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-144 Revised April 3, 2017

For temporary pits, below-grade tanks, and multi-well fluid management pits, submit to the appropriate NMOCD District Office.

For permanent pits submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

## Proposed Alternative Method Permit or Closure Plan Application

Proposed Alternative Method Permit of Closure Plan Application	
Type of action:  Below grade tank registration  Permit of a pit or proposed alternative method  Closure of a pit, below-grade tank, or proposed alternative method  Modification to an existing permit/or registration  Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tank, or proposed alternative method	
Instructions: Please submit one application (Form C-144) per individual pit, below-grade tank or alternative request	
ase be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the rironment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.	
perator: Hilcorp Energy Company OGRID #: 372171	
ddress: 382 Road 3100 Aztec, NM 87410	
acility or well name: CANYON LARGO UNIT NP 182	
PI Number:OCD Permit Number:	
//L or Qtr/Qtr P (SESE) Section 2 Township 24N Range 7W County: RIO ARRIBA	
enter of Proposed Design: Latitude 36.33653 Longitude -107.53854 NAD83	
urface Owner:   Federal   State   Private   Tribal Trust or Indian Allotment	
Pit:       Subsection F, G or J of 19.15.17.11 NMAC         emporary:       □ Drilling       □ Workover         □ Permanent       □ Emergency       □ Cavitation       □ P&A       □ Multi-Well Fluid Management       Low Chloride Drilling Fluid       □ yes       □ no         □ Lined       □ Unlined       Liner type:       Thickness      mil       □ LLDPE       □ HDPE       □ PVC       □ Other          □ String-Reinforced       iner Seams:       □ Welded       □ Factory       □ Other        x W       x D	
Below-grade tank: Subsection I of 19.15.17.11 NMAC	
folume:bbl Type of fluid:Produced Water	
ank Construction material: Fiberglass	
Secondary containment with leak detection   Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off	
Visible sidewalls and liner    ✓ Visible sidewalls only    ☐ Other	
iner type: Thicknessmil	
Alternative Method:  ubmittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	
	٦
encing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)  Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, hospital,	
stitution or church)  Tour foot height, four strands of barbed wire evenly spaced between one and four feet	
Alternate. Please specify	

Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)	
☐ Screen ☐ Netting ☐ Other	
☐ Monthly inspections (If netting or screening is not physically feasible)	
7.	
Signs: Subsection C of 19.15.17.11 NMAC	
☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers	
☐ Signed in compliance with 19.15.16.8 NMAC	
D.	
8. Variances and Exceptions:	
Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.	
Please check a box if one or more of the following is requested, if not leave blank:  Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.	
Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	
9. State Catalanta (management and management and m	
Siting Criteria (regarding permitting): 19.15.17.10 NMAC Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptance of the compliance of the complianc	otable source
material are provided below. Siting criteria does not apply to drying pads or above-grade tanks.	
General siting	
Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank.	☐ Yes ☐ No
- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	⊠ NA
Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit.	Yes No
NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	⊠ NA
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	☐ Yes ☐ No
adopted pursuant to NMSA 1978, Section 3-27-3, as amended. (Does not apply to below grade tanks)	
- Written confirmation or verification from the municipality; Written approval obtained from the municipality	
Within the area overlying a subsurface mine. (Does not apply to below grade tanks)	☐ Yes ☐ No
- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	
Within an unstable area. ( <b>Does not apply to below grade tanks</b> ) - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological	☐ Yes ☐ No
Society; Topographic map	
Within a 100-year floodplain. (Does not apply to below grade tanks)	☐ Yes ☐ No
- FEMA map	
Below Grade Tanks	
Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured	
from the ordinary high-water mark).	☐ Yes ⊠ No
- Topographic map; Visual inspection (certification) of the proposed site	
Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;.	☐ Yes ⊠ No
- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	
<u>Temporary Pit using Low Chloride Drilling Fluid</u> (maximum chloride content 15,000 mg/liter)	
Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole,	
or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.)	Yes No
- Topographic map; Visual inspection (certification) of the proposed site	
Within 300 feet from a occupied permanent residence, school, hospital, institution, or church in existence at the time of initial	☐ Yes ☐ No
<ul> <li>application.</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>	
Within 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application.	☐ Yes ☐ No
NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	

Within 100 feet of a wetland.  - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No		
Temporary Pit Non-low chloride drilling fluid			
Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No		
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No		
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, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application;  - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No		
Within 300 feet of a wetland US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No		
Permanent Pit or Multi-Well Fluid Management Pit			
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa			
lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No		
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No		
Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application.			
- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No		
Within 500 feet of a wetland.  - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No		
Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC  Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.  Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC  Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC  Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC  Design Plan - based upon the appropriate requirements of 19.15.17.12 NMAC  Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC  Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC  Previously Approved Design (attach copy of design) API Number: or Permit Number: or Permit Number:			
11.  Multi-Well Fluid Management Pit Checklist: Subsection B of 19.15.17.9 NMAC			
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the doc attached.  Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC  Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC  A List of wells with approved application for permit to drill associated with the pit.  Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19 and 19.15.17.13 NMAC  Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC  Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC  Previously Approved Design (attach copy of design) API Number:			

Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the description is the subsection of the following items must be attached to the application.	locuments are			
attached.				
☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC				
☐ Climatological Factors Assessment				
Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC				
☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC				
Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC				
Quality Control/Quality Assurance Construction and Installation Plan				
☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC ☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC				
Nuisance or Hazardous Odors, including H <sub>2</sub> S, Prevention Plan				
Emergency Response Plan				
☐ Oil Field Waste Stream Characterization ☐ Monitoring and Inspection Plan				
Erosion Control Plan				
Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC				
13.				
Proposed Closure: 19.15.17.13 NMAC Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.				
	wid Managamant Dit			
Type: Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Multi-well Fl Alternative	uid Management Pit			
Proposed Closure Method: Waste Excavation and Removal				
<ul><li>☐ Waste Removal (Closed-loop systems only)</li><li>☐ On-site Closure Method (Only for temporary pits and closed-loop systems)</li></ul>				
☐ In-place Burial ☐ On-site Trench Burial				
Alternative Closure Method				
14. W. A. Francking and D. Charles and Cha				
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be a closure plan. Please indicate, by a check mark in the box, that the documents are attached.	utacnea to tne			
Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC				
Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.13 NMAC				
<ul> <li>☑ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)</li> <li>☑ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC</li> </ul>				
Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC				
☑ Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC				
15.				
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC				
Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable sour provided below. Requests regarding changes to certain siting criteria require justifications and/or demonstrations of equivalency. P				
19.15.17.10 NMAC for guidance.	ieuse rejer io			
Ground water is less than 25 feet below the bottom of the buried waste.  - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No			
	□ NA			
Ground water is between 25-50 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	∐ Yes∐ No □ NA			
Ground water is more than 100 feet below the bottom of the buried waste.  - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	∐ Yes∐ No □ NA			
Within 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, lakebed, sinkhole, or playa				
lake (measured from the ordinary high-water mark).	∐ Yes ∐ No			
- Topographic map; Visual inspection (certification) of the proposed site				
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.	☐ Yes ☐ No			
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image				
Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence	☐ Yes ☐ No			
at the time of initial application.				
- NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site				
Written confirmation or verification from the municipality; Written approval obtained from the municipality  Yes No				
Within 300 feet of a wetland.				
US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No			
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance				

adopted pursuant to NMSA 1978, Section 3-27-3, as amended.  - Written confirmation or verification from the municipality; V			
	Written approval obtained from the r	nunicipality	☐ Yes ☐ No
Within the area overlying a subsurface mine Written confirmation or verification or map from the NM EM	MNRD-Mining and Mineral Divisio	1	☐ Yes ☐ No
Within an unstable area.  - Engineering measures incorporated into the design; NM Bure Society; Topographic map	eau of Geology & Mineral Resource	es; USGS; NM Geological	
Within a 100-year floodplain.			Yes No
- FEMA map			Yes No
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.  Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC  Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection E of 19.15.17.13 NMAC  Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K of 19.15.17.11 NMAC  Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.13 NMAC  Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC  Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of 19.15.17.13 NMAC  Waste Material Sampling Plan - based upon the appropriate requirements of 19.15.17.13 NMAC  Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)  Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC  Re-vegetation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC			
17. Operator Application Certification:			
I hereby certify that the information submitted with this application i	-		
Name (Print):	Title:		<u>-</u>
Signature:	Date:		
e-mail address:	Telephone:		
18.  OCD Approval: Permit Application (including closure plan)	Closure Plan (only) OCD (	Conditions (see attachment)	
OCD Representative Signature:		Approval Date:02	/21/2025
Title: Environmental Scientist & Specialist-A	OCD Permit Number	er:BGT1	
19. Closure Report (required within 60 days of closure completion):			
Instructions: Operators are required to obtain an approved closure The closure report is required to be submitted to the division within section of the form until an approved closure plan has been obtained	n 60 days of the completion of the co ed and the closure activities have b	losure activities. Please do no	ot complete this
The closure report is required to be submitted to the division within	n 60 days of the completion of the co ed and the closure activities have b	osure activities. Please do no een completed. etion Date: 02/12/202	ot complete this

22.		
Operator Closure Certification:		
I hereby certify that the information and attachments submitted with t belief. I also certify that the closure complies with all applicable clos		
Name (Print): Tammy Jones	Title:	Operations/Regulatory Technician - Sr
Signature: Tammy Jones		_ Date: 02/17/2025
e-mail address: tajones@hilcorp.com	Telephone:	(505) 324-5185

#### Hilcorp Energy Company BGT Modification

Hilcorp Energy Company is requesting to modify the below-grade tank permit for Canyon Largo Unit NP 182 (30.039.23550) as follows:

- Hilcorp Energy would like to base the BGT permit/registration on the current 19.15.17 NMAC rule. The closure plan includes an updated confirmation sampling limits, Table I attached.
- Hilcorp Energy requests approval to use the 8015D method and add together DRO, MRO and GRP for TPH result.

Table I  Closure Criteria for Soils Beneath Below-Grade Tanks, Drying Pads Associated with Closed-Loop					
	Systems and Pits where Contents are Removed				
Depth below bottom of pit to groundwater less than 10,000 mg/l TDS	Constituent	Method*	Limit**		
≤50 feet	Chloride	EPA 300.0	600 mg/kg		
	TPH BTEX	EPA SW-846 Method 418.1  EPA SW-846 Method 8021B or 8260B	100 mg/kg 50 mg/kg		
	Benzene	EPA SW-846 Method 8021B or 8015M	10 mg/kg		
51 feet-100 feet	Chloride	EPA 300.0	10,000 mg/kg		
31 leet-100 leet	TPH	EPA SW-846 Method 418.1	2,500 mg/kg		
	GRO+DRO	EPA SW-846 Method 8015M	1,000 mg/kg		
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg		
	Benzene Chloride	EPA SW-846 Method 8021B or 8015M	10 mg/kg		
> 100 feet		EPA 300.0	20,000 mg/kg		
	TPH	EPA SW-846 Method 418.1	2,500 mg/kg		
	GRO+DRO	EPA SW-846 Method 8015M	1,000 mg/kg		
	BTEX	EPA SW-846 Method 8021B or 8260B	50 mg/kg		
	Benzene	EPA SW-846 Method 8021B or 8015M	10 mg/kg		

<sup>\*</sup>Or other test methods approved by the division

<sup>\*\*</sup>Numerical limits or natural background level, whichever is greater

# Hilcorp Energy Company San Juan Basin: New Mexico Assets Below Grade Tank Closure Report

Type text I

Lease Name: Canyon Largo Unit NP 182

**API No.:** 30-039-23550

In accordance with Rule 19.15.17.13 NMAC, the following information describes the closure of the below-grade tank referenced above. All proper documentation regarding closure activities is being included with the C-144.

#### **General Plan Requirements:**

1. Prior to initiating any BGT closure, except in the case of an emergency, HILCORP will notify the surface owner of the intent to close the BGT by certified mail no later than 72 hours or one week before closure and a copy of this notification will be included in the closure report. In the case of an emergency, the surface owner will be notified as soon as practical.

The surface owner was notified by email of the closure process and the notification is attached.

- 2. Notice of closure will be given to the District Division office between 72 hours and one week of the scheduled closure via email or phone. The notification of closure will include the following:
  - a. Operators Name
  - b. Well Name and API Number
  - c. Location

#### Notification is attached.

3. All liquids will be removed from the BGT following cessation of operation. Produced water will be disposed of at one of HILCORP's approved Salt Water Disposal facilities or at a District Division approved facility.

All recovered liquids were disposed of at an approved SWD facility or an approved District Division facility within 60 days of cessation of operation.

