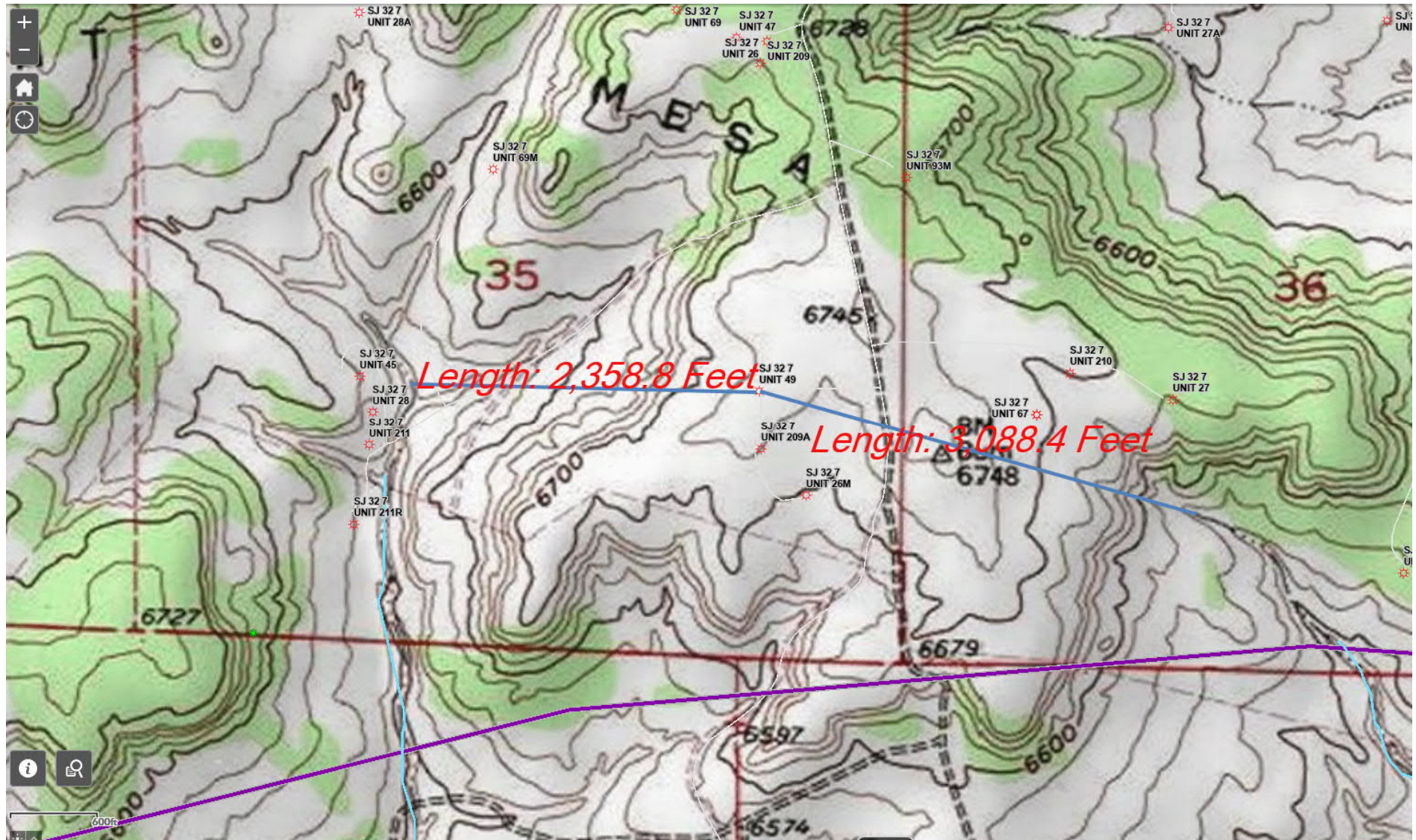


Note 1: Surface extent of release above measured approximately 14 ft x 14 ft. All fluids remained within secondary containment.

Note 2: Each tank shown in the image above have separate secondary containment areas.



