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 *Page 1 of 63* 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.

Pit, Below-Grade Tank, or			
Proposed Alternative Method Permit or Closure Plan Application			
Type of action: Below grade tank registration Permit of a pit or proposed alter	ernative method		
$\square$ Closure of a pit, below-grade tai	ank, or proposed alternative method mit/or registration		
Incident #NSCW2311457655 Closure plan only submitted for	r an existing permitted or non-permitted pit, below-grade tank,		
or proposed alternative method	1) non individual nit halow and a tauk on alternative near set		
Please be advised that approval of this request does not relieve the operator of liabili	<i>t) per matvialia pa</i> , <i>below-grade lank or alternative request</i> lity should operations result in pollution of surface water, ground water or the	•	
environment. Nor does approval relieve the operator of its responsibility to comply	y with any other applicable governmental authority's rules, regulations or ordin	nances.	
1. Operator: Hilcorp Energy Company	OGRID #: 372171	_	
Address: 382 Road 3100 Aztec, NM 87410			
Facility or well name: Little Stinker 1M			
API Number: 30-045-30754 OCD Pe	Permit Number:		
U/L or Qtr/Qtr <u>H</u> Section <u>11</u> Township <u>30N</u>	Range 12W County: San Juan	l	
Center of Proposed Design: Latitude <u>36.82861</u>	Longitude <u>-108.06083</u> NAD83		
Surface Owner: 🛛 Federal 🛄 State 🛄 Private 🛄 Tribal Trust or Indian Allo	lotment		
2. <b>Pit:</b> Subsection F. G or L of 19 15 17 11 NMAC			
Temporary: Drilling Workover			
Permanent Emergency Cavitation P&A Multi-Well Fluid N	Management Low Chloride Drilling Fluid 🗌 yes 🗌 no		
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.			
Below-grade tank: Subsection I of 19.15.17.11 NMAC			
Volume: <u>120</u> bbl Type of fluid: <u>Produced V</u>	Water		
Tank Construction material:   Metal			
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: Thicknessmii L HDPE PVC A Other <u>Unspecified</u>			
4.			
Submittal of an exception request is required. Exceptions must be submitted	to the Santa Fe Environmental Bureau office for consideration of approx	val.	
د د د د د د د د د د د د د د د د د د د	rr		
Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, ter	emporary 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			
Thermate: Trease speen y			

**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)

#### 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

#### 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.

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 acceptable 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 🗌 Yes 🗌 No Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit. 🕅 NA NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells 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. (Does not apply to below grade tanks)

Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map
 Within a 100 year floodalain. (Does not apply to below grade tanks)

Within a 100-year floodplain. (Does not apply to below grade tanks)

- 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).
 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;.
 NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

# Temporary Pit using Low Chloride Drilling Fluid (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.)

- 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	
application.	
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	

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. NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site

<i>Accelved by OCD: 4/21/2023 9:49:37 AM</i>	rage 5 0j 0	
<ul> <li>Within 100 feet of a wetland.</li> <li>US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	Yes No	
<u>Temporary Pit Non-low chloride drilling fluid</u>		
<ul> <li>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).</li> <li>Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🗌 No	
<ul> <li>Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>	🗌 Yes 🗌 No	
<ul> <li>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;</li> <li>NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🗌 No	
<ul> <li>Within 300 feet of a wetland.</li> <li>US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🗌 No	
<u>Permanent Pit or Multi-Well Fluid Management Pit</u>		
<ul> <li>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).</li> <li>Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🗌 No	
<ul> <li>Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>	🗌 Yes 🗌 No	
<ul> <li>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.</li> <li>NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🗌 No	
<ul> <li>Within 500 feet of a wetland.</li> <li>US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🗌 No	
10. <u>Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist</u> : 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		
Previously Approved Design (attach copy of design) API 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 documents are 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 19.15.17.9 NMAC         Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.10 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: or Permit Number: or Permit Number:		