4. Solids and sludge's will be shoveled and/or vacuumed out for disposal at one of the District Division approved facilities, depending on the proximity of the BGT site: Envirotech Land Farm (Permit #NM-01-011), JFJ Land Farm % Industrial Ecosystems Inc. (Permit #NM-01-0010B), and Basin Disposal (Permit #NM-01-005).

Any sludge or soil required to be removed to facilitate closure was transported to Envirotech Land Farm (Permit # NM-01-011) and/or JFJ Landfarm % IEI (Permit# NM-01-0010B).

Revised 10/14/2015

5. HILCORP will obtain prior approval from District Division to dispose, recycle, reuse, or reclaim the BGT and provide documentation of the disposition of the BGT in the closure report. Steel materials will be recycled or reused as approved by the District Division. Fiberglass tanks will be empty, cut up or shredded, and EPA cleaned for disposal as solid waste. Liner materials will be cleaned without soils or contaminated material for disposal as solid waste. Fiberglass tanks and liner materials will meet the conditions of 19.15.35 NMAC. Disposal will be at a licensed disposal facility, presently San Juan County Landfill operated by Waste Management under NMED Permit SWM-052426.

The below-grade tank was disposed of in a division-approved manner. The liner was cleaned per 19.15.35.8.C(1)(m) NMAC and disposed of at the San Juan County Regional Landfill located on CR 3100.

6. Any equipment associated with the BGT that is no longer required for some other purpose, following the closure, will be removed.

All on-site equipment associated with the below-grade tank was removed.

- 7. Following removal of the tank and any liner material, HILCORP will test the soils beneath the BGT as follows:
  - a. At a minimum, a five-point composite sample will be taken to include any obvious stained or wet soils or any other evidence of contamination.
  - b. The laboratory sample shall be analyzed for the constituents listed in Table I of 19.15.17.13.

A five point composite sample was taken of the below-grade tank using sampling tools and all samples tested per Table I of 19.15.17.13 and the results are attached.

8. If the District Division and/or HILCORP determine there is a release, HILCORP will comply with 19.15.17.13.C.3b.

A release was not determined for the above referenced well.

9. Upon completion of the tank removal, pursuant to 19.15.17.13.C.3c, if all contaminant concentrations are less than or equal to the parameters listed in Table I of 19.15.17.13 NMAC, the excavation will be backfilled with non-waste earthen material compacted and covered with a minimum of one foot top soil or background thickness whichever is greater and to existing grade. The surface will be re-contoured to match the native grade and to prevent ponding.

The tank removal area passed all requirements of Table I of 19.15.17.13 NMAC and was backfilled with compacted, non-waste containing, earthen material which included at least one foot of suitable material to establish vegetation at the site.

Revised 10/14/2015

10. For those portions of the former BGT area no longer required for production activities, HILCORP will seed the disturbed area the first favorable growing season after the BGT is covered. Seeding will be accomplished via drilling on the contour whenever practical, or by other District Division-approved methods. HILCORP will notify the District Division when reclamation and re-vegetation is complete.

Reclamation of the BGT shall be considered complete when:

- Vegetative cover reflects a life form ratio of +/- 50% of pre disturbance levels.
- Total percent plant cover of at least 70% of pre-disturbance levels (Excluding noxious weeds) OR
- Pursuant to 19.15.17.13.H.5d HILCORP will comply with obligations imposed by other applicable federal or tribal agencies in which there re-vegetation and reclamation requirements provide equal or better protection of fresh water, human health and the environment.

Provision 10 will be accomplished pursuant to 19.15.17.H.5d and notification will be submitted upon completion.

11. For those portions of the former BGT area required for production activities, reseeding will be done at well abandonment, and following the procedure noted above.

The former BGT area is required for production activities and reseeding will be completed upon plug and abandonment, per the procedure noted above.

#### **Closure Report:**

All closure activities will include proper documentation and will be submitted to OCD within 60 days of the BGT closure on a Closure Report using District Division Form C-144. The Report will include the following:

- Proof of Closure Notice (surface owner and District Division) (Attached)
- Backfilling & cover installation (See Report)
- Confirmation Sampling Analytical Results (Attached)
- Application Rate & Seeding techniques (See Report)
- Photo Documentation of Reclamation (Attached)

#### Tammy Jones

Subject: FW: 72 hour BGT Closure Notice – CANYON LARGO UNIT NP 182 (API# 30-039-23550)

Attachments: Canyon Largo Unit NP 182\_BGT Permit\_OCD APVD.pdf

From: Tammy Jones <tajones@hilcorp.com> Sent: Thursday, October 24, 2024 6:50 AM

To: Allison Marks <amarks@slo.state.nm.us>; April Elliott <aelliott@slo.state.nm.us>; Dana Strang

<dvstrang@slo.state.nm.us>; Bryan Hall <bhall@hilcorp.com>; slwells@slo.state.nm.us; spills@slo.state.nm.us;

tknight@slo.state.nm.us; Will Barners <wbarnes@slo.state.nm.us>; Kate Kaufman@hilcorp.com>; Max Lopez

<Max.Lopez@hilcorp.com>; Ramon Hancock <Ramon.Hancock@hilcorp.com>; Mitch Killough <mkillough@hilcorp.com>;

Samantha Grabert <Samantha.Grabert@hilcorp.com>; Victoria Venegas (Victoria.Venegas@emnrd.nm.gov)

<Victoria.Venegas@emnrd.nm.gov>; Kennedy, Joseph, EMNRD <Joseph.Kennedy@emnrd.nm.gov>;

joel.stone@emnrd.nm.gov; Lisa Jones <ljones@hilcorp.com>; Ben Mitchell <bemitchell@hilcorp.com>; Farmington Regulatory Techs <FarmingtonRegulatoryTechs@hilcorp.com>

Subject: 72 hour BGT Closure Notice - CANYON LARGO UNIT NP 182 (API# 30-039-23550)

Subject: 72 Hour BGT Closure Notification

Anticipated Start Date: Tuesday, 10/29/2024 at 10:00 AM

The subject well has a below-grade tank that will be permanently removed. The BGT permit is attached. Please contact me if you have any questions or concerns.

Well Name: CANYON LARGO UNIT NP 182

**API#:** 30-039-23550

Location: Unit P (SESE), Section 2, T24N, R7W

**Footages:** 790' FSL & 790' FEL

Operator: Hilcorp Energy Surface Owner: STATE

Reason: Well has been P&A'd.

#### \*\*Please Note Required Photos for Closure\*\*

- Well site placard
- Photos of the BGT prior to closure
- The sample location or, more preferred, photos of actual sample collection
- Final state of the area after closure.
- Photos will require captioning including direction of photo, date and time of photo and a description of the image contents.

Thanks,

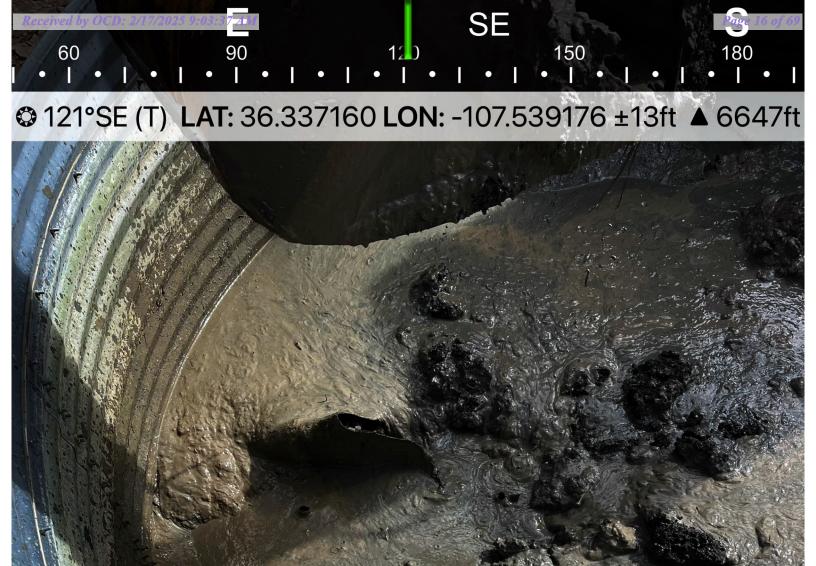
Tammy Jones | HILCORP ENERGY COMPANY | San Juan Regulatory | 505.324.5185 | tajones@hilcorp.com





Canyon Largo NP 182 10-29-2024, 12:23:54





Canyon Largo NP 182 10-29-2024, 13:17:12









From: Stone, Joel, EMNRD < Joel.Stone@emnrd.nm.gov>

Sent: Tuesday, January 21, 2025 3:47 PM

To: Samantha Grabert

Subject: RE: [EXTERNAL] Hilcorp - Legacy BGT Closures - 19.15.17.13 NMAC Guidance API:

30-039-23550 Canyon Largo Unit NP 182

Hi Samantha,

OCD has reviewed the email and confirmed that the 5-point composite soil sample collected after the removal of the BGT associated with Canyon Largo Unit NP #182 (API 30-039-23550) indicates that analytical results for TPH exceeds the limits of the permit/registration approved 02/15/2012.

OCD has also determined that the depth to groundwater determination in the aforementioned permit/registration, approved by the OCD, is greater than 100 feet.

Hilcorp can request a modification to their existing permit/registration utilizing the C-144 Form. The modification request should state that Hilcorp requests a variance to the BGT permit/registration to be based on the current 19.15.17 NMAC rule. Hilcorp also needs to include an update to the closure plan's confirmation sampling limits. Please note: Table 1 of 19.15.17.13 NMAC specifies that TPH be analyzed using EPA SW-846 Method 418.1. The lab report Hilcorp submitted shows the analysis used method 8015 M/D for DRO and MRO, and 8015D for GRO (Table 1 calls for 8015M for GRO). If Hilcorp would like to request approval to use these methods and add together DRO, MRO and GRO for TPH result, please include this in your modification request. For simplicity, Hilcorp can combine this modification request in conjunction with the final closure report.

The OCD is granting approval for Hilcorp to backfill the area and then to proceed with revegetation. Once closure is completed, Hilcorp must submit a final closure report that addresses all components in the approved closure plan (e.g., waste disposal methods/disposal site name, proof surface owner was notified, etc.). Hilcorp must submit the final closure report, utilizing the C-144 Form, to the OCD within 60-days of closure completion. In this C-144 application, Hilcorp also needs to ask for the modification request and check the Type of action "Modification to an existing permit/or registration" in conjunction with the "Closure of a pit, below-grade tank, or proposed alternative method." All applicable sections for the closure report need to be filled out and section 16 needs to be checked for "Confirmational Sampling Plan."

If you have any questions, please do not hesitate to contact me.

Sincerely,

Joel B. Stone • Environmental Scientist & Specialist Energy, Minerals and Natural Resources Department Oil Conservation Division 1220 S. St. Francis Drive, Santa Fe, NM 87505 (505) 709-5149 | joel.stone@emnrd.nm.gov

From: Samantha Grabert <Samantha.Grabert@hilcorp.com>

Sent: Tuesday, January 21, 2025 11:47 AM

To: Stone, Joel, EMNRD < Joel. Stone@emnrd.nm.gov>

Cc: Kennedy, Joseph, EMNRD < Joseph. Kennedy@emnrd.nm.gov>

Subject: [EXTERNAL] Hilcorp - Legacy BGT Closures - 19.15.17.13 NMAC Guidance API: 30-039-23550 Canyon Largo Unit NP 182

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

Good Afternoon, Joel,

I am the environmental specialist for Hilcorp Energy Company's San Juan South asset team in the Farmington area. I am assisting our Aztec Field Office with a BGT C-144 closure packet and needed some guidance in regard to 19.15.17.13 NMAC. The 5-pt composite closure soil sample collected after BGT removal, shows an exceedance of TPH when compared to the BGT permitted limits. However, when comparing the same concentrations to the applicable Table 1 closure criteria in 19.15.17.13 NMAC, we are below standards and do not trigger any cleanup per 19.15.17.13(C)(3)(c) NMAC. In the attached PDF package, you will find a drafted C-141 form, a memorandum summarizing the scenario, a Site Characterization determination performed by a third-party consultant, the final sample lab report, and the current BGT permit for your reference. Please advise and provide if we can proceed with backfilling/re-contouring the BGT location based on the information provided, and as always, please feel free to reach out if you have any questions, concerns, or need anything further from me for this request.

Thanks.