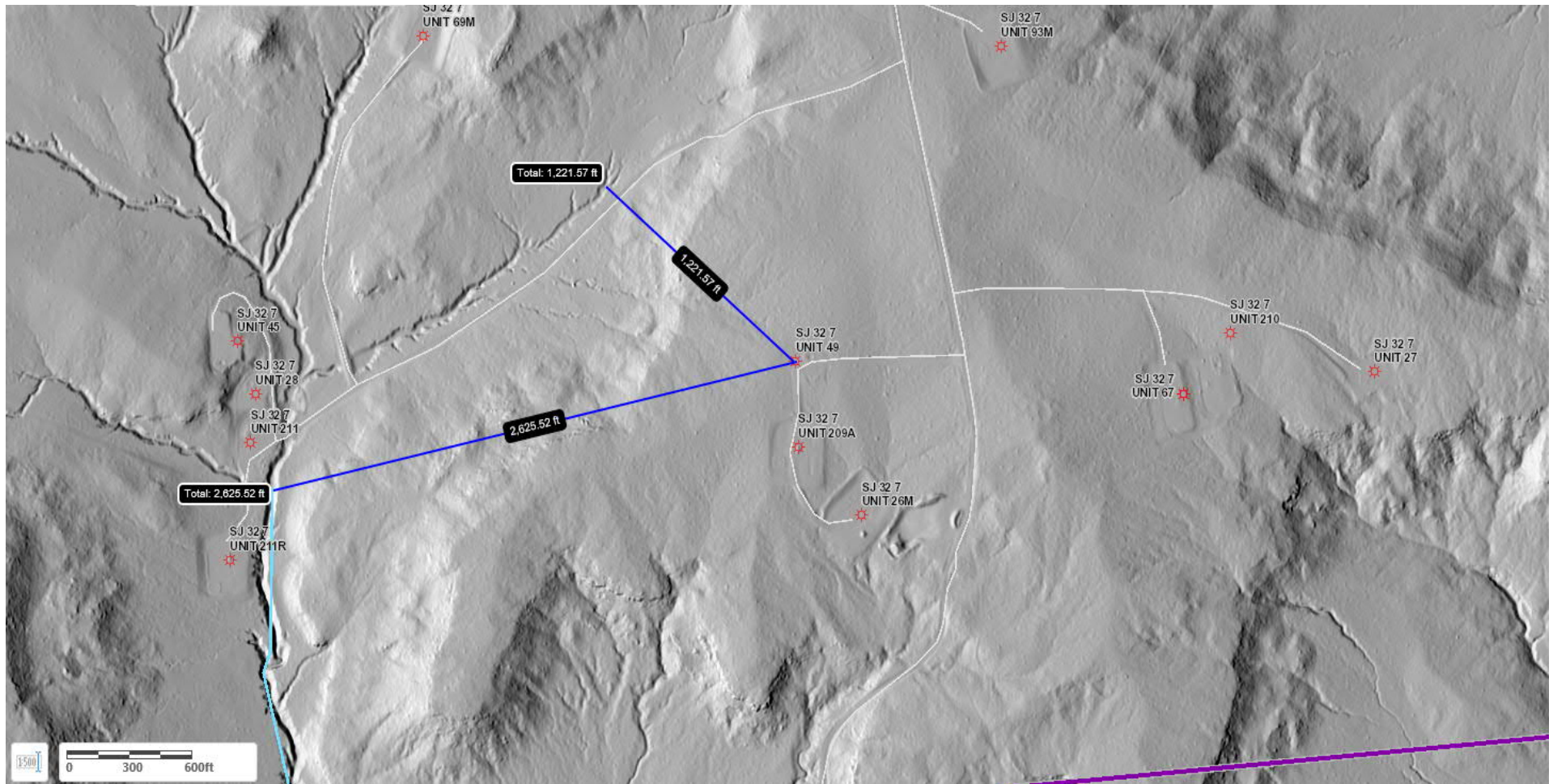
# Determination of water sources and significant watercourses within ½ mile of the lateral extent of the release



Note: Based on the topographic overlay shown above, the release point is shown to be greater than 300 ft from any delineated watercourses.