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<ul> <li>12.</li> <li>Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC</li> <li>Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the of attached.</li> <li>Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC</li> <li>Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC</li> <li>Climatological Factors Assessment</li> <li>Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC</li> <li>Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC</li> <li>Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC</li> <li>Quality Control/Quality Assurance Construction and Installation Plan</li> <li>Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.11 NMAC</li> <li>Kisance or Hazardous Odors, including H<sub>2</sub>S, Prevention Plan</li> <li>Emergency Response Plan</li> <li>Oil Field Waste Stream Characterization</li> <li>Monitoring and Inspection Plan</li> <li>Erosion Control Plan</li> <li>Closure Plan - based upon the appropriate requirements of 19.15.17.9 NMAC and 19.15.17.13 NMAC</li> </ul>	locuments are	
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.         Type:       Drilling       Workover       Emergency       Cavitation       P&A       Permanent Pit       Below-grade Tank       Multi-well Fl         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	uid Management Pit	
14.         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.		
15. <u>Siting Criteria (regarding on-site closure methods only)</u> : 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.	ce material are lease refer to	
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	
<ul> <li>Ground water is between 25-50 feet below the bottom of the buried waste</li> <li>NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells</li> </ul>	□ Yes □ No □ NA	
<ul> <li>Ground water is more than 100 feet below the bottom of the buried waste.</li> <li>NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells</li> </ul>	□ 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) Topographic map; Visual inspection (certification) of the proposed site		
<ul> <li>Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>	🗌 Yes 🗌 No	
<ul> <li>Within 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, in existence at the time of initial application.</li> <li>NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🗌 No	
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		
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance		
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	<b>Received</b> b	v OCD:	4/21/2023	9:49:57 AM
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Received by OCD: 4/21/2023 9:49:57 AM	Page 5 of 6	
adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	Yes No	
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. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society: Tonographic map		
Within a 100-year floodnlain	🗌 Yes 🗌 No	
- FEMA map	Yes No	
16.       On-Site Closure Plan Checklist:       (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure play 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 19.15.17.13 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 canned 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         Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC	an. Please indicate, 11 NMAC 15.17.11 NMAC ot be achieved)	
<ul> <li>17.</li> <li>Operator Application Certification:</li> <li>I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and believed and b</li></ul>	ef.	
Name (Print):		
Signature: Date:		
e-mail address: Telephone:		
Is.       Report         OCD Approval:       Permit Application (including closure plan)       Image: Closure Plan (only)       OCD Conditions (see attachment)		
OCD Representative Signature: Shelly Wells Approval Date: 4/24/20	23	
Title: Environmental Specialist-Advanced       OCD Permit Number:BGT1 Closure		
<sup>19.</sup> <u>Closure Report (required within 60 days of closure completion)</u> : 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. <u>⊠ Closure Completion Date:</u> 2/17/2023		
20.         Closure Method:         ⊠ Waste Excavation and Removal       □ On-Site Closure Method       □ Alternative Closure Method       □ Waste Removal (Closed-loc         □ If different from approved plan, please explain.	oop systems only)	
21.         Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please intermediate in the box, that the documents are attached.	dicate, by a check □ 1983	

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#### 22. 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.

Name (Print):	Amanda Walker	Title: <u>Operations/Regulatory Technician – Sr</u>
	Allala	
Signature:	AWWAU	Date: <u>4/21/2023</u>
e-mail address:	mwalker@hilcorp.com	Telephone:(346) 237-2177

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# Hilcorp Energy Company San Juan Basin Below Grade Tank Closure Report

# Lease Name: Little Stinker 1M API No.: 30-045-30754

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:

 HILCORP shall close a below-grade tank within 60 days of cessation of operations per Subsection G.4 of 19.15.17.13 NMAC. This will include a) below-grade tanks that do 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 five years, if not retrofitted to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC; b) an earlier date that the division requires because of imminent danger to fresh water, public health or the environment. For any closure, HILCORP will file the C144 Closure Report as required.

# The below-grade tank referenced above was permitted and closed within 60 days of cessation of the below-grade tanks operation.

 HILCORP shall remove liquids and sludge from a below-grade tank prior to implementing a closure method and shall dispose of the liquids and sludge in a division-approved facility. The facilities to be used will be Basin Disposal (Permit #NM-01-005), JFJ Landfarm % Industrial Ecosystem Inc. (Permit # NM-01-0010B) and Envirotech Land Farm (Permit #NM-01-011). The liner after being cleaned well (Subsection D, Paragraph 1, Subparagraph (m) of 19.15.9.712 NMAC) will be disposed of at the San Juan County Regional Landfill located on CR 3100.

All recovered liquids were disposed of at Basin Disposal (Permit #NM-01-005) and any sludge or soil required to be removed to facilitate closure was hauled to Envirotech Land Farm (Permit #NM-01-011) and JFJ Landfarm % IEI (Permit #NM-01-0010B). The liner was cleaned per Subsection D, Paragraph 1, Subparagraph (m) of 19.15.9.712 NMAC was disposed of at the San Juan County Regional Landfill located on CR 3100.

3. HILCORP will receive prior approval to remove the below-grade tank and dispose of it in a division-approved facility or recycle, reuse, or reclaim it in a manner that the appropriate division district office approves.

#### The below-grade tank was disposed of in a division-approved manner.

4. If there is any on-site equipment associated with a below-grade tank, then HILCORP shall remove the equipment, unless the equipment is required for some other purpose.

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

5. HILCORP will test the soils beneath the below-grade tank to determine whether a release has occurred. HILCORP 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 analyzed for the constituents listed in Table I of 19.15.17.13 NMAC. Hilcorp shall notify the division of its results on form C-141.