713-757-7116 (Office) 337-781-9630 (Mobile)

The information contained in this email message is confidential and may be legally privileged and is intended only for the use of the individual or entity named above. If you are not an intended recipient or if you have received this message in error, you are hereby notified that any dissemination, distribution, or copy of this email is strictly prohibited. If you have received this email in error, please immediately notify us by return email or telephone if the sender's phone number is listed above, then promptly and permanently delete this message.

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

State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised August 24, 2018 Submit to appropriate OCD District office

Incident ID	
District RP	
Facility ID	
Application ID	

## **Release Notification**

		Responsil	ble Part	y	
Responsible Party: Hilcorp Energy			OGRID: 3	72171	
Contact Name: Samantha Grabert			Contact To	elephone: 713-75	7-7116
Contact email: Samantha.grabert@hilcorp.com					
Contact mailing address	s: 1111 Travis St. Hous	ton, TX 77471			
	]	Location of R	elease S	ource	
Latitude	36.3369522	(NAD 83 in decimal deg		Longitude	-107.5390015
Site Name Canyon Larg	go Unit NP 182		Site Type	Gas Well	
Date Release Discovered	d N/A		API# (if app	olicable) 30-039-23	3550
Unit Letter	Section	Township		Range	County
P	02	24N		7W	Rio Arriba
Surface Owner: State  Mater		ature and Vol	ume of l		olumes provided below)
Crude Oil	Volume Released (bb		•	Volume Recove	
Produced Water	Volume Released (bb	ols)		Volume Recove	ered (bbls)
Is the concentration of dissolved chloride in the produced water >10,000 mg/l?		in the	Yes No		
Condensate				Volume Recove	ered (bbls)
☐ Natural Gas	Volume Released (Mcf)			Volume Recovered (Mcf)	
Other (describe)	Other (describe) Volume/Weight Released (provide units) Volu		Volume/Weigh	t Recovered (provide units)	
Condition 5 of the close Closure Criteria for Soil	sure plan. Thus, indications Is Beneath Below-Grade	ng that a potential r Tanks listed in curr	release occurent Table I	rred. However, T of 19.15.17.13 NM	GT closure criteria thresholds shown in PH concentrations did not exceed the MAC for groundwater depths (>100 ft).
	•	· ·			s: 1) modification of the current BGT

Method 8015D for TPH analysis. See ensuing pages for details.

Received by OCD:	2/17/2025 9:03:37 AM
Form C-141	State of New Mexico
Page 2	Oil Conservation Division

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Incident ID	
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the r	esponsible party co	onsider this a major release?						
☐ Yes ⊠ No	N/A								
If YES, was immediate no	If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?								
Not Required									
Initial Response									
The responsible	party must undertake the following actions imme	ediately unless they cou	uld create a safety hazard that would result in injury						
☐ The source of the rele	ease has been stopped.								
☐ The impacted area ha	s been secured to protect human health	n and the environm	nent.						
Released materials ha	Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.								
All free liquids and re	ecoverable materials have been remove	ed and managed ap	ppropriately.						
If all the actions described	If all the actions described above have <u>not</u> been undertaken, explain why:								
has begun, please attach	a narrative of actions to date. If reme	edial efforts have b	nmediately after discovery of a release. If remediation been successfully completed or if the release occurred all information needed for closure evaluation.						
regulations all operators are public health or the environr failed to adequately investig	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: Samant	ha Grabert	Title:	Environmental Specialist						
Signature:	ntha Subut	Date:	1/2/2025						
email: <u>samantha.graber</u>	t@hilcorp.com	Telephone:	713-757-7116						
OCD Only									
Received by:		Date:							



#### Memorandum

To: Energy, Minerals, and Natural Resources Department (EMNRD) – Permitting Program

From: Samantha Grabert, Hilcorp Energy Company (Hilcorp)

**Date**: 1/2/2025

**Subject**: Canyon Largo Unit NP 182– Permanent Closure of a BGT – Exception/Variance Request

On 10/24/2024, Hilcorp submitted a 72-hour notice prior to the permanent closure of a below grade tank (BGT) at the Canyon Largo Unit NP 182, Rio Arriba County, New Mexico. As required by Condition 5 (found in the enclosed Closure Plan, certified by Huntington on 5/5/2009), Hilcorp personnel proceeded to collect a 5-pt composite soil sample on 10/29/2024 to determine if any contaminant concentrations exceeded the BGT closure criteria thresholds, per Condition 5. Upon receiving analytical results, Hilcorp determined that total petroleum hydrocarbon (TPH) concentrations exceeded the BGT closure criteria thresholds shown in Condition 5 of the closure plan. Thus, indicating that a potential release occurred (refer to table below). However, TPH concentrations did not exceed the Closure Criteria for Soils Beneath Below-Grade Tanks listed in Table I of 19.15.17.13 NMAC for groundwater depths (>100 ft bgs).

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 - 5 Point	10/29/2024	0.060	<0.047	0.43	2.7	3.19	<60	56	320	440	376	816
Current BGT Permit Closure Criteria		0.2	NE	NE	NE	50	250	NE	NE	NE	NE	100
Table I of 19.15.17.13 N	NMAC	10	NE	NE	NE	50	20,000	NE	NE	NE	1,000	2,500

In accordance with 19.15.17.13(C)(3)(c) NMAC, all contaminant concentrations are less than the parameters listed in Table I of 19.15.17.13 NMAC for groundwater depths (>100 ft). Based on this determination and the date of the BGT registration, Hilcorp respectfully requests an exception/variance approval per 19.15.17.13(E)(5) NMAC (effective 6/16/2008; amended 7/16/2009) to proceed with final backfilling/re-contouring since all laboratory analytes in the 5-point composite soil sample are below closure thresholds listed in Table I of 19.15.29.12 NMAC for groundwater depths (>100 ft) and would be deemed non-reportable to the NMOCD. A Site Characterization performed by Ensolum, LLC is also being provided to further support Hilcorp's determination that this site falls in the least stringent Table 1 closure criteria for both 19.15.17.13 NMAC and 19.15.29.12 NMAC.

If any additional information is needed for this exception/variance request, please let me know.

Enclosures: Eurofins Lab Report (dated 11/12/2024)

Pit, Closed-Loop System, Below-Grade Tank, or Proposed Alternative Method Permit or Closure

Plan Application (certified by Huntington on 5/5/2009) Site Characterization (provided by Ensolum, LLC)

Hilcorp Energy Company
1111 Travis Street, Houston, Texas 77002
T 713.209.2400 F 713.289.2750

					□ EN	SOLUM			
			New Mexico	Site Characterization	on				
REFERENCE			SIT	E INFORMATION		COMMENTS			
C-141			Site Name:	Canyon Largo Unit NP #182					
C-141			Coordinates:	36.33653, -107.53854					
C-141			Incident Number:	-		Rio Arriba county			
C-141			Land Owner:	State					
NMOCD O&G Map			Site Elevation (ft):	6,648					
			CLOSEST SIG	NIFICANT WATER SOURCE					
NMOCD O&G Map,			Type:	Intermittently Flooded Streamber	d				
USGS dashed blue line,			Distance (ft):	431					
aerials			Direction:	S					
	Y/N	Distance		SITE RECEPTORS					
C-141	NO	NA	Did this release impact ground	lwater or surface water?					
NMOCD O&G Map	NO	>5mi	< 200 ft of any lakebed, sinkho	ole, or playa lake?					
NMOCD O&G Map	NO	>5mi	< 300 ft of a continuously flow	ing watercourse or any other signifi	cant watercourse?				
Aerials	NO	>5mi	≤ 300 ft of an occupied perma	nent residence, school, hospital, ins	titution, or church?				
FEMA map	NO	>5mi	Incorporated municipal bound	orporated municipal boundaries or a defined municipal fresh water field					
Wetlands map	NO	688	300 ft of a wetland?						
NMOSE	NO	1,584	500 ft of a spring or a private	stock watering well					
NMOSE/USGS map	NO	21,648	1,000 ft of any other fresh w	≤ 1,000 ft of any other fresh water well or spring?					
FEMA map	NO	432	Distance to nearest 100-year f	Distance to nearest 100-year floodplain					
NMOCD O&G Map	NO	NA	overlying unstable geology (HI	GH KARST)? Distance to High Karst a	irea	_			
NMOCD O&G Map	LOW	NA	karst potential						
			<u>DT\</u>	V INFORMATION					
		Clo	sest Well	2nd Clo	osest Well				
		(	LOSER						
	Name:		SJ-681(39)		SJ-01131				
	Distance fro	om Site (ft):	21,648		26,189				
Cross reference USGS	Direction fr	om Site:	WSW		SW	_			
Map, NMOCD Map,	Elevation:		7,273		7,201	<b>-</b>			
and NMOSE/USGS Database	DTW (ft):		500		400	<b>-</b>			
Database	Total Depth		1825		1700	<b>-</b>			
	Coordinate		36.318129, -107.608531	Donath to work 1 1	36.297642, -107.613546	<del>- </del>			
	625	feet nigher in	elevation than the Site ESTIMAT	Depth to water belo ED DTW @ SITE: >100'	w site based on elev.				
			NMOCD TAE	SLE 1 CLOSURE CRITERIA					
		DRO+ GRO			es: 20,000 mg/kg				

**Environment Testing** 

## **ANALYTICAL REPORT**

## PREPARED FOR

Attn: Samantha Grabert Hilcorp Energy PO BOX 4700 Farmington, New Mexico 87499

Generated 11/12/2024 11:53:39 AM

## **JOB DESCRIPTION**

Canyon Largo Unit NP 182- BGT

## **JOB NUMBER**

885-14584-1

Eurofins Albuquerque 4901 Hawkins NE Albuquerque NM 87109

## **Eurofins Albuquerque**

#### **Job Notes**

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

## **Authorization**

Generated 11/12/2024 11:53:39 AM

Authorized for release by Michelle Garcia, Project Manager michelle.garcia@et.eurofinsus.com (505)345-3975 2

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Client: Hilcorp Energy
Laboratory Job ID: 885-14584-1
Project/Site: Canyon Largo Unit NP 182- BGT

## **Table of Contents**

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#### **Definitions/Glossary**

Client: Hilcorp Energy Job ID: 885-14584-1

Project/Site: Canyon Largo Unit NP 182- BGT

#### **Qualifiers**

#### **GC Semi VOA**

Qualifier **Qualifier Description** 

MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not

applicable.

#### **Glossary**

Abbreviation	These commonly used abbreviations may or may not be present in this report.
<del>\( \psi \)</del>	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL. RA. RE. IN	Indicates a Dilution. Re-analysis. Re-extraction. or additional Initial metals/anion analysis of the sample

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin) LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

EPA recommended "Maximum Contaminant Level" MCL MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit ML Minimum Level (Dioxin) MPN Most Probable Number MQL Method Quantitation Limit

Not Calculated NC

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NEG Negative / Absent POS Positive / Present

**PQL** Practical Quantitation Limit

**PRES** Presumptive QC **Quality Control** 

Relative Error Ratio (Radiochemistry) RER

Reporting Limit or Requested Limit (Radiochemistry) RL

RPD Relative Percent Difference, a measure of the relative difference between two points

Toxicity Equivalent Factor (Dioxin) **TEF** TEQ Toxicity Equivalent Quotient (Dioxin)

**TNTC** Too Numerous To Count

Eurofins Albuquerque

Job ID: 885-14584-1

#### **Case Narrative**

Client: Hilcorp Energy Job ID: 885-14584-1

Project: Canyon Largo Unit NP 182- BGT

**Eurofins Albuquerque** 

Job Narrative 885-14584-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

#### Receipt

The sample was received on 11/1/2024 7:15 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.3°C.