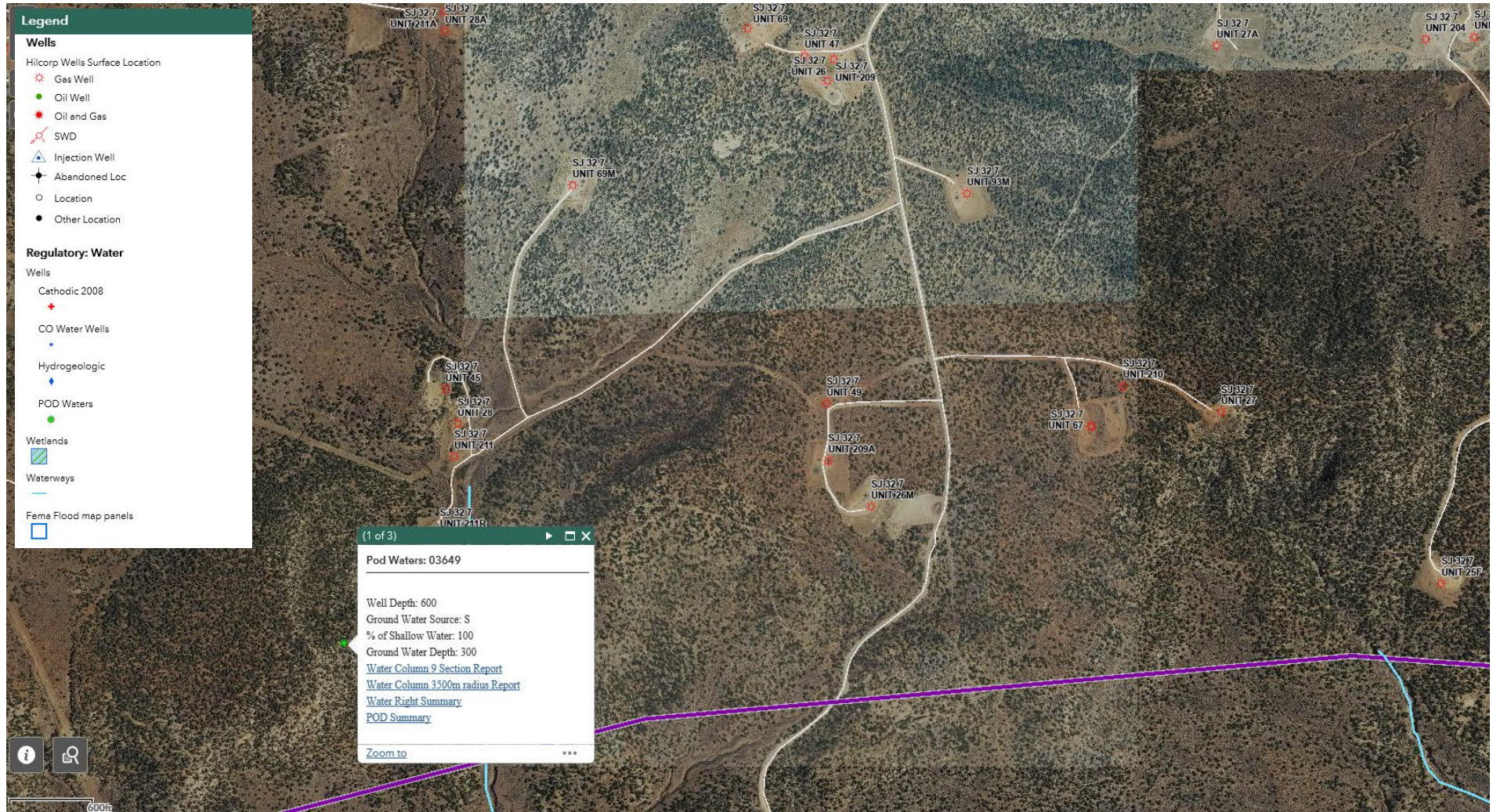
# Determination of water sources and significant watercourses within ½ mile of the lateral extent of the release



Note: LiDAR overlay shows a potential water feature to the NW, but this feature is not within 300 ft of the San Juan 32-7 Unit 49.



# Determination of water sources and significant watercourses within ½ mile of the lateral extent of the release



Note 1: The lateral extents of the release point are not shown to be within 300 feet of a mapped wetland.

Note 2: The lateral extents of the release point are not shown to be within 500 ft of a spring or domestic freshwater well used by less than 5 households (or stock watering) or within 1,000 ft of any freshwater water well or spring.