A five point composite sample was taken of the below-grade tank using sampling tools and all samples tested per Subsection B of 19.15.17.1 3(B)(1)(b). (Sample results attached). Form C-141 is attached.

Components	Tests Method	Limit (mg/kg)
Benzene	EPA SW-846 8021B or 8260B 0.2	
BTEX	EPA SW-846 8021B or 8260B	50
ТРН	EPA SW-846 418.1 100	
Chlorides	EPA 300.0	250

6. If HILCORP or the division determines that a release has occurred, then HILCORP shall comply with 19.15.3.116 NMAC and 19.15.1.19 NMAC, as appropriate.

#### A release was determined for the above referenced well.

7. If the sampling program demonstrates that a release has not occurred or that any release does not exceed the concentrations specified in Table I of 19.15.17.13 NMAC, then HILCORP shall backfill the excavation with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover; recontour and revegetate the site.

# The below-grade tank area passed all requirements of Paragraph (4) of Subsection E of 19.15.17.13 NMAC and was backfilled with compacted, non-waste containing, earthen material.

- 8. Notice of Closure will be given prior to closure to the Aztec Division office between 72 hours and one week via email or verbally. The notification of closure will include the following:
  - i. Operator's name
  - ii. Location by Unit Letter, Section, Township, and Range. Well name and API number.

#### Notification is attached.

9. The surface owner shall be notified of HILCORP's closing of the below-grade tank 72 hours, but not more than one week, prior to closure as per the approved closure plan via certified mail, return receipt requested.

# The closure process notification to the landowner was sent via email. (See Attached) (Well located on Federal Land, certified mail is not required for Federal Land per BLM/OCD MOU.)

10. Re-contouring of location will match fit, shape, line, form and texture of the surrounding. Re-shaping will include drainage control, prevent ponding, and prevent erosion. Natural drainages will be unimpeded and water bars and/or silt traps will be place in areas where needed to prevent erosion on a large scale. Final re-contour shall have a uniform appearance with smooth surface, fitting the natural landscape.

The below-grade tank area was re-contoured to match fit, shape, line, form and texture of the surrounding area. Re-shaping including drainage control, to prevent ponding and erosion. Natural drainages were unimpeded and water bars and/or silt traps were placed in areas where needed to prevent erosion on a large scale. Final recontour has a uniform appearance with smooth surface, fitting the natural landscape.

11. HILCORP shall seed the disturbed areas the first favorable growing season following closure of a below-grade tank. Seeding will be accomplished via drilling on the contour whenever practical or by other division-approved methods. BLM stipulated seed mixes will be used on federally regulated lands and division-approved seed mixtures (administratively approved if required) will be utilized on all State or private lands. A uniform vegetative cover has been established that reflects a life-form ratio of plus or minus fifty percent (50%) of pre- disturbance levels and a total percent plant cover of at least seventy percent (70%) of pre-disturbance levels, excluding noxious weeds. If alternate seed mix is required by the state, private owner or tribe, it will be implemented with administrative approval if needed. Hilcorp will repeat seeding or planting will be continued until successful vegetative growth occurs.

# Provision 13 was accomplished through complying with BLM seeding requirements as allowed by the BLM/OCD MOU.

12. A minimum of four feet of cover shall be achieved and the cover shall include one foot of suitable material, with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, to establish vegetation at the site, or the background thickness of topsoil, whichever is greater.

# The below-grade tank area was backfilled and more than four feet of cover was achieved and the cover included one foot of suitable material to establish vegetation at the site.

- 13. All closure activities will include proper documentation and be available for review upon request and will be submitted to OCD within 60 days of closure of the below-grade tank. Closure report will be filed on C-144 and incorporate the following:
  - Soil Backfilling and Cover Installation (See Report)
  - Re-vegetation application rates and seeding techniques (See Report)
  - Photo documentation of the site reclamation (Included as an attachment)
  - Confirmation Sampling Results (Included as an attachment)
  - Proof of closure notice (Included as an attachment)

# Mandi Walker

From:	Mandi Walker
Sent:	Tuesday, February 14, 2023 8:22 AM
То:	Abiodun Adeloye; Ben Mitchell; Bobby Spearman; Brandon Sinclair; Burdine, Jaclyn,
	EMNRD; Chad Perkins; Clara Cardoza; Kandis Roland; 11thomas@blm.gov; Mandi
	Walker; Mitch Killough
Cc:	Christopher Bramwell; Ray Shelby
Subject:	72hr BGT Closure Notice - Little Stinker 1M (3004530754)
Attachments:	30045307540000_LITTLE STINKER 1M_BGT PERMIT_OCD APPVD.pdf
Follow Up Flag:	Follow up
Due By:	Monday, April 3, 2023 3:00 PM
Flag Status:	Flagged

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

Well Name: Little Stinker 1M API#: 30-045-30754 Location: H-11-30N-12W Footages: 1975 FNL & 660 FEL Operator: HEC Surface Owner: BLM Reason for Removal: Well P&A'd Scheduled Date & Time of Start: Friday February 17<sup>th</sup> @ 9:00 am

\*\*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.