#### Gasoline Range Organics

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### GC VOA

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### **Diesel Range Organics**

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

#### HPLC/IC

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Eurofins Albuquerque

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#### **Client Sample Results**

Client: Hilcorp Energy Job ID: 885-14584-1

Project/Site: Canyon Largo Unit NP 182- BGT

Released to Imaging: 2/21/2025 10:34:31 AM

**Client Sample ID: BGT 5-Point** 

Lab Sample ID: 885-14584-1

Date Collected: 10/29/24 13:15 Matrix: Solid Date Received: 11/01/24 07:15

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics [C6 -	56		4.7	mg/Kg		11/01/24 13:13	11/11/24 13:48	1
C10]								
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	131		35 - 166			11/01/24 13:13	11/11/24 13:48	1
Method: SW846 8021B - Volatile	Organic Comp	ounds (GC)	)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.060		0.024	mg/Kg		11/01/24 13:13	11/11/24 13:48	1
Ethylbenzene	0.43		0.047	mg/Kg		11/01/24 13:13	11/11/24 13:48	1
Toluene	ND		0.047	mg/Kg		11/01/24 13:13	11/11/24 13:48	1
Xylenes, Total	2.7		0.095	mg/Kg		11/01/24 13:13	11/11/24 13:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			48 - 145			11/01/24 13:13	11/11/24 13:48	1
Method: SW846 8015M/D - Diese	el Range Organ	ics (DRO) (	GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	320		9.9	mg/Kg		11/01/24 14:16	11/01/24 23:16	1
Motor Oil Range Organics	440		49	mg/Kg		11/01/24 14:16	11/01/24 23:16	1
[C28-C40]								
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate (Surr)	108		62 - 134			11/01/24 14:16	11/01/24 23:16	1
Method: EPA 300.0 - Anions, lor	Chromatograp	hy						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

Prep Batch: 15249

Job ID: 885-14584-1 Client: Hilcorp Energy

Project/Site: Canyon Largo Unit NP 182- BGT

Method: 8015M/D - Gasoline Range Organics (GRO) (GC)

Lab Sample ID: MB 885-15249/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 15392

MB MB Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac Gasoline Range Organics [C6 - C10] ND 5.0 mg/Kg 11/01/24 13:13 11/04/24 10:54

MB MB

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 4-Bromofluorobenzene (Surr) 116 35 - 166 11/01/24 13:13 11/04/24 10:54

Lab Sample ID: LCS 885-15249/2-A Client Sample ID: Lab Control Sample Prep Type: Total/NA

mg/Kg

**Matrix: Solid** 

Analysis Batch: 15392

Prep Batch: 15249 Spike LCS LCS %Rec Analyte Added Result Qualifier Unit %Rec Limits Gasoline Range Organics [C6 -25.0 30.0 120

C10]

LCS LCS

Surrogate %Recovery Qualifier Limits 35 - 166 4-Bromofluorobenzene (Surr) 239

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 885-15249/1-A Client Sample ID: Method Blank Prep Type: Total/NA

**Matrix: Solid** 

Analysis Batch: 15393

MB MB Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac ND 0.025 11/01/24 13:13 11/04/24 10:54 Benzene mg/Kg Ethylbenzene ND 0.050 mg/Kg 11/01/24 13:13 11/04/24 10:54 Toluene NΠ 0.050 11/01/24 13:13 11/04/24 10:54 mg/Kg Xylenes, Total ND 0.10 mg/Kg 11/01/24 13:13 11/04/24 10:54

MB MB

Surrogate %Recovery Qualifier Limits Dil Fac Prepared Analyzed 48 - 145 11/01/24 13:13 4-Bromofluorobenzene (Surr) 11/04/24 10:54 101

Lab Sample ID: LCS 885-15249/3-A

Released to Imaging: 2/21/2025 10:34:31 AM

**Matrix: Solid** 

Analysis Batch: 15393

Client Sample ID: Lab Control Sample

70 - 130

Prep Type: Total/NA

Prep Batch: 15249

Prep Batch: 15249

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	1.00	0.982	-	mg/Kg		98	70 - 130	
Ethylbenzene	1.00	0.990		mg/Kg		99	70 - 130	
m&p-Xylene	2.00	1.97		mg/Kg		99	70 - 130	
o-Xylene	1.00	0.964		mg/Kg		96	70 - 130	
Toluene	1.00	0.985		mg/Kg		98	70 - 130	
Xylenes, Total	3.00	2.93		mg/Kg		98	70 - 130	

LCS LCS

Surrogate %Recovery Qualifier Limits 48 - 145 4-Bromofluorobenzene (Surr) 100

Eurofins Albuquerque

Job ID: 885-14584-1 Client: Hilcorp Energy

Project/Site: Canyon Largo Unit NP 182- BGT

Method: 8015M/D - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 885-15256/1-A

**Analysis Batch: 15228** 

Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA Prep Batch: 15256

MB MB Analyte Result Qualifier RLUnit D Prepared Analyzed Dil Fac Diesel Range Organics [C10-C28] ND 10 mg/Kg 11/01/24 14:16 11/01/24 21:15 Motor Oil Range Organics [C28-C40] ND 50 mg/Kg 11/01/24 14:16 11/01/24 21:15

MB MB

Qualifier Limits Dil Fac Surrogate %Recovery Prepared Analyzed Di-n-octyl phthalate (Surr) 94 62 - 134 11/01/24 14:16 11/01/24 21:15

Client Sample ID: Lab Control Sample Lab Sample ID: LCS 885-15256/2-A Prep Type: Total/NA

**Matrix: Solid** 

**Analysis Batch: 15228** 

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit D %Rec Limits 50.0 57.3 115 60 - 135 Diesel Range Organics mg/Kg

[C10-C28]

LCS LCS Surrogate %Recovery Qualifier Limits Di-n-octyl phthalate (Surr) 93 62 - 134

Lab Sample ID: 885-14584-1 MS

**Analysis Batch: 15228** 

Client Sample ID: BGT 5-Point **Matrix: Solid** Prep Type: Total/NA

Prep Batch: 15256

Prep Batch: 15256

MS MS %Rec Sample Sample Spike Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits 47.7 703 **Diesel Range Organics** 320 4 mg/Kg 809 44 - 136

[C10-C28]

MS MS

%Recovery Qualifier Limits Surrogate Di-n-octyl phthalate (Surr) 62 - 134 114

Lab Sample ID: 885-14584-1 MSD

**Matrix: Solid** Prep Type: Total/NA Analysis Batch: 15228

MSD MSD Sample Sample Spike %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit **Diesel Range Organics** 320 47.4 737 4 885 44 - 136 mg/Kg

[C10-C28]

**Matrix: Solid** 

MSD MSD %Recovery Surrogate Qualifier Limits Di-n-octyl phthalate (Surr) 105 62 - 134

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 885-15281/1-A Client Sample ID: Method Blank

**Analysis Batch: 15282** 

Released to Imaging: 2/21/2025 10:34:31 AM

мв мв Analyte Qualifier RL Unit Prepared Analyzed Dil Fac Result

Chloride ND 3.0 mg/Kg 11/03/24 08:48 11/03/24 10:42

Eurofins Albuquerque

Prep Type: Total/NA

Prep Batch: 15281

Client Sample ID: BGT 5-Point

Prep Batch: 15256

RPD

**Client Sample ID: Lab Control Sample** 

**Prep Type: Total/NA** 

#### QC Sample Results

Client: Hilcorp Energy Job ID: 885-14584-1

Project/Site: Canyon Largo Unit NP 182- BGT

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 885-15281/2-A

Matrix: Solid

Analysis Batch: 15282

Prep Batch: 15281
Spike LCS LCS %Rec

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#### **QC Association Summary**

Client: Hilcorp Energy

Project/Site: Canyon Largo Unit NP 182- BGT

Job ID: 885-14584-1

#### **GC VOA**

#### Prep Batch: 15249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-14584-1	BGT 5-Point	Total/NA	Solid	5030C	
MB 885-15249/1-A	Method Blank	Total/NA	Solid	5030C	
LCS 885-15249/2-A	Lab Control Sample	Total/NA	Solid	5030C	
LCS 885-15249/3-A	Lab Control Sample	Total/NA	Solid	5030C	

#### Analysis Batch: 15392

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-15249/1-A	Method Blank	Total/NA	Solid	8015M/D	15249
LCS 885-15249/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	15249

#### Analysis Batch: 15393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-15249/1-A	Method Blank	Total/NA	Solid	8021B	15249
LCS 885-15249/3-A	Lab Control Sample	Total/NA	Solid	8021B	15249

#### Analysis Batch: 15680

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-14584-1	BGT 5-Point	Total/NA	Solid	8015M/D	15249

#### Analysis Batch: 15681

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-14584-1	BGT 5-Point	Total/NA	Solid	8021B	15249

#### **GC Semi VOA**

#### Analysis Batch: 15228

Lab Sample ID 885-14584-1	Client Sample ID BGT 5-Point	Prep Type Total/NA	Matrix Solid	Method 8015M/D	Prep Batch 15256
MB 885-15256/1-A	Method Blank	Total/NA	Solid	8015M/D	15256
LCS 885-15256/2-A	Lab Control Sample	Total/NA	Solid	8015M/D	15256
885-14584-1 MS	BGT 5-Point	Total/NA	Solid	8015M/D	15256
885-14584-1 MSD	BGT 5-Point	Total/NA	Solid	8015M/D	15256

#### Prep Batch: 15256

<b>Lab Sample ID</b> 885-14584-1	Client Sample ID BGT 5-Point	Prep Type Total/NA	Matrix Solid	Method SHAKE	Prep Batch
MB 885-15256/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 885-15256/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
885-14584-1 MS	BGT 5-Point	Total/NA	Solid	SHAKE	
885-14584-1 MSD	BGT 5-Point	Total/NA	Solid	SHAKE	

#### **HPLC/IC**

#### Prep Batch: 15281

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
885-14584-1	BGT 5-Point	Total/NA	Solid	300_Prep	
MB 885-15281/1-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 885-15281/2-A	Lab Control Sample	Total/NA	Solid	300_Prep	

#### Analysis Batch: 15282

Released to Imaging: 2/21/2025 10:34:31 AM

	Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch			
	885-14584-1	BGT 5-Point	Total/NA	Solid	300.0	15281			

Eurofins Albuquerque

#### **QC Association Summary**

Client: Hilcorp Energy Job ID: 885-14584-1

Project/Site: Canyon Largo Unit NP 182- BGT

#### **HPLC/IC (Continued)**

#### **Analysis Batch: 15282 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 885-15281/1-A	Method Blank	Total/NA	Solid	300.0	15281
LCS 885-15281/2-A	Lab Control Sample	Total/NA	Solid	300.0	15281

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# **Lab Chronicle**

Client: Hilcorp Energy Job ID: 885-14584-1

Project/Site: Canyon Largo Unit NP 182- BGT

**Client Sample ID: BGT 5-Point** Lab Sample ID: 885-14584-1

Matrix: Solid

Date Collected: 10/29/24 13:15 Date Received: 11/01/24 07:15

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Туре	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	5030C			15249	AT	EET ALB	11/01/24 13:13
Total/NA	Analysis	8015M/D		1	15680	JP	EET ALB	11/11/24 13:48
Total/NA	Prep	5030C			15249	AT	EET ALB	11/01/24 13:13
Total/NA	Analysis	8021B		1	15681	JP	EET ALB	11/11/24 13:48
Total/NA	Prep	SHAKE			15256	MI	EET ALB	11/01/24 14:16
Total/NA	Analysis	8015M/D		1	15228	MI	EET ALB	11/01/24 23:16
Total/NA	Prep	300_Prep			15281	JT	EET ALB	11/03/24 08:48
Total/NA	Analysis	300.0		20	15282	JT	EET ALB	11/03/24 13:20

### Laboratory References:

EET ALB = Eurofins Albuquerque, 4901 Hawkins NE, Albuquerque, NM 87109, TEL (505)345-3975

# **Accreditation/Certification Summary**

Client: Hilcorp Energy Job ID: 885-14584-1

Project/Site: Canyon Largo Unit NP 182- BGT

# **Laboratory: Eurofins Albuquerque**

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Prog	ram	Identification Number	<b>Expiration Date</b>		
New Mexico	State		NM9425, NM0901	02-26-25		
0 ,	are included in this report, b	out the laboratory is not certif	fied by the governing authority. This li	st may include analytes		
Analysis Method	Prep Method	Matrix	Analyte			
300.0	300_Prep	Solid	Chloride			
8015M/D	5030C	Solid	Gasoline Range Organics [C6 - C10]			
8015M/D	SHAKE	Solid	Diesel Range Organics [C10-C28]			
8015M/D	SHAKE	Solid	Motor Oil Range Organics [C28-C40]			
8021B	5030C	Solid	Benzene			
8021B	5030C	Solid	Ethylbenzene			
8021B	5030C	Solid	Toluene			
8021B	5030C	Solid	Xylenes, Total			
Dregon	NELA	<b>Λ</b> P	NM100001	02-26-25		

Eurofins Albuquerque

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Released to Imaging: 2/21/2025

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# **Login Sample Receipt Checklist**

Client: Hilcorp Energy Job Number: 885-14584-1

Login Number: 14584 List Source: Eurofins Albuquerque

List Number: 1

Creator: McQuiston, Steven

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

# Jones, Brad A., EMNRD

From:

Cathy Smith [CSmith@huntingtonenergy.com]

Sent:

Wednesday, February 15, 2012 9:11 AM

To:

Jones, Brad A., EMNRD

Subject:

BLM C144 Permit to Operate Approval List 2\_15\_12 (b).xlsx

Attachments:

BLM C144 Permit to Operate Approval List 2\_15\_12 (b).xlsx

Brad,

Attached is a list of 14 wells for approval to operate BGT's. We are seeking C-144 approval for the permits to operate. The BGTs will be upgraded to meet the new NMOCD standards. I will send additional BGT approvals later this month.