# Depth to groundwater

Note: Groundwater information taken from the registered Form C-144 for Below-Grade Tank at the San Juan 32-7 Unit 49. The estimated groundwater depth is shown to be 432 ft.

Source: Page extracted from Registered Pit Closure Permit (Form C-144) for the San Juan 32-7 Unit 49. Found on OCD's website under San Juan 32-7 Unit 49 (30-045-22984) – Associated Images – Well File Search (12/9/2019).

## SAN JUAN 32-7 UNIT 49

### Site Specific Hydrogeology

A visual site inspection confirming the information contained herein was performed on the well 'SAN JUAN 32-7 UNIT 49', which is located at 36.9346619 degrees North latitude and 107.5299988 degrees West longitude. This location is located on the Burnt Mesa 7.5' USGS topographic quadrangle. This location is in section 35 of Township 32 North Range 7 West of the Public Land Survey System (New Mexico Principal Meridian). This location is located in San Juan County, New Mexico. The nearest town is Allison, located 6.6 miles to the north. The nearest large town (population greater than 10,000) is Durango, located 30.4 miles to the northwest (National Atlas). The nearest highway is State Highway 511, located 5.6 miles to the northwest. The location is on BLM land and is 772 feet from the edge of the parcel as noted in the BLM land status layer updated January 2008. This location is in the Upper San Juan, Colorado, New Mexico, Sub-basin. This location is located 2056 meters or 6743 feet above sea level and receives 15 inches of rain each year. The vegetation at this location is classified as Colorado Plateau Pinion-Juniper Woodland as per the Southwest Regional Gap Analysis Program.

The estimated depth to ground water at this point is 432 feet. This estimation is based on the data published on the New Mexico Engineer's iWaters Database website and water depth data from ConocoPhillips' Cathodic wells. Groundwater data available from the NM State Engineer's iWaters Database for wells near the proposed site are attached. The nearest stream is 2,603 feet to the west and is classified by the USGS as an intermittent stream. The nearest perennial stream is 5,373 feet to the south. The nearest water body is 4,978 feet to the south. It is classified by the USGS as an intermittent lake and is 0.2 acres in size. The nearest spring is 28,065 feet to the northwest. All stream, river, water body and spring information was determined as per the USGS Hydrographic Dataset (High Resolution), downloaded 3/2008. The nearest water well is 4,016 feet to the west. The nearest wetland is a 1.1 acre Freshwater Pond located 13,179 feet to the east. The slope at this location is 0 degrees to the southwest as calculated from USGS 30M National Elevation Dataset. This information is also discerned from the aerial and topographic map included. The surface geology at this location is SAN JOSE FORMATION--Siltstone, shale, and sandstone with a Sandstone dominated formations of all ages substrate. The soil at this location is 'Penistaja-Buckle association, gently sloping' and is well drained and not hydric with moderate erosion potential as taken from the NRCS SSURGO map unit, downloaded January 2008. The nearest underground mine is 12.9 miles to the southeast as indicated on the Mines, Mills and Quarries Map of New Mexico provided.

### Regional Hydrogeological context:

The San Jose Formation of Eocene age occurs in New Mexico and Colorado, and its outcrop forms the land surface over much of the eastern half of the central basin. It overlies the Nacimiento Formation in the area generally south of the Colorado-New Mexico State line and overlies the Animas Formation in the area generally north of the State line. The San Jose Formation was deposited in various fluvial-type environments. In general, the unit consists of an interbedded sequence of sandstone, siltstone, and variegated shale. Thickness of the San Jose Formation generally increases from west to east (200 feet in the west and south to almost 2,700 feet in the center of the structural basin). Ground water is associated with alluvial and fluvial sandstone aquifers. Thus, the occurrence of ground water is mainly controlled by the distribution of sandstone in the formation. The distribution of such sandstone is the result of original depositional extent plus any post-depositional modifications, namely erosion and structural deformation. Transmissivity data for San Jose Formation are minimal. Values of 40 and 120 feet squared per day were determined from two aquifer tests (Stone et al, 1983, table 5). The reported or measured discharge from 46 water wells completed in San Jose Formation ranges from 0.15 to 61 gallons per minute and the median is 5 gallons per minute. Most of the wells provide water for livestock and domestic use. The San Jose Formation is a very suitable unit for recharge from precipitation because soils that form on the unit are sandy and highly permeable and therefore readily adsorb precipitation. However, low annual precipitation, relatively high transpiration and evaporation rates, and deep dissection of the San Jose Formation by the San Juan River and its tributaries all tend to reduce the effective recharge to the unit.