# Mandi Walker

San Juan North/South (6,7) Regulatory Technician Hilcorp Energy 346.237.2177 <u>mwalker@hilcorp.com</u>





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**

# **Responsible Party**

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

# **Location of Release Source**

Latitude 36.8286171\_

Longitude -108.0607834

(NAD 83 in decimal degrees to 5 decimal places)		
Site Name Little Stinker 1M	Site Type Well	
Date Release Discovered: 3/2/2023 @ 04:06 pm (MT) –	API# 30-045-30754	

Date/Time of Hall Environmental Analytical Laboratory report

Unit Letter	Section	Township	Range	County
Н	11	30N	12W	San Juan

Surface Owner: 🗌 State 🖾 Federal 🗌 Tribal 🗌 Private

# Nature and Volume of Release

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

Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	Yes No
Condensate	Volume Released (bbls)	Volume Recovered (bbls)
□ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release:

Historical release discovered during the permanent removal of a below-grade tank (BGT). Refer to attached memo (dated 3/15/2023) for additional information.

Per the memo attached, Hilcorp determined that chlorides and total petroleum hydrocarbons (TPH) exceeded the BGT closure criteria thresholds shown in Condition 7 of the closure plan. Thus, indicating that a potential release occurred. However, chlorides and TPH 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). Hilcorp will proceed with the backfill and ensure that the excavation is backfilled in accordance with Conditions 9 and 11 of the BGT Closure Plan.

Page 13 of 63

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 responsible party consider this a major release?
🗌 Yes 🗌 No	
If YES, was immediate ne	otice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?

# **Initial Response**

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

 $\square$  The source of the release has been stopped.

The impacted area has been secured to protect human health and the environment.

Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not been undertaken, explain why:

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

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

Printed Name:Mitch Killough	Title:Environmental Specialist
Signature:	Date:03/15/2023
email:mkillough@hilcorp.com	Telephone: <u>713-757-5247</u>
OCD Only	
Received by:	Date:

Page 2



# Memorandum

To:	Jaclyn Burdine, New Mexico Oil Conservation Division (NMOCD)
From:	Mitch Killough, Hilcorp Energy Company (Hilcorp)
Date:	3/15/2023
Subject:	Little Stinker 1M – Permanent Closure of a Below-Grade Tank (BGT)

On 2/14/2023, Hilcorp submitted a 72-hour notice prior to the permanent closure of a BGT at the Little Stinker 1M, San Juan County, New Mexico. As required by Condition 7 *(found in the enclosed Closure Plan, received by the NMOCD on 9/12/2022)*, Hilcorp personnel proceeded to collect a 5-pt composite soil sample on 2/17/2023 to determine if any contaminant concentrations exceeded the BGT closure criteria thresholds, per Condition 7. Upon receiving analytical results on 3/2/2023, Hilcorp determined that chlorides and total petroleum hydrocarbons (TPH) exceeded the BGT closure criteria thresholds shown in Condition 7 of the closure plan. Thus, indicating that a potential release occurred (refer to table below). However, chlorides and TPH 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 ANALYTICAL RESULTS LITTLE STINKER 1M												
HILCORP ENERGY COMPANY - L48 WEST												
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)
Bottom Comp	2/17/2023	<0.024	<0.047	<0.047	<0.095	<0.213	300	<4.7	970	1100	<974.7	<2074.7
NMOCD BGT Closure Criteria 0.2 NE NE				NE	NE	50	250	NE	NE	NE	NE	100
Table I of 19.15.17.13 NMAC 10 NE 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). Hilcorp will proceed with closure and ensure that the excavation is backfilled in accordance with Conditions 9 and 11 of the Closure Plan.

Enclosures: Hall Lab Report (dated 3/2/2023)

Pit, Closed-Loop System, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application (approved by the NMOCD on 9/12/2022) Preliminary Site Characterization Assessment (provided by Ensolum, LLC; dated 3/8/2023)

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



March 02, 2023

Mitch Killough HILCORP ENERGY PO Box 4700 Farmington, NM 87499 TEL: (505) 564-0733 FAX: Hall Environmental Analysis Laboratory 4901 Hawkins NE Albuquerque, NM 87109 TEL: 505-345-3975 FAX: 505-345-4107 Website: www.hallenvironmental.com

RE: Little Stinker 1M

OrderNo.: 2302825

Dear Mitch Killough:

Hall Environmental Analysis Laboratory received 1 sample(s) on 2/18/2023 for the analyses presented in the following report.