I will be out of the office February 16 - 22. I will be checking my emails from home when I get a chance. If you have any problems, just send me an email & I will get back to you as soon as I can.

Thank you!

Cathy Smith Huntington Energy, L.L.C. 908 N.W. 71<sup>st</sup> St. Oklahoma City, OK 73116 (405) 840-9876 ext. 129

# HUNTINGTON ENERGY, L.L.C. BGT APPLICATION LIST

WELL				LOCATION	NO			
TYPE	WELL NAME	API#	ᆲ	SEC/TOWNSHIP/RANGE	FOOTAGES	LATITUDE	LATITUDE LONGITUDE COUNTY	Y ST
u_	CANYON LARGO UNIT 128	30-039-05620	Σ	SW/4 SEC 6-24N-6W	840' FSL & 840' FWL	36.33636	-107.51503 RIO ARRIBA NM	BA NM
щ	CANYON LARGO UNIT NP 182	30-039-23550	۵	SE/4 SEC 2-24N-7W	790' FSL & 790' FEL	36.33653	-107.53854 RIO ARRIBA	BA NM
щ	CANYON LARGO UNIT 303	30-039-22685	0	SE/4 SEC 5-24N-6W	790' FSL & 1850' FEL	36.33659	-107.48839 RIO ARRIBA	BA NM
щ	CANYON LARGO UNIT 304	30-039-22687	ပ	NW/4 SEC 11-24N-6W	790' FNL & 1850' FWL	36.33217	-107.43991 RIO ARRIBA	BA NM
ட	CANYON LARGO UNIT 306	30-039-23083	¥	SW/4 SEC 11-24N-6W	1850' FSL & 2150' FWL	36.32500	-107.43890 RIO ARRIBA	BA NM
ட	CANYON LARGO UNIT 308	30-039-23650	G	NE/4 SEC 5-24N-6W	2010' FNL & 1720' FEL	36.34363	-107.48804 RIO ARRIBA	BA NM
ட	CANYON LARGO UNIT 332	30-039-23326	⋖	SEC 1-24N-7W	970' FNL & 960' FEL	36.34691	-107.52109 RIO ARRIBA	BA NM
ц.	CANYON LARGO UNIT 333	30-039-23346	ш	SEC 1-24N-7W	2060' FNL & 990' FWL	36.34401	-107.53249 RIO ARRIBA	BA NM
ட	CANYON LARGO UNIT 337	30-039-23399	_	SEC 5-24N-6W	1630' FSL & 790' FWL	36.33896	-107.49745 RIO ARRIBA	BA NM
щ	CANYON LARGO UNIT 338	30-039-23401	7	SEC 6-24N-6W	1910' FSL & 1670' FEL	36.33957	-107.50577 RIO ARRIBA	BA NM
ட	CANYON LARGO UNIT 339	30-039-23400	ပ	SEC 6-24N-6W	790' FNL & 1690' FWL	36.34740	-107.51207 RIO ARRIBA	BA NM
ட	CANYON LARGO UNIT 340	30-039-23402	_	SEC 1-24N-7W	1850' FSL & 990' FEL	36.33913	-107.52124 RIO ARRIBA	BA NM
щ	CANYON LARGO UNIT 341	30-039-23403	z	SEC 1-24N-7W	990' FSL & 1850' FWL	36.33693	-107.52957 RIO ARRIBA	BA NM
ш	CANYON LARGO UNIT NP 347	30-039-23575	I	NE/SE, SEC 1-24N-7W	2645' FNL & 690' FEL	36.34277	-107.51962 RIO ARRIBA NM	BA NM

Form C-144 July 21, 2008

1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artes District III 1000 Rio Brazos Road. District IV 1220 S. St. Phanes pho Gampine, New 7505

State of New Mexico Energy Minerals and Natural Resources Department Oil Conservation Division 1220 South St. Francis Dr. Santa Fe NM 27505

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office. For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD

District Office.
Pit, Closed-Loop System, Below-Grade Tank, or
Proposed Alternative Method Permit or Closure Plan Application
Type of action:  Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method  Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method  Modification to an existing permit  Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system, below-grade tank, or proposed alternative method  Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request
Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.
Operator:Huntington Energy, L.L.COGRID #:208706
Address:908 N.W. 71 <sup>st</sup> St., Oklahoma City, OK 73116
Facility or well name:Canyon Largo Unit NP #182
API Number:30-039-23550OCD Permit Number:
U/L or Qtr/Qtr P Section 2 Township 24N Range 7W County: Rio Arriba
Center of Proposed Design: Latitude 36.33653 Longitude107.53854 NAD: ☐1927 ☐ 1983
Surface Owner: State Private Tribal Trust or Indian Allotment
2.
$\square$ Pit: Subsection F or G of 19.15.17.11 NMAC
Temporary: Drilling Workover
Permanent Emergency Cavitation P&A
Lined Unlined Liner type: Thicknessmil LLDPE HDPE PVC Other
String-Reinforced
Liner Seams:  Welded Factory Other Volume: bbl Dimensions: L x W x D
3.  Closed-loop System: Subsection H of 19.15.17.11 NMAC  Type of Operation: P&A Drilling a new well Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)
Drying Pad Above Ground Steel Tanks Haul-off Bins Other
Lined Unlined Liner type: Thicknessmil LLDPE HDPE PVC Other
Liner Seams:  Welded Factory Other
4. Subsection I of 19.15.17.11 NMAC
Volume:30_bbl Type of fluid:Produced Water
Tank Construction material: Fiberglass
Secondary containment with leak detection  Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
☐ Visible sidewalls and liner ☑ Visible sidewalls only ☐ Other
Liner type: Thickness mil
5.
Alternative Method:
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

	M
6.  Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)	
Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school,	hospital,
institution or church)  Four foot height, four strands of barbed wire evenly spaced between one and four feet	
Alternate. Please specify 4' hogwire fence with a single strand of barbed wire on top.	•
7.	
Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)  Screen □ Netting □ Other	
Monthly inspections (If netting or screening is not physically feasible)	÷
8.	
Signs: Subsection C of 19.15.17.11 NMAC	
12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers	
☑ Signed in compliance with 19.15.3.103 NMAC	
9. Administrative Approvals and Exceptions:	
Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.	
Please check a box if one or more of the following is requested, if not leave blank:  Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau	office for
consideration of approval.	
Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	
Siting Criteria (regarding permitting): 19.15.17.10 NMAC	
Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of accelerate material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appro-	
office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of a	pproval.
Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to dry above-grade tanks associated with a closed-loop system.	ing pads or
Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.	☐ Yes ☑ No
- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells  Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa	☐ Yes ☑ No
lake (measured from the ordinary high-water mark).	
- Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☑ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (Applies to temporary, emergency, or cavitation pits and below-grade tanks)	□ NA
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (Applies to permanent pits)	☐ Yes ☐ No ☐ NA
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.	Yes 🖾 No
- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended.	☐ Yes ☑ No.
- Written confirmation or verification from the municipality; Written approval obtained from the municipality	
Within 500 feet of a wetland.	☐ Yes ☑ No
- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	
Within the area overlying a subsurface mine.  - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☑ No
Within an unstable area.	☐ Yes ☑ No
- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	<b>.</b>
Within a 100-year floodplain FEMA map	☐ Yes ☑ No

Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are	
attached.  ☐ Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC ☐ Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC ☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC	
<ul> <li>☑ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC</li> <li>☑ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC</li> <li>☑ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC</li> </ul>	•
and 19.15.17.13 NMAC  Previously Approved Design (attach copy of design) API Number: or Permit Number:	_
Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.	
Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9  Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC  Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC	
Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC	3
Previously Approved Design (attach copy of design)  API Number:	
Previously Approved Operating and Maintenance Plan API Number:(Applies only to closed-loop system that use	
above ground steel tanks or haul-off bins and propose to implement waste removal for closure)	
13.	
Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are	
attached.	
Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC  Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC	
☐ Climatological Factors Assessment ☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC	
☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC ☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC	
Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC  Quality Control/Quality Assurance Construction and Installation Plan	
Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC	
Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC  Nuisance or Hazardous Odors, including H <sub>2</sub> S, Prevention Plan	
☐ Emergency Response Plan ☐ Oil Field Waste Stream Characterization	
☐ Monitoring and Inspection Plan ☐ Erosion Control Plan	
Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC	
14. Proposed Closure: 19.15.17.13 NMAC	
Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.	
Type: Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Closed-loop System Alternative	
Proposed Closure Method: Waste Excavation and Removal Waste Removal (Closed-loop systems only)	
On-site Closure Method (Only for temporary pits and closed-loop systems)  In-place Burial On-site Trench Burial	
Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)	
15. Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the	
closure plan. Please indicate, by a check mark in the box, that the documents are attached.  ☑ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC	
☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC ☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)	
Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC	
Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC  Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC	

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Instructions: Please indentify the facility or facilities for the disposal of liquids, facilities are required.		
Disposal Facility Name:	Disposal Facility Permit Number:	
Disposal Facility Name:	Disposal Facility Permit Number:	
Will any of the proposed closed-loop system operations and associated activities of Yes (If yes, please provide the information below) No	ccur on or in areas that will not be used for future serv	vice and operations?
Required for impacted areas which will not be used for future service and operation  Soil Backfill and Cover Design Specifications based upon the appropriate Re-vegetation Plan - based upon the appropriate requirements of Subsection  Site Reclamation Plan - based upon the appropriate requirements of Subsection	e requirements of Subsection H of 19.15.17.13 NMA( a I of 19.15.17.13 NMAC	C
17. Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the provided below. Requests regarding changes to certain siting criteria may required considered an exception which must be submitted to the Santa Fe Environmenta demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC	re administrative approval from the appropriate dist il Bureau office for consideration of approval.  Justi	rict office or may be
Ground water is less than 50 feet below the bottom of the buried waste.  - NM Office of the State Engineer - iWATERS database search; USGS; Da	ta obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is between 50 and 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Da	ta obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is more than 100 feet below the bottom of the buried waste.  - NM Office of the State Engineer - iWATERS database search; USGS; Da	ta obtained from nearby wells	☐ Yes ☐ No ☐ NA
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other signake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	gnificant watercourse or lakebed, sinkhole, or playa	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or churc - Visual inspection (certification) of the proposed site; Aerial photo; Satellit		☐ Yes ☐ No
Within 500 horizontal feet of a private, domestic fresh water well or spring that les watering purposes, or within 1000 horizontal feet of any other fresh water well or - NM Office of the State Engineer - iWATERS database; Visual inspection	spring, in existence at the time of initial application.	Yes No
Within incorporated municipal boundaries or within a defined municipal fresh was adopted pursuant to NMSA 1978, Section 3-27-3, as amended.  Written confirmation or verification from the municipality; Written approx	_	☐ Yes ☐ No
Within 500 feet of a wetland.  - US Fish and Wildlife Wetland Identification map; Topographic map; Visu	al inspection (certification) of the proposed site	☐ Yes ☐ No
Within the area overlying a subsurface mine.  - Written confirmation or verification or map from the NM EMNRD-Minin	g and Mineral Division	☐ Yes ☐ No
Within an unstable area  - Engineering measures incorporated into the design; NM Bureau of Geolog Society; Topographic map	y & Mineral Resources; USGS; NM Geological	☐ Yes ☐ No
Within a 100-year floodplain FEMA map		☐ Yes ☐ No
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the by a check mark in the box, that the documents are attached.  Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of Construction/Design Plan of Burial Trench (if applicable) based upon the a Construction/Design Plan of Temporary Pit (for in-place burial of a drying Protocols and Procedures - based upon the appropriate requirements of 19.1 Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Disposal Facility Name and Permit Number (for liquids, drilling fluids and Soil Cover Design - based upon the appropriate requirements of Subsection Re-vegetation Plan - based upon the appropriate requirements of Subsection Site Reclamation Plan - based upon the appropriate requirements of Subsection	quirements of 19.15.17.10 NMAC  f Subsection F of 19.15.17.13 NMAC  ppropriate requirements of 19.15.17.11 NMAC  pad) - based upon the appropriate requirements of 19.  5.17.13 NMAC  quirements of Subsection F of 19.15.17.13 NMAC  f Subsection F of 19.15.17.13 NMAC  drill cuttings or in case on-site closure standards cann  H of 19.15.17.13 NMAC  1 of 19.15.17.13 NMAC	15.17.11 NMAC