# Depth to groundwater



## New Mexico Office of the State Engineer Water Column/Average Depth to Water

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

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

No records found.

### PLSS Search:

**Section(s):** 35, 36

**Township:** 32N

**Range:** 07W


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.

7/2/21 7:43 AM

WATER COLUMN/ AVERAGE  
DEPTH TO WATER

Note: No groundwater wells shown within Sections 35 and 36 in T32N, R7W.


# Depth to groundwater



## New Mexico Office of the State Engineer

### Water Column/Average Depth to Water

(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 Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	DepthWell	DepthWater	Water Column
<a href="#">SJ 03649</a>		SJ	SJ	4	1	02	31N	07W	273538	4090167*		600	300	300

Average Depth to Water: 300 feet  
Minimum Depth: 300 feet  
Maximum Depth: 300 feet

**Record Count:** 1

**PLSS Search:**

Section(s): 1, 2      Township: 31N      Range: 07W

\*UTM location was derived from PLSS - see Help

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.

7/2/21 7:46 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER

Note: One groundwater well shown within Section 2, T31N, R7W. Average water depth is shown to be 300 ft.



# Determination of potential occupied residences, schools, hospitals, institutions, or churches



Note 1: The lateral extents of the release point are not shown to be within 300 feet of any occupied residences, schools, hospitals, institutions, or churches.



Mitch Killough

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From: Mitch Killough  
Sent: Monday, April 26, 2021 7:08 AM  
To: Smith, Cory, EMNRD; Ryan Joyner; ocd.enviro@state.nm.us  
Cc: Kurt Hoekstra; Cameron Garrett  
Subject: Closure Soil Sampling - San Juan 32-7 Unit 49 (Incident No. nAPP2110656396)

Tracking:	Recipient	Delivery
	Smith, Cory, EMNRD	
	Ryan Joyner	
	ocd.enviro@state.nm.us	
	Kurt Hoekstra	Delivered: 4/26/2021 7:08 AM
	Cameron Garrett	Delivered: 4/26/2021 7:08 AM

Good morning.

Hilcorp Energy Company (Hilcorp) is providing a 48-hour notification for closure soil sampling scheduled to occur at the San Juan 32-7 Unit 49 on Wednesday, April 28, 2021, beginning at 9:00am (MT). The initial C-141 was submitted to the NMOCD on 4/16/2021 and was assigned incident no. nAPP2110656396.

Please let me know if you have any questions.

Thanks.

Mitch Killough  
Environmental Specialist  
Hilcorp Energy Company  
1111 Travis Street  
Houston, TX 77002  
713-757-5247 (office)  
281-851-2338 (cell)  
[mkillough@hilcorp.com](mailto:mkillough@hilcorp.com)

## Data table of soil contaminant concentration data

Soil Sample Identification	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	Chlorides (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	MRO (mg/kg)	GRO+DRO (mg/kg)	TPH (mg/kg)
BGT PIT	4/28/2021	<0.023	<0.047	<0.047	<0.093	<0.21	1700	<4.7	14	<48	<18.7	<66.7
NMOCD Table 1 Closure Criteria		10	NE	NE	NE	50	20,000	NE	NE	NE	1,000	2,500

Note: Confirmation samples were collected on 4/28/2021 by Hilcorp personnel. The composite sample came back below action levels.



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

May 04, 2021

Mitch Killough  
HILCORP ENERGY  
PO Box 4700  
Farmington, NM 87499  
TEL: (505) 564-0733  
FAX:

RE: S J 32 through 7 49

OrderNo.: 2104C29

Dear Mitch Killough:

Hall Environmental Analysis Laboratory received 1 sample(s) on 4/29/2021 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](http://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".