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

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

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

Sincerely,

andy

Andy Freeman Laboratory Manager 4901 Hawkins NE Albuquerque, NM 87109

**CLIENT: HILCORP ENERGY** 

**Project:** Little Stinker 1M

**Analytical Report** Lab Order 2302825

Date Reported: 3/2/2023

# Hall Environmental Analysis Laboratory, Inc.

Client Sample ID: Bottom Comp Collection Date: 2/17/2023 9:15:00 AM Dessived Data: 2/18/2022 0.20.00 AM

Lab ID: 2302825-001	Matrix: SOIL	Reco	eived Date:	2/18/2	.023 9:30:00 AM
Analyses	Result	RL Qu	ual Units	DF	Date Analyzed
EPA METHOD 8015M/D: DIESEL RAN	GE ORGANICS				Analyst: DGH
Diesel Range Organics (DRO)	970	98	mg/Kg	10	2/28/2023 6:17:35 PM
Motor Oil Range Organics (MRO)	1100	490	mg/Kg	10	2/28/2023 6:17:35 PM
Surr: DNOP	0	69-147	S %Rec	10	2/28/2023 6:17:35 PM
EPA METHOD 8015D: GASOLINE RAI	NGE				Analyst: JJP
Gasoline Range Organics (GRO)	ND	4.7	mg/Kg	1	2/21/2023 6:37:23 PM
Surr: BFB	109	37.7-212	%Rec	1	2/21/2023 6:37:23 PM
EPA METHOD 8021B: VOLATILES					Analyst: JJP
Benzene	ND	0.024	mg/Kg	1	2/21/2023 6:37:23 PM
Toluene	ND	0.047	mg/Kg	1	2/21/2023 6:37:23 PM
Ethylbenzene	ND	0.047	mg/Kg	1	2/21/2023 6:37:23 PM
Xylenes, Total	ND	0.095	mg/Kg	1	2/21/2023 6:37:23 PM
Surr: 4-Bromofluorobenzene	97.8	70-130	%Rec	1	2/21/2023 6:37:23 PM
EPA METHOD 300.0: ANIONS					Analyst: NAI
Chloride	300	60	mg/Kg	20	2/21/2023 5:43:30 PM

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

**Qualifiers:** 

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

Page 1 of 5

Client: Project:	HILCO Little	ORP ENERGY Stinker 1M							
Sample ID:	MB-73297	SampType:	mblk	Tes	tCode: EPA Me	6			
Client ID:	PBS	Batch ID:	73297						
Prep Date:	2/21/2023	Analysis Date:	2/21/2023	S	SeqNo: 3425748	B Units: mg/K	g		
Analyte		Result PQ	L SPK value	SPK Ref Val	%REC Lowl	Limit HighLimit	%RPD	RPDLimit	Qual
Chloride		ND 1	.5						
Sample ID:	LCS-73297	SampType:	lcs	Tes	tCode: EPA Me	thod 300.0: Anions	5		
Client ID:	LCSS	Batch ID:	73297	F	RunNo: <b>94770</b>				
Prep Date:	2/21/2023	Analysis Date:	2/21/2023	5	SeqNo: <b>342574</b>	Dits: mg/K	g		
Analyte		Result PQ	L SPK value	SPK Ref Val	%REC Lowl	Limit HighLimit	%RPD	RPDLimit	Qual
Chloride		14 1	.5 15.00	0	94.9	90 110			

#### Qualifiers:

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

# WO#: 2302825 02-Mar-23

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

Client: Project:	HILCOR Little Sti	P ENERGY nker 1M	r									
I Tojeci.	Little Sti											
Sample ID:	LCS-73281	SampTy	/pe: <b>LC</b>	S	Tes	TestCode: EPA Method 8015M/D: Diesel Range Organics						
Client ID:	LCSS	Batch	ID: 732	281	F	RunNo: 94831						
Prep Date:	2/21/2023	Analysis Da	ate: <b>2/2</b>	22/2023	S	SeqNo: 34	27388	Units: mg/K	g			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range C	Organics (DRO)	41	10	50.00	0	82.1	61.9	130				
Surr: DNOP		4.4		5.000		88.2	69	147				
Sample ID:	MB-73281	SampTy	/pe: <b>MB</b>	BLK	Tes	tCode: EF	A Method	8015M/D: Die	sel Range	Organics		
Client ID:	PBS	Batch	ID: 732	281	F	RunNo: <b>9</b> 4	831					
Prep Date:	2/21/2023	Analysis Da	ate: <b>2/</b> 2	22/2023	5	SeqNo: 34	27392	Units: mg/K	g			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Diesel Range C	Organics (DRO)	ND	10									
Motor Oil Range	e Organics (MRO)	ND	50									
Surr: DNOP		8.8		10.00		87.6	69	147				
Sample ID:	LCS-73400	SampTy	/pe: LC	s	Tes	tCode: EF	A Method	8015M/D: Die	sel Range	Organics		
Client ID:	LCSS	Batch	ID: <b>734</b>	100	F	RunNo: <b>9</b> 4	1924					
Prep Date:	2/27/2023	Analysis Da	ate: <b>2/</b> 2	28/2023	5	SeqNo: 34	31562	Units: %Rec	;			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: DNOP		4.3		5.000		86.1	69	147				
Sample ID:	MB-73400	SampTy	/pe: <b>MB</b>	BLK	Tes	tCode: EF	A Method	8015M/D: Die	sel Range	Organics		
Client ID:	PBS	Batch	ID: <b>73</b> 4	100	F	RunNo: <b>9</b> 4	1924					
Prep Date:	2/27/2023	Analysis Da	ate: 2/2	28/2023	S	SeqNo: 34	31563	Units: %Rec	;			
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual	
Surr: DNOP		8.3		10.00		83.2	69	147				