•
19. Operator Application Certification:
I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.
Name (Print):Catherine Smith Title:Regulatory
Signature: Date:
e-mail address:csmith@huntingtonenergy.com Telephone:405-840-9876
OCD Approval: Permit Application (including closure plan) Closure Plan (only) COCD Conditions (see attachment)
OCD Representative Signature: Approval Date: Z/15/12
Title: OCD Permit Number:
Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC  Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report.  The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.  Closure Completion Date:
22,
Closure Method:  ☐ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only) ☐ If different from approved plan, please explain.
Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: Instructions: Please indentify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.
Disposal Facility Name: Disposal Facility Permit Number:
Disposal Facility Name: Disposal Facility Permit Number:
Yes (If yes, please demonstrate compliance to the items below) No
Required for impacted areas which will not be used for future service and operations:  Site Reclamation (Photo Documentation)
☐ Soil Backfilling and Cover Installation ☐ Re-vegetation Application Rates and Seeding Technique
24.
Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.
Proof of Closure Notice (surface owner and division) Proof of Deed Notice (required for on-site closure)
☐ Plot Plan (for on-site closures and temporary pits) ☐ Confirmation Sampling Analytical Results (if applicable)
☐ Waste Material Sampling Analytical Results (required for on-site closure)
☐ Disposal Facility Name and Permit Number ☐ Soil Backfilling and Cover Installation
Re-vegetation Application Rates and Seeding Technique
Site Reclamation (Photo Documentation) On-site Closure Location: Latitude Longitude NAD: ☐ 1927 ☐ 1983
Operator Closure Certification:
I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.
I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and
I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

# New Mexico Office of the State Engineer POD Reports and Downloads

Township: 24N Range: 07W Sections:
NAD27 X: Y: Zone: Search Radius:
County: Basin: Number: Suffix:
Owner Name: (First) (Last) C Non-Domestic C Domestic C All
POD / Surface Data Report Avg Depth to Water Report Water Column Report
Clear Form : WATERS Menu Help

# WATER COLUMN REPORT 04/09/2009

	(quarter	s are	1=NW 2=N	E 3=SW 4=	=SE)					
	(quarter	s are l	biggest	to smalle	est)		Depth	Depth	Water	(in feet)
POD Number	Tws	Rng Se	ec q q q	Zone	x	Y	Well	Water	Column	
SJ 00681 37	24N	07W 1	5 1 1 2				190			
SJ 00681 39	24N	07W 18	8 2 2 4				1825	500	1325	
SJ 01131	24N	07W 19	9 4 1				1700	400	1300	
SJ 01335	24N	07W 33	1 1				185			

Record Count: 4

# New Mexico Office of the State Engineer POD Reports and Downloads

•
Township: 24N Range: 07W Sections:
NAD27 X: Y: Zone: Search Radius:
County: Basin: Number: Suffix:
Owner Name: (First) (Last) C Non-Domestic C Domestic All
POD / Surface Data Report Avg Depth to Water Report Water Column Report
Clear Form   IWATIERS Menu Help

# AVERAGE DEPTH OF WATER REPORT 04/09/2009

							(Depth	Water in	Feet)
ì	Tws	Rng Sec	Zone	X	Y	Wells	Min	Max	Avg
	24N	07W 18				1	500	500	500
	24N	ก7พ 19				1	400	400	400

Record Count: 2

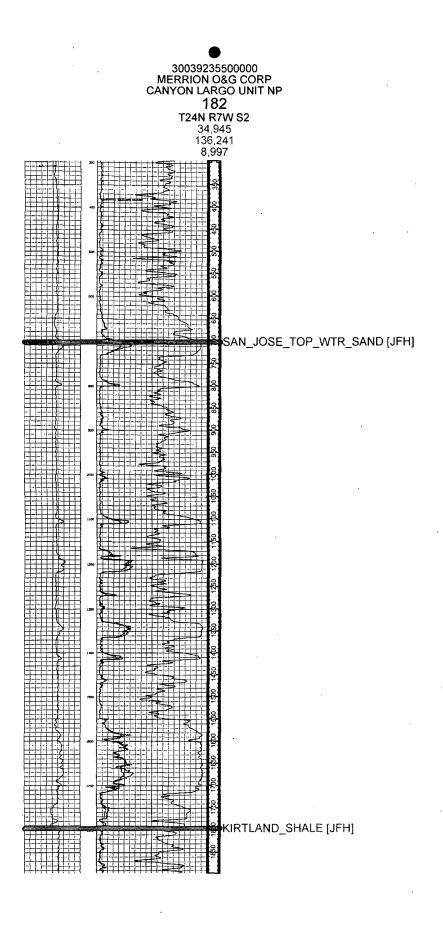
Bsn SJ SJ

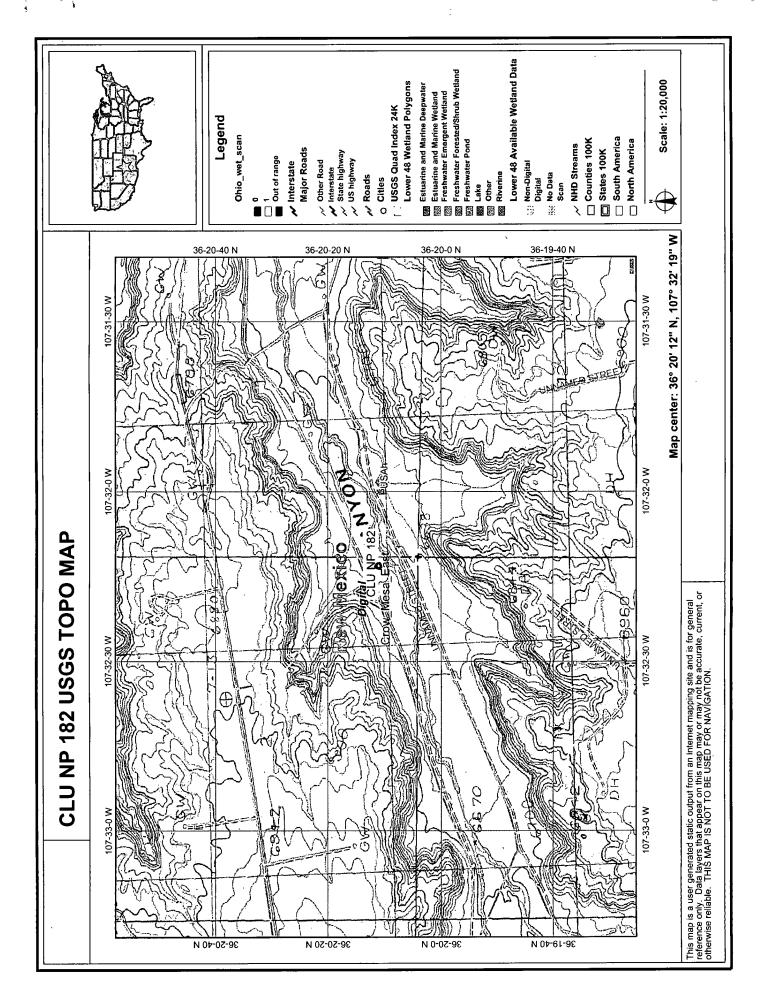
# New Mexico Office of the State Engineer POD Reports and Downloads

				POD Reports and	Downloads							
See Control of the Co			Tow	nship: 24N Range: 07W Section	ıs:					***************************************	Addition	
			NAD27	X: \ \ Y: \ \ Zone:		Sear	ch Radius:					
			County:	Basin:	Num	ber:	Suffix:					
			Owner Name: (Fir	rst) (Last)	с	Non-l	Domestic O Domes	stic • All				
			POD// Surface	ce Data Report	Water Report		Water Column R	eport .				
				Clear Form	RS Menu	Help		,				
Firmmanning Paris Paris Afficiation and									······	***************************************	***************************************	
			POD / SURFACE DAT			1				,		
		ft per ann					7 2=NE 3=SW 4=SE) gest to smallest	V V			*****	
DB File Nbr	Use	Diversion	Owner	POD Number	Source		Rng Sec qqq	Zone	in Feet X	Y	UTM Zone	in Meters)
SJ 00681 2	STK	4.839	HOMER C. BERRY	SJ 00681 2	Bource	24N	07W 01 3 3 2	20116	^	1	13	Easting 1 272654
SJ 00681 37	STK	3.022	HOMER C BERRY	SJ 00681 37	-	24N	07W 15 1 1 2				13	269408
SJ 00681 38	STK	3	HOMER C. BERRY	SJ 00681 38	•	24N	07W 17 2 4 1				13	267209
SJ 00681 39	STK	86	HOMER C. BERRY	SJ 00681 39		24N	07W 18 2 2 4				13	265824
SJ 00681 5	STK	8	HOMER C. BERRY	SJ 00681 5	•	24N	07W 22 3 3				13	269307
SJ 00681 6	STK	12.9	HOMER C. BERRY	SJ 00681 6	-	24N	07W 36 2 2				13	273515
SJ 00681 7	STK	12.9	HOMER C. BERRY	SJ 00681 7	•	24N	07W 34 2 3				13	269980
SJ 01131	MIN	23	HOMER C. BERRY	SJ 01131	Shallow	24N	07W 19 4 1				13	265313
C.T 01225	מסא	2	MARY V IARCO	67 01225		2487	07W 31 1				12	204072

Record Count: 9

Released to Imaging:

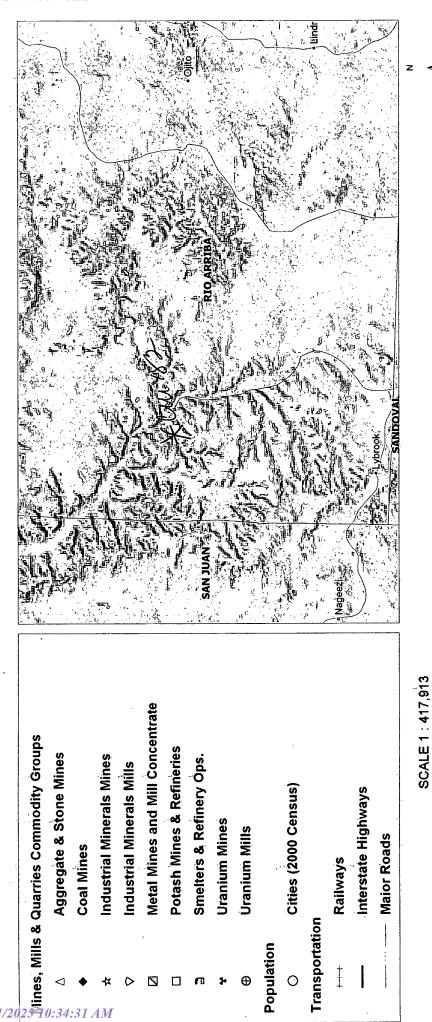


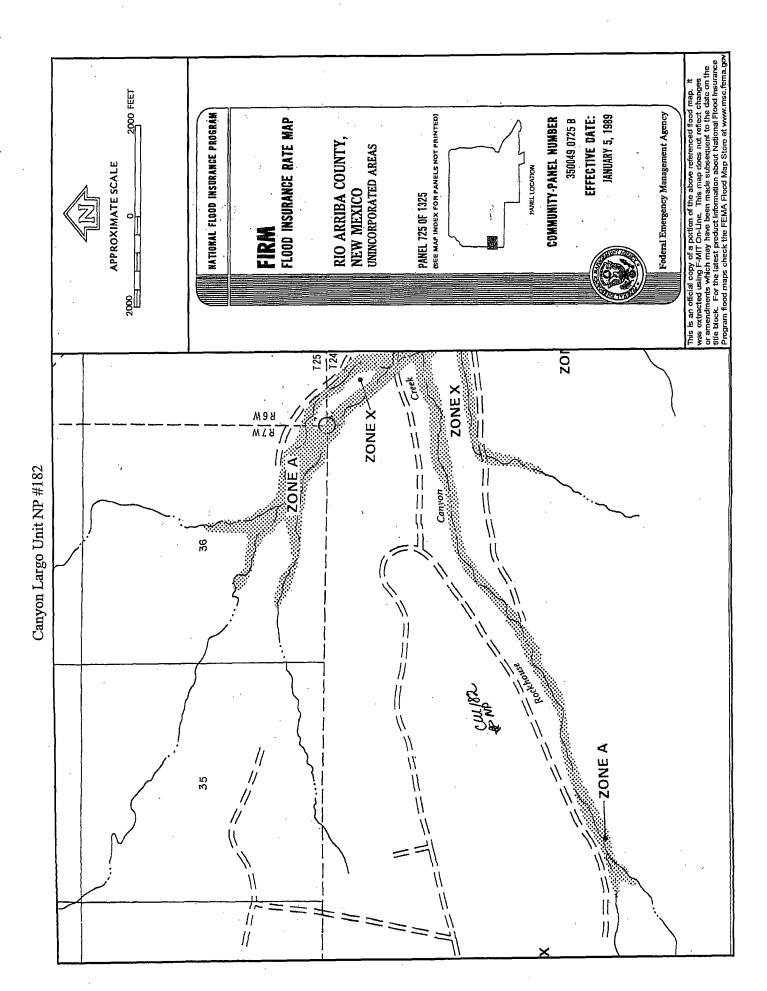


Tuesday, March 03, 2009 3:14 PM

# http://www.emnrd.state.nm.us/MMD/MMQonline/MMQonline-PUBLIC-PROD.mwf

# Sanyon Largo Unit NP 182 Mines, Mills and Quarries Web Map





# Hydrogeological Report for Canyon Largo Unit NP #182

# **Regional Hydrogeolocial 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 absorb 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.