Andy Freeman  
Laboratory Manager  
4901 Hawkins NE  
Albuquerque, NM 87109



## Analytical Report

Lab Order 2104C29

Date Reported: 5/4/2021

## Hall Environmental Analysis Laboratory, Inc.

CLIENT: HILCORP ENERGY

Client Sample ID: BGT PIT

Project: S J 32 through 7 49

Collection Date: 4/28/2021 9:15:00 AM

Lab ID: 2104C29-001

Matrix: SOIL

Received Date: 4/29/2021 7:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>EPA METHOD 8015M/D: DIESEL RANGE ORGANICS</b>						Analyst: <b>SB</b>
Diesel Range Organics (DRO)	14	9.7		mg/Kg	1	5/1/2021 4:13:51 PM
Motor Oil Range Organics (MRO)	ND	48		mg/Kg	1	5/1/2021 4:13:51 PM
Surr: DNOP	95.9	70-130		%Rec	1	5/1/2021 4:13:51 PM
<b>EPA METHOD 8015D: GASOLINE RANGE</b>						Analyst: <b>NSB</b>
Gasoline Range Organics (GRO)	ND	4.7		mg/Kg	1	4/30/2021 8:33:21 PM
Surr: BFB	88.8	70-130		%Rec	1	4/30/2021 8:33:21 PM
<b>EPA METHOD 8021B: VOLATILES</b>						Analyst: <b>NSB</b>
Benzene	ND	0.023		mg/Kg	1	4/30/2021 8:33:21 PM
Toluene	ND	0.047		mg/Kg	1	4/30/2021 8:33:21 PM
Ethylbenzene	ND	0.047		mg/Kg	1	4/30/2021 8:33:21 PM
Xylenes, Total	ND	0.093		mg/Kg	1	4/30/2021 8:33:21 PM
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	4/30/2021 8:33:21 PM
<b>EPA METHOD 300.0: ANIONS</b>						Analyst: <b>VP</b>
Chloride	1700	60		mg/Kg	20	5/3/2021 1:31:53 PM

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

<b>Qualifiers:</b>	*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
	D	Sample Diluted Due to Matrix	E	Value above quantitation range
	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		

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# QC SUMMARY REPORT

## Hall Environmental Analysis Laboratory, Inc.

WO#: 2104C29

04-May-21

Client: HILCORP ENERGY

Project: S J 32 through 7 49

Sample ID: <b>LCS-59759</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>59759</b>	RunNo: <b>77110</b>								
Prep Date: <b>5/3/2021</b>	Analysis Date: <b>5/3/2021</b>	SeqNo: <b>2733792</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	14	1.5	15.00	0	93.9	90	110			

Sample ID: <b>MB-59759</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 300.0: Anions</b>								
Client ID: <b>PBS</b>	Batch ID: <b>59759</b>	RunNo: <b>77110</b>								
Prep Date: <b>5/3/2021</b>	Analysis Date: <b>5/3/2021</b>	SeqNo: <b>2733793</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	ND	1.5								

### 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

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit

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**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2104C29

04-May-21

**Client:** HILCORP ENERGY**Project:** S J 32 through 7 49

Sample ID: <b>LCS-59724</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>59724</b>			RunNo: <b>77087</b>						
Prep Date: <b>4/30/2021</b>	Analysis Date: <b>5/1/2021</b>			SeqNo: <b>2732831</b>		Units: <b>mg/Kg</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Diesel Range Organics (DRO)	51	10	50.00	0	103	68.9	141			
Surr: DNOP	5.4		5.000		108	70	130			

Sample ID: <b>LCS-59746</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>59746</b>			RunNo: <b>77087</b>						
Prep Date: <b>4/30/2021</b>	Analysis Date: <b>5/1/2021</b>			SeqNo: <b>2732834</b>		Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	5.1		5.000		101	70	130			

Sample ID: <b>LCS-59752</b>	SampType: <b>LCS</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>LCSS</b>	Batch ID: <b>59752</b>			RunNo: <b>77087</b>						
Prep Date: <b>5/1/2021</b>	Analysis Date: <b>5/1/2021</b>			SeqNo: <b>2732837</b>		Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	4.4		5.000		87.1	70	130			