**Qualifiers:** 

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

Р Sample pH Not In Range

RL Reporting Limit Page 3 of 5

2302825

02-Mar-23

WO#:

# QC SUMMARY REPORT Hall Environmental Analysis Laboratory, Inc.

Client: 1 Project: 1	HILCORP ENERC	GΥ								
Sample ID: LCS-732	CS-73280 SampType: LCS			TestCode: EPA Method 8015D: Gasoline Range						
Client ID: LCSS	Bato	Batch ID: 73280			RunNo: <b>9</b> 4	4751				
Prep Date: 2/20/20	23 Analysis	Date: 2/3	21/2023	Ş	SeqNo: 34	425194	Units: <b>mg/K</b>	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	(GRO) 23	5.0	25.00	0	92.7	72.3	137			
Surr: BFB	2000		1000		195	37.7	212			
Sample ID: mb-7328	0 Samp	Туре: МЕ	BLK TestCode: EPA Method			8015D: Gaso	line Range	!		
Client ID: PBS	Bato	ch ID: 73	280	F	RunNo: <b>9</b> 4	4751				
Prep Date: 2/20/20	23 Analysis	Date: 2/	21/2023	S	SeqNo: 34	425195	Units: <b>mg/K</b>	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	GRO) ND	5.0								
Surr: BFB	1100		1000		108	37.7	212			

Qualifiers:

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

2302825

02-Mar-23

WO#:

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**Client:** 

**Project:** 

Sample ID: LCS-73280

Client ID: LCSS

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

SampType: LCS

Batch ID: 73280

HILCORP ENERGY

Little Stinker 1M

Prep Date: 2/20/2023	Analysis [	Date: 2/2	21/2023	5	SeqNo: 34	425196	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	0.92	0.025	1.000	0	91.8	80	120			
Toluene	0.96	0.050	1.000	0	95.6	80	120			
Ethylbenzene	0.94	0.050	1.000	0	94.1	80	120			
Xylenes, Total	2.8	0.10	3.000	0	94.1	80	120			
Surr: 4-Bromofluorobenzene	1.0		1.000		103	70	130			
Sample ID: mb-73280	Samp	Гуре: МВ	LK	Tes	tCode: EF	PA Method	8021B: Volati	les		
Client ID: PBS	Batc	h ID: <b>732</b>	280	F	lunNo: <b>9</b> 4	4751				
Prep Date: 2/20/2023	Analysis [	Date: 2/2	21/2023	5	SeqNo: 34	425197	Units: mg/K	g		
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	0.025								
Toluene	ND	0.050								
Ethylbenzene	ND	0.050								
Ethylbenzene Xylenes, Total	ND ND	0.050 0.10								

TestCode: EPA Method 8021B: Volatiles

RunNo: 94751

Qualifiers:

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

- J Analyte detected below quantitation limits
- Sample pH Not In Range
- RL Reporting Limit

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WO#: 2302825

02-Mar-23

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HALL ENVIRONMENTAL ANALYSIS LABORATORY