Stone et al., 1983, Hydrogeology and Water Resources of the San Juan Basin, New Mexico: Socorro, New Mexico Bureau of Mines and Mineral Resources Hydrologic Report 6, 70 p.

# **CLU NP 182**

Siting Criteria Compliance Demonstration & Hydro Geologic Analysis

The subject well is not located in an unstable area. Visual inspection has been performed (see attached siting checklist): location is not within 300' of flowing watercourse or 200' from any other water course or lake bed; not within 300' of any permanent residence, school, institution; not within 500' of any private water well or spring. The topographic map confirms visual inspection of water course. FEMA Map confirms the location is not within a 100 year floodplain. The location is not over a mine and is not on the side of a hill, as indicated on the Mines, Mills and Quarries Map. iWaters search indicates the closest water is Sec 18 -24N-R7W NESE # SJ00681-39, Well Depth 1825', Depth water 500', Water Column 1325'; distance from CLU NP 182 is 4.3 miles. Huntington Energy CLU NP 182 reported the top of San Jose water sand at 700', as demonstrated on attached log.

# HUNTINGTON ENERGY, L.L.C. BELOW GRADE TANK SITING/VISUAL INSPECTION CHECKLIST

Well Name: CLU 182

Legal Location: SE/4 SEC 2 T24N R7W

Date of Inspection: 4-2-09

Sitting Personnel: David Morales

# I observed the following:

1 ODS	erved the following:	Yes	<u>No</u>
A.	300 ft from flowing watercourse		X
B.	200 ft from any water course or lake bed		X
C.	300 ft from permanent resident, school, or institution		X
D.	500 ft from private fresh water well or spring used by less than 5 households for domestic or stock watering purposes.		X
E.	1000 ft from any other fresh water well or spring		X
F.	Incorporated municipal boundaries or within a defined municipal fresh water well field.		X
G.	Area overlaying a sub-surface mine		X
H.	Unstable area		X
I.	100 year flood plain		X

# SY NO MINERALS DEPARTMENT SANTA FE, NEW MEXICO 87501

kerised 10

	· .	All distance	a must be fro		er hounderte	• ef the Secti	m.			
perator				Lease					Well No.	
MERRION OIL &			<u> </u>		YON LARGO		<del></del>		182	
nit Letter Secti	ion o	Township	L'IN	Roma		County	Arriba			
tual Footage Location	of Well:		Щи		7W	l uro	Arriba		<del></del>	<del></del>
790 foot	from the Se	outh	line and	790		feet from the	East		line	
ound Level Elev:	Producing For	nation		P∞l		teat thout the			ited Acreager	
6648	Gallup			Devils	Fork Gal	lup		16	50	Acres
Outline the act     If more than of interest and rope	ne lease is								•	working
3. If more than on dated by communication Yes   If answer is "nothing form if necessary that is a second to the second seco	No If are one, 'I list the essary.)	nitization, swer is "y owners and	force-pooli res;" type o	ing. etc? of consol	idation which have	actually be	en consolic	lated.	(Use reverse	side of
No allowable wi forced-pooling, a sion.										
	             	ec.		SEP.	7 1984 ON. DI	V.	Nome Steve S Position Operati Company	certify erein is my know  6. Dur  ons M	<del></del>	ete to the
	       		2 s	tate Le	     <u> </u>   <u> </u>   <u> </u>   <u> </u>   <u> </u>   <u> </u>    <u> </u>	9-15	shown or notes of under my	n this pl actual superv and cor	r that the well at was plotted f surveys made ision, end that rect to the be elief.	from field by me or the same
.  Released to Imaging:	2/21/2025 Po	34.31 AN -	1000'		7801	7801	Registered	mber Profesa d'Surve	Kend )	

# Huntington Energy, L.L.C. Below Grade Tank Design and Construction San Juan Basin

The design and construction requirements for below-grade tanks include the general provisions of Paragraphs A, C, D, and E of 19.15.17.11 NMAC and the specific requirements of Paragraph I of 19.15.17.11 NMAC. In accordance with Section 11 of 19.15.17 NMAC, the following include all of the appropriate provisions for the design and construction of below grade tanks (BGT) on Huntington Energy, L.L.C. (HE) locations.

# General Plan:

- 1. HE will design and construct a BGT to contain liquids and to prevent contamination of fresh water and protect the public health and environment.
- 2. Huntington Energy, L.L.C. (HE) shall have signs at the sites as per 19.15.16.8 NMAC of which an existing well is the same operator-Huntington Energy. The sign shall provide the following: Operator's name, location of site by quarter-quarter or unit letter, section, township and range, and emergency numbers. If in case the Below Grade Tank (BGT) does not co-exist with an existing well, the sign shall comply with subsection C of 19.15.17.11 NMAC.
- 3. HE shall fence the BGT in a manner that prevents unauthorized access and shall maintain the fence in good repair. We shall ensure that all gates associated with the fence are closed and locked when responsible personnel are not on-site.
  - HE shall construct fencing around the BGT using 4' hogwire fencing topped with two strands of barbed wire, or with a pipe top rail- an alternative to the requirements as set out by Subsection D of 19.15.17.11 and should provide long term protection and less maintenance. A six foot chain link fence topped with three strands of barbed wire will be used if the well location is within 1000' of a permanent residence, school, hospital, institution, or church.
- 4. HE will construct an expanded metal covering on the top of the BGT.
- 5. HE shall ensure that a below-grade tank is constructed of materials resistant to the below-grade tank's particular contents and damage from sunlight.
- 6. HE will construct a properly constructed foundation consisting of a firm, unyielding base, smooth and free of rocks, debris, sharp edges, or irregularities to prevent the liner's rupture or tear. Once the hole is constructed with a backhoe and firmed, shovels are used to smooth and remove all rocks, debris, or edges that might rupture the liner. In addition, I-beams placed below the tank are wrapped with 60 mil HPDE material to prevent any punctures of liner.
- 7. HE shall construct a BGT to prevent overflow and the collection of surface water run-on by constructing an inner crib, which the height extends above ground level by 6" preventing water from entering. The BGT is also elevated 6" above ground level as well. The berm, which is constructed approximately 3' tall by 5' wide for containment and any fluids entering outside of the fenced area. Auto shut-off controls are installed using a radar that is set at 14" of freeboard. When water level reaches that point, a signal is sent

and sends an alarm to the pumper. If 10" of freeboard is reached, a signal is sent to a valve which shuts the gas line on discharge of separator. This in turn causes a pressure increase to 200 psi, which closes the motor valve on the inlet side of the separator, shutting the well down. A manual valve is also placed on the 2" line from separator to BGT shutting off any water to BGT.

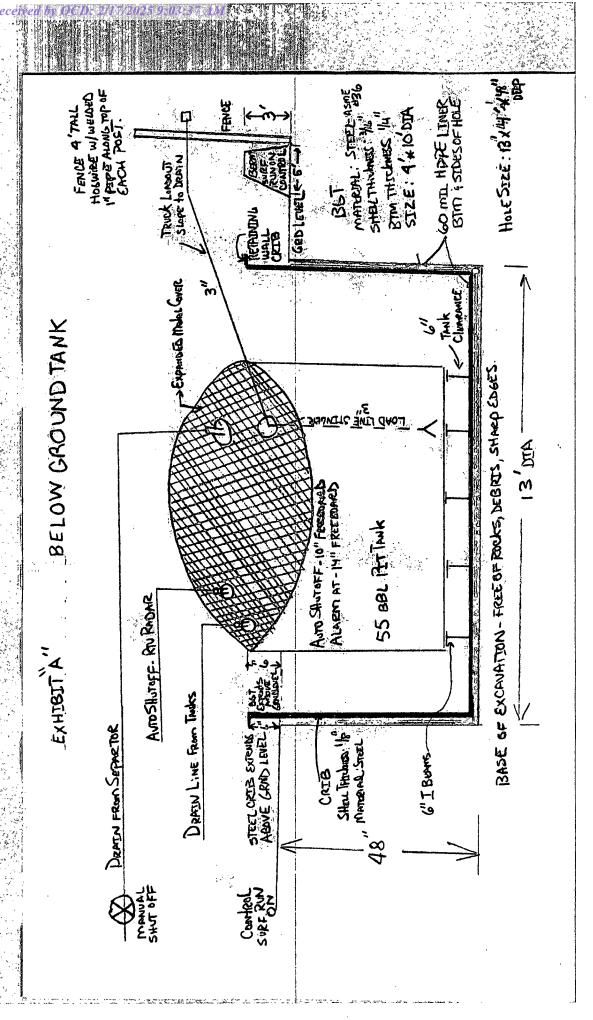
8. HE will construct a BGT system employing an external crib that stands between the wall of the foundation of the hole and the BGT. The crib will be placed on top of the 60 mil liner and will extend 6" above ground level. It is made of steel with a grey coating. The BGT side walls will be visible and open for visual inspection. Dirt is placed outside of crib filling void. (Liner is extended to ground level on outside of crib.)

The BGT will be steel and elevated 6" above underlying ground surface using 6" I-Beam (I-Beams wrapped to prevent edges from rupturing the liner), which elevates the BGT 6" above ground level to prevent surface run-on.

- 9. HE shall equip below-grade tanks designed in this manner with a properly operating automatic high-level shut-off control device and manual controls to prevent overflows. Auto shut-off controls are installed using a radar that is set at 14" of freeboard and when water level reaches that point, a signal is sent and it in turns sends an alarm to the pumper. If 10" of freeboard is reached, a signal is sent to a valve which shuts the gas line on discharge of separator. This in turn causes a pressure increase to 200 psi which closes the motor valve on the inlet side of separator shutting the well down. A manual valve is also placed on the 2" line from separator to BGT shutting off any water to BGT.
- 10. The geomembrane liner shall consist of 30-mil flexible PVC or 60-mil HDPE liner, or an equivalent liner material that the appropriate division district office approves. The geomembrane liner shall have a hydraulic conductivity no greater than 1 x 10-9 cm/sec. The geomembrane liner shall be composed of an impervious, synthetic material that is resistant to petroleum hydrocarbons, salts and acidic and alkaline solutions. The liner material shall be resistant to ultraviolet light. Liner compatibility shall comply with EPA SW-846 method 9090A.

HE will demonstrate to the NMOCD that the liner complies with the specifications within Subparagraph (a) of Paragraph (4) of Subsection I of 19.15.17.11 NMAC and obtain approval from the NMOCD prior to the installation of the new design.

11. HE BGT's constructed and installed prior to June 16, 2008, that do not comply with 19.15.17.11 NMAC Paragraph 1-4 of Subsection I, shall be equipped or retrofitted or closed within 5 years after June 16, 2008. If the existing BGT does not demonstrate integrity, the BGT will be removed and a BGT that meets criteria set forth by Paragraphs 1 thru 4 of Subsection I of 19.15.17.11 NMAC will be installed.