Sample ID: <b>MB-59724</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>59724</b>			RunNo: <b>77087</b>						
Prep Date: <b>4/30/2021</b>	Analysis Date: <b>5/1/2021</b>			SeqNo: <b>2732844</b>		Units: <b>mg/Kg</b>				
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	9.5		10.00		94.9	70	130			

Sample ID: <b>MB-59746</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>59746</b>			RunNo: <b>77087</b>						
Prep Date: <b>4/30/2021</b>	Analysis Date: <b>5/1/2021</b>			SeqNo: <b>2732846</b>		Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.5		10.00		94.6	70	130			

Sample ID: <b>MB-59752</b>	SampType: <b>MBLK</b>			TestCode: <b>EPA Method 8015M/D: Diesel Range Organics</b>						
Client ID: <b>PBS</b>	Batch ID: <b>59752</b>			RunNo: <b>77087</b>						
Prep Date: <b>5/1/2021</b>	Analysis Date: <b>5/1/2021</b>			SeqNo: <b>2732847</b>		Units: <b>%Rec</b>				
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: DNOP	9.6		10.00		95.5	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

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2104C29

04-May-21

**Client:** HILCORP ENERGY**Project:** S J 32 through 7 49

Sample ID: <b>MB-59714</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>PBS</b>	Batch ID: <b>59714</b>	RunNo: <b>77068</b>								
Prep Date: <b>4/29/2021</b>	Analysis Date: <b>4/30/2021</b>	SeqNo: <b>2732562</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	ND	5.0								
Surr: BFB	900		1000		90.4	70	130			

Sample ID: <b>LCS-59714</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8015D: Gasoline Range</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>59714</b>	RunNo: <b>77068</b>								
Prep Date: <b>4/29/2021</b>	Analysis Date: <b>4/30/2021</b>	SeqNo: <b>2732563</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics (GRO)	22	5.0	25.00	0	86.5	78.6	131			
Surr: BFB	990		1000		98.9	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

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit

**QC SUMMARY REPORT****Hall Environmental Analysis Laboratory, Inc.**

WO#: 2104C29

04-May-21

**Client:** HILCORP ENERGY**Project:** S J 32 through 7 49

Sample ID: <b>MB-59714</b>	SampType: <b>MBLK</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>PBS</b>	Batch ID: <b>59714</b>	RunNo: <b>77068</b>								
Prep Date: <b>4/29/2021</b>	Analysis Date: <b>4/30/2021</b>	SeqNo: <b>2732606</b>	Units: <b>mg/Kg</b>							
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	1.0		1.000		102	70	130			

Sample ID: <b>LCS-59714</b>	SampType: <b>LCS</b>	TestCode: <b>EPA Method 8021B: Volatiles</b>								
Client ID: <b>LCSS</b>	Batch ID: <b>59714</b>	RunNo: <b>77068</b>								
Prep Date: <b>4/29/2021</b>	Analysis Date: <b>4/30/2021</b>	SeqNo: <b>2732607</b>	Units: <b>mg/Kg</b>							
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.96	0.025	1.000	0	96.0	80	120			
Toluene	0.97	0.050	1.000	0	97.5	80	120			
Ethylbenzene	0.97	0.050	1.000	0	96.7	80	120			
Xylenes, Total	2.9	0.10	3.000	0	97.6	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		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

B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
P Sample pH Not In Range  
RL Reporting Limit

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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: HILCORP ENERGY

Work Order Number: 2104C29

RcptNo: 1

Received By: Juan Rojas

4/29/2021 7:15:00 AM

Completed By: Desiree Dominguez

4/29/2021 8:58:32 AM

Reviewed By:

4/29/21

Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐
4. Were all samples received at a temperature of  $>0^{\circ}\text{C}$  to  $6.0^{\circ}\text{C}$ ? 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 broken? Yes ☐ No ☒
11. Does paperwork match bottle labels?  
(Note discrepancies on chain of custody) Yes ☒ No ☐
12. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐
13. Is it clear what analyses were requested? Yes ☒ No ☐
14. Were all holding times able to be met?  
(If no, notify customer for authorization.) Yes ☒ No ☐

# of preserved  
bottles checked  
for pH:

( $<2$  or  $>12$  unless noted)

Adjusted?