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

# Sample Log-In Check List

				neosne. nn		141.0011		
Client Name:	Hilcorp En	ergy	Wa	ork Order Num	ıber: 2302825		RcptNo:	1
Received By:	Tracy Ca	sarrubias	2/18/2	2023 9:30:00	АМ			
Completed By:	Tracy Ca	sarrubias	2/18/2	2023 10:01:5	1 AM			
Reviewed By:	Cme	-	ch	0123				
Chain of Cus	stody							
1. Is Chain of C	ustody com	plete?			Yes 🗌	No 🔽	Not Present	
2. How was the	sample deli	vered?			Courier			
Log In								
3. Was an atter	mpt made to	cool the sar	nples?		Yes 🗹	Νο	NA 🗌	
4. Were all sam	ples receive	d at a tempe	erature of >0°	C to 6.0°C	Yes 🗹	No 🗌	NA 🗌	
5. Sample(s) in	proper conta	ainer(s)?			Yes 🗹	No 🗌		
6. Sufficient san	nple volume	for indicated	test(s)?		Yes 🔽	No 🗌		
7. Are samples	(except VOA	and ONG)	properly prese	rved?	Yes 🗹	No 🗌		
8. Was preserva	ative added to	o bottles?			Yes 🗌	No 🔽	NA 🗌	
9. Received at le	east 1 vial wi	th headspac	æ <1/4" for AQ	VOA?	Yes	No 🗌	NA 🗹	
<ol><li>Were any sar</li></ol>	mple contain	ers received	broken?		Yes 🗌	No 🔽	# of processed	
1. Does paperwo	ork match bo ancies on ch	ottle labels?	4v)		Yes 🗹	No 🗌	bottles checked for pH:	>12 unless noted)
2. Are matrices	correctly ider	ntified on Ch	ain of Custody	?	Yes 🔽	No 🗌	Adjusted?	
3. Is it clear wha	it analyses w	ere request	ed?		Yes 🗹	No 🗌		
4. Were all holdi (If no, notify c	ing times abl ustomer for a	e to be met? authorizatior	, 1.)		Yes 🔽	No 🗆	Checked by:	Me 2/10/27
pecial Handl	ling (if ap	plicable)	,					
5. Was client no	otified of all d	liscrepancie	s with this orde	er?	Yes 🗌	No 🗌	NA 🗹	
Person	Notified:	J		Date				
By Who	om:	<b></b>		Via:	eMail	Phone 🗌 Fax	In Person	
Regard	ling:	[	Manhangat das schederschipper					
Client I	nstructions:	I						
<ol> <li>Additional re</li> </ol>	marks:							
7. Cooler Infor	mation	1						
Cooler No	Temp ⁰C	Conditio	n Seal Intac	t Seal No	Seal Date	Signed By		
11	2.5	Good	Yes	Morty	1		1	

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odv Record Turn-Around Titte:	Mall Environmental       Standard     Rush       Standard     Rush	Project Marine.	$L$ ; $f+le S$ ; $here \pm 1$ M 4901 Hawkins NE - Albuquerque, NM 87109	Project #: Tel. 505-345-3975 Fax 505-345-4107	Analysis Request	<u>i la ir Øhiltor p. con</u> Project Manager:	-evel 4 (Full Validation) $M_1 + c h k'_2 / o a h$	ance Sampler: <i>Brandon Stack</i>	Cooler Temp(induding cp); 2,5 = 8+ 2,5 (°C) MT 15D( 99 83 64 75 (°C) MT 15D( 16D(0) 15D(0) 15	Container Preservative HEAL No. (X) 10081 (V) 20081 (V)	21 Tom Comp 122 or COP WUL Y Y Y Y Y						Repeived by: Via: Date Time Remarks:	Received by: Via: Courty Date Time
Chain-of-Custody Record	Client: Hilcorp		Mailing Address:	Proj	Phone #:	email or Fax#: brondow. Sinclair Dhilcorp.com Proj	QA/QC Package: □ Standard □ Level 4 (Full Validation)	Accreditation:		Con Doto Timo Matrix Samula Name T.m.	2-1/ 0412 JULI DOI 10m COMP 11						Date: Time: Relinquished by:)	Date: Time: Relinquished by: 77/173 1530 0.044 00