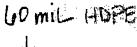




Table 1.1: Minimum Values for Smooth Black-Surfaced HDPE Geomembranes

TESTED PROPERTY	TEST METHOD	PREQUENCY			NIMUM VA	ENE	agramme progression and the experience
Product Code			HDE 030A000	HDE	MDE	OROADGO	T Time
Trickness (minimum अभ्यतक्रा) मधी (मारा)	ASTM D 5199	Every roll	30 (0.78)	40 (1.00)	60 (1,50)	80 (2,00)	1000
Lowest individual reading (-10%)			27 (0.69)	36 (0.91)	54 (1.40)	72 (1.60)	\$67 (p. 30)
Density, g/cm²	ASTM D 1505	200,000 lb	0.94	0.94	0,94	0.94	والكافئة الراق
Tensile Properties (each direction)	ASTM D 6893, Type IV	20,000 lb	1				
Strength at Break, libite (N/mm)	Dumbell, 2 lpm		114 (20)	152 (27)	228 (40)	30-4 (53)	330987 (19)
Strangth at Yield, Wiln (N/mm)	Ì		63 (11)	B4 (15)	126 (22)	168 (29)	Trust Carr
Elongation at Break, %	G.L. 2.0 m (51 mm)		700	700	700	7/000	376.47
Elongation at Yield, %	G.L. 1.3 in (33 mm)		12	12	12	12	1. 1. 2.
Tear Reststance, & (N)	ASTM D 1004	45,000 lb	21 (93)	28 (125)	42 (187)	50 (249)	Pri 2:91 : 1
Puncture Resistance, Ib (N)	ASTM D 4833	45,000 Bb	54 (240)	72 (320)	106 (480)	144 (840)	190 : 147
Cerbon Black Content, %	ASTM D 1603*/4218	20,000 в	2.0	2.0	20	2.0	And the
Carbon Black Dispersion	ASTM D 5505	45,000 tb	+ Note 1	+ Note 1	+ Note 1	+ N-36± 1 .	in distant
Notched Constant Tensile Load, IV	ASTIM D S367; Appendix	200,000 lb	300	300	300	300	24650
REFERENCE PROPERTY	TEST METHOD	FREQUENCY		NO	MINAL VA	UE	
Oxidative Induction Time, min	ASTM D 3895, 200° C; C <sub>2</sub> , 1 atm	200,000 lb	>100	>100	>100	>100	the second property of the second sec
Roll Lengtin <sup>(1)</sup> (approximate), fi (m)			1,120 (341)	670 (2 <del>65</del> )	560 (171)	430 (131)	144 (14m)
Roll Wilder (1), ft (m)			22.5 (6.9)	22.5 (6.9)	22.5 (6,9)	225(8.9)	T.1. (5.5)
Roll Area, fi² (m²)			25,200 (2,341)	19,575 (1,819)	12,600 (1,171)	8,675 (599)	7.11

### TO VER

- Notes: December only spokes to year solvenosi applomenates, 9 of 10 views shall be Category 1 or 2. No more than 1 view from Category 2
- GSG HD is available in role weighing about 3,900 to (1,769 kg)
- AR G68 permembranes have demendered stability of \$2% when heated with ASTM D-1204 and LTB of <77° C when tysted with ASTM D 746.</li>
- Infroil lengths and widths live a tolerance of a 1%
- · "ModBed

# Huntington Energy, L.L.C. Below Grade Tank Operational Plan San Juan Basin

The operation requirements for below-grade tanks include the general provisions of Paragraph A of 19.15.17.12 NMAC and the specific requirements of Paragraph E of 9.15.17.12 NMAC.

### General Plan:

- 1. HE will operate and maintain a BGT to contain liquids and solids and prevent contamination of fresh water and protect public health and environment. Maintaining and operating all equipment in a satisfactory working order is accomplished by daily and monthly inspections to assure all systems are performing. These inspections should include: operations of equipment-functioning properly, observance of any surface runon, checking for visible leaks, assure correct freeboard of liquids in BGT, berms integrity is good, fencing in compliance, assure no oil sludge, miscellaneous, expanded metal cover integrity is good, and all signs are in order.
- 2. HE shall construct a BGT to prevent overflow and the collection of surface water run-on by constructing an inner crib which the height extends above ground level by 6" preventing water from entering. The BGT is also elevated 6" above ground level as well as the berm constructed approximately 3' tall by approximately 5' wide for containment and any fluids entering outside of fenced area. Auto shut-off controls are installed using a radar that is set at 14" of freeboard and when water level reaches that point, a signal is sent and it in turns sends an alarm to the pumper. If 10" of freeboard is reached, a signal is sent to a valve which shuts the gas line on discharge of separator. This in turn causes a pressure increase to 200 psi which closes the motor valve on the inlet side of separator shutting the well down. A manual valve is also placed on the 2" line from separator to BGT shutting off any water to BGT.

Each lease operator gets a daily report containing water levels in each location. If auto shut-off control shuts well in, well is not opened until sufficient freeboard is reestablished and no alarms are activated. HE will maintain a 14" freeboard policy for alarm notification and a complete shut down when freeboard reaches 10" from top of BGT.

Berms will be maintained at 5' wide and 3' tall to assure prevention of surface run on and containment.

- 3. HE shall continuously remove any visible or measurable layer of oil from the fluid surface of a below-grade tank in an effort to prevent significant accumulation of oil over time.
- 4. HE monthly inspection report involves both lease operator and foreman reviewing each report monthly to assure integrity of the BGT system. This includes equipment functioning correctly, observance of any surface run-on, spills, or leak detection, check freeboard of liquids in BGT, berm integrity, all fencing in good condition, all gates in working condition, expanded metal cover in good condition, remove any visible layer of sludge from fluid level in tank, and document review on monthly gauge sheet of each

BGT system. If any issue arises, immediate action should commence to repair or replace in order to prevent any contamination of fresh water and protect public health and the environment.

- 5. If a BGT develops a leak, or if any penetration of the pit liner or BGT occurs below the liquid's surface, HE will remove all liquid above the damage or leak line within 48 hours. HE will notify the appropriate division district office within 48 hours of the discovery and repair the damage or replace the pit liner or BGT.
  - Existing BGT's installed prior to June 16, 2008, shall comply with Paragraph (1) through (4) of Subsection I of 19.15.17.11 NMAC. If existing BGT does not meet standards, HE will retrofit, remove or replace as per approved Exhibit "A" Design Drawing.
- 6. HE Operations Plan specifies that the auto shut-off system will send an alarm to HE lease operator and foremen when the freeboard liquid level is 14" from the top of BGT and the auto system will shut in system at 10" of freeboard. A manual valve is in place for complete shut down if needed.
- 7. HE standard operating procedures will comply with Subsection A of 19.15.17.12 NMAC in accordance with the following requirements:
  - 1) Operate and maintain BGT to contain liquids and maintain integrity of the liner, liner system and secondary containment (crib) to prevent contamination of fresh water and protect public health and environment. Daily and written monthly reviews will be executed to assure system is maintained and complies with all Division rules. Records will be kept a minimum of 5 years.
  - 2) HE shall not store or discharge any hazardous wastes into a BGT.

# Huntington Energy, L.L.C. Below Grade Tank Closure Plan San Juan Basin

The closure requirements for below-grade tanks include the general provisions of Paragraphs A, G, H, I, J, and K of 19.15.17.13 NMAC and the specific requirements of Paragraph E of 9.15.17.13 NMAC.

# Closure Timelines:

1. HE shall close an existing BGT within the time periods provided in 19.15.17.13 NMAC, or by and earlier date that the division requires because of imminent danger to fresh water, public health or the environment. HE will close an existing BGT that does not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC or is not included in Paragraph 5 of Subsection I of 19.15.17.11 NMAC within 5 years after June 16, 2008, if not retrofitted to comply with Paragraph (1) through (4) of Subsection I of 19.15.17.11 NMAC.

HE shall close a permitted BGT within 60 days of cessation of the BGT's operation or As required by the provisions of Subsection B of 19.15.17.17 NMAC in accordance with a closure plan the Division District Office approves.

2. HE shall submit closure notice prior to the implementation of any closure operations to the Division District Office and surface owners. HE shall notify surface owners by certified mail, return receipt requested. Evidence of mailing of the notice to the address of the surface owner shown in the county tax records shall be provided in the Closure Report. HE will notify the Division District office at least 72 hours, but not more than one week prior to any closure operation. All operator information shall include the operator's name and the location to be closed by unit letter, section, township and range. If associated with a particular well, the notice shall include the well's name, number and API number.

# Closure Method & Procedures:

- 1. Remove liquids and sludge from a BGT prior to implementing a closure method. These will be disposed in facility IEI, Permit # 01001010B for sludge, and liquids will be disposed at the TNT Environmental, permit # NM 01-0008 or Basin Disposal, Inc., permit # NM-01-005 or Jillson SWD (Conoco-Phillips), R-10168.
- 2. HE will obtain prior approval from the OCD to dispose, recycle, reuse, or reclaim the BGT and provide documentation of the final disposition of the BGT in the Closure Report.
- 3. All on-site related equipment with a BGT shall be removed unless equipments is required for some other purpose.
- 4. If the liner material requires disposal, HE will clean the liner (as per subparagraph (m) of paragraph (1) of Subsection C of 19.15.35.8 NMAC), and can be accepted at a solid waste facility at San Juan County Regional Landfill.
- 5. HE shall test the soils beneath the below-grade tank to determine whether a release has occurred. HE shall collect, at a minimum, a five point, composite sample; collect individual grab samples from any area that is wet, discolored or showing other evidence of a release; and analyze for BTEX, TPH and chlorides to

demonstrate that the benzene concentration, as determined by EPA SW-846 methods 8021B or 8260B or other EPA method that the division approves, does not exceed 0.2mg/kg; total BTEX concentration, as determined by EPA SW-846 methods 8021B or 8260B or other EPA method that the division approves, does not exceed 50 mg/kg; the TPH concentration, as determined by EPA method 418.1 or other EPA method that the division approves, does not exceed 100 mg/kg; and the chloride concentration, as determined by EPA method 300.1 or other EPA method that the division approves, does not exceed 250 mg/kg, or the background concentration, whichever is greater. HE shall notify the division of its results on form C-141.

- 6. If we determine a release has occurred, we will comply with 19.15.29 NMAC and 19.15.30 NMAC.
- 7. If sampling program demonstrates that release has not occurred or that any release does not exceed the concentrations specified in Paragraph (4) of Subsection E of 19.15.17.13 NMAC, then HE shall backfill the excavation with compacted, non-waste earthen material, construct a division prescribed soil cover, and re-contour and re-vegetate the site, as per Subsection G, H and I of 19.15.17.13 NMAC.
- 8. Once HE has closed the BGT location, including associated access roads to a safe and stable condition that blends with the surrounding undisturbed area, HE will then restore the surface are to prior conditions before operations as provided in Subsection H of 19.15.17.13 NMAC.
- 9. The soil cover for closure shall consist of the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater. HE will construct the soil cover to the site's existing grade and prevent ponding of water and erosion of the cover material.
- 10. Re-vegetation: the first growing season after HE closes a BGT, HE shall seed or plant the disturbed area. HE shall accomplish seeding by drilling on the contour whenever practical or by other division-approved methods. HE shall obtain vegetative cover that equals 70% of the native perennial vegetative cover (unimpacted by overgrazing, fire or other intrusion damaging to native vegetation) consisting of at least three native pant species, including at lease one grass, but not including noxious weeds, and maintain the cover through two successive growing seasons. During the two growing seasons that prove viability, there shall be no artificial irrigation of the vegetation. HE shall repeat seeding or planting until the required vegetative cover is achieved. HE shall notify the division when it has seeded or planted and when successful re-vegetation has occurred.
- 11. Closure Report: Within 60 days of closure, HE shall submit a closure report on form C-144/Checklist Box 24, with the following attachments: Proof of Closure Notice (surface owner and division); Proof of Deed Notice; Plot Plan, Confirmation Sampling Analytical Results (if applicable); Waste Material Sampling Analytical Results, Disposal Facility Name and Permit Number; Soil Backfilling and Cover Installation; Re-vegetation Application Rates and Seeding Technique; Site Reclamation (Photo Documentation); and Latitude and Longitude of site.





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

General Information Phone: (505) 629-6116

Online Phone Directory https://www.emnrd.nm.gov/ocd/contact-us

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

CONDITIONS

Action 432539

### **CONDITIONS**

Operator:	OGRID:
HILCORP ENERGY COMPANY	372171
1111 Travis Street	Action Number:
Houston, TX 77002	432539
	Action Type:
	[C-144] Below Grade Tank Plan (C-144B)

### CONDITIONS

Created By	Condition	Condition Date
joel.stone	Upon the cessation of all production operations in the area associated with this below-grade tank, well API 30-039-23550 (Canyon Largo Unit NP 182), the operator shall complete the requirements of 19.15.17.13 NMAC for the area associated with this below-grade tank and notify the OCD when restoration, reclamation, and re-vegetation are complete.	2/21/2025