Checked by:

IO

4/29/21

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:

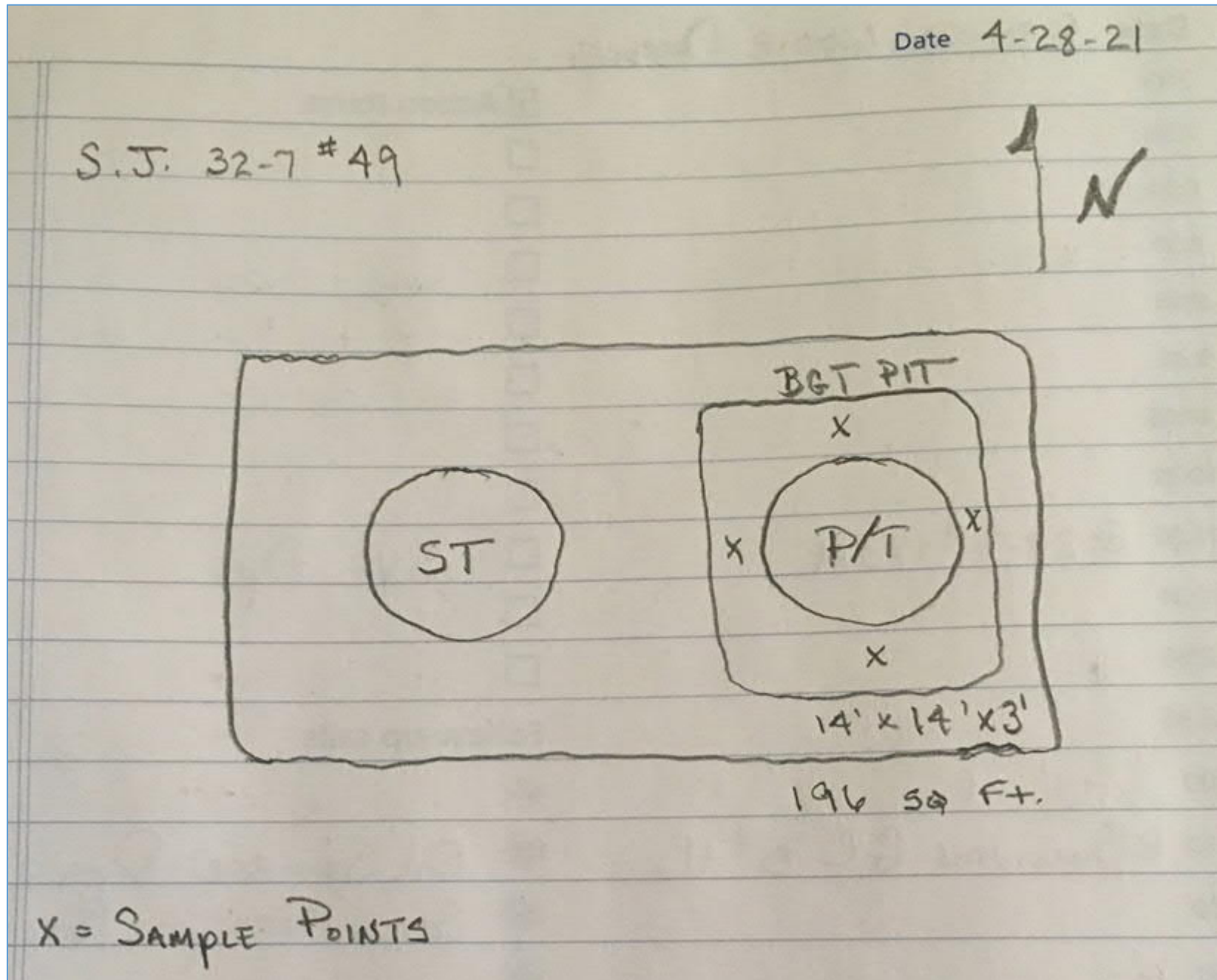
17. Cooler Information

Cooler No	Temp $^{\circ}\text{C}$	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	1.9	Good				
2	0.3	Good				





# Sample field notes



**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 34803

## CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 34803
	Action Type: [C-141] Release Corrective Action (C-141)

## CONDITIONS

Created By	Condition	Condition Date
nvelez	None	6/15/2022