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Form C-144

District I	State of New Mexico	July 21, 2008				
District II	Energy Minerals and Natural Resources	For temporary pits, closed-loop systems, and				
1301 W. Grand Avenue, Artesia, NM 88210 District III	Department Oil Conservation Division	below-grade tanks, submit to the appropriate				
1000 Rio Brazos Road, Aztec, NM 87410	1220 South Station Deliver	Bor permanent pits and exceptions submit to				
District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505	Sonto Eo. NM 97505	provide a copy to the appropriate NMOCD				
	2008 NOV 19 PM 1	District Office.				
D:4	Classed Laser Systems Dalary Crude 5	Tonis or				
<u>PIL,</u> Duana and Al	<u>Loop System, Below-Grade</u>	<u>I ank, or</u>				
Proposed Al	ternative Method Permit or Closure F	Plan Application				
Type of action: $\square$ Perm	nit of a pit, closed-loop system, below-grade tank, o	or proposed alternative method				
Existing BGT Clos	ure of a pit, closed-loop system, below-grade tank,	or proposed alternative method				
	sure plan only submitted for an existing permitted or	r non-permitted pit, closed-loop system.				
below-grade tank, or prop	osed alternative method	F F,,				
Instructions: Please submit one appli	cation (Form C-144) per individual pit, closed-loop syst	em, below-grade tank or alternative request				
Please be advised that approval of this request does	not relieve the operator of liability should operations result i	in pollution of surface water, ground water or the				
environment. Nor does approval relieve the operato	or of its responsibility to comply with any other applicable go	overnmental authority's rules, regulations or ordinances.				
1. Operator: XTO Energy Inc	OGRID #	5380				
Address: #382 County Road 3100 Aztec	NM 87410					
Facility or well name: LITTLE STINKER	#1M					
API Number: 30-045-30754	OCD Permit Number:					
U/L or Otr/Otr H Section 11	Township 30N Pange 12W Cou	inty: San Juan				
Conter of Proposed Design: Letitude 26 828	$\underline{\qquad} 1000000000000000000000000000000000000$					
Surface Oursers M Endered D State D Drivet	D Tribel Trust on Indian Alletment	NAD. []1927 [] 1985				
	I I I I I I I I I I I I I I I I I I I					
2. $\Box$ <b>Pit</b> : Subsection F or G of 19 15 17 11 NN	AAC					
Temporary: Drilling Workover						
Dermonant Emergency Covitation						
		than				
Steing Deinforced						
Liner Seams: Welded Factory Othe	.r Volume:bb	Dimensions: Lx Wx D				
3.		- 107-1				
Ture of Operations D B& A D Drilling on the						
intent)	wen i workover of Drining (Applies to activities wh	fich require prior approval of a permit or notice of				
Drying Pad DAbove Ground Steel Tank	s 🔲 Haul-off Bins 🗌 Other					
$\Box$ Lined $\Box$ Unlined Liner type: Thickness mil $\Box$ LLDPE $\Box$ HDPE $\Box$ PVC $\Box$ Other						
Liner Seams: Welded Factory Oth	er					
Below-grade tank: Subsection I of 19.15	.17.11 NMAC					
Volume: 120 bbl Type of	of fluid: Produced Water					
Tank Construction material: Steel						
Secondary containment with leak detection	Visible sidewalls liner 6-inch lift and automatic of	verflow shut-off				
Visible sidewalls and liner	ewalls only A Other Visible sidewalls voulted outer	matic high-level shut off no liner				
Liper type: Thickness		mane mgn-nevel shut on, no mner				
5.						
Alternative Method:						
Submittal of an exception request is required.	Exceptions must be submitted to the Santa Fe Environme	ental Bureau office for consideration of approval.				

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 Four foot height, steel mesh field fence (hogwire) with pipe top railing

Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)

Screen Netting Other Expanded metal or solid vaulted top

Monthly inspections (If netting or screening is not physically feasible)

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

# Administrative Approvals and Exceptions:

10.

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 acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system.						
<ul> <li>Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.</li> <li>NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells</li> </ul>	🗌 Yes 🛛 No					
<ul> <li>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).</li> <li>Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🛛 No					
<ul> <li>Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</li> <li>(Applies to temporary, emergency, or cavitation pits and below-grade tanks)</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>	☐ Yes ⊠ No ☐ NA					
<ul> <li>Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.</li> <li>(Applies to permanent pits)</li> <li>Visual inspection (certification) of the proposed site; Aerial photo; Satellite image</li> </ul>	☐ Yes ☐ No ⊠ NA					
<ul> <li>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.</li> <li>NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site</li> </ul>	🔲 Yes 🖾 No					
<ul> <li>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.</li> <li>Written confirmation or verification from the municipality; Written approval obtained from the municipality</li> </ul>	🗋 Yes 🖾 No					
<ul> <li>Within 500 feet of a wetland.</li> <li>US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	🗌 Yes 🛛 No					
<ul> <li>Within the area overlying a subsurface mine.</li> <li>Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division</li> </ul>	🗌 Yes 🛛 No					
Within an unstable area.	Ves X No					

 Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map

Within a 100-year floodplain.

FEMA map

□ Yes ⊠ No

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11. Temperatur Dite Emergency Dite and Delaw grade Tenks Descrit Application Attackment Checklists Subsection D of 10.15.17.0 NDAC
<u>I emporary rits, Emergency rits, and Below-grade Tanks Permit Application Attachment Checklist</u> : Subsection B of 19.15.17.9 NMAC
Instructions: Euch of the following items must be attached to the application. Fleuse indicate, by a check mark in the box, that the accuments are
$\mathbb{X}$ Hydrogeologic Report (Relow-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 1915 179 NMAC
Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19 15 17.9 NMAC
Sing Criteria Compliance Demonstrations - based upon the appropriate requirements of 10 15 17 10 NMAC
Sing Criteria - based upon the appropriate requirements of 19 15 17 11 NMAC
A Design rule - based upon the appropriate requirements of 19.15.17.17.17.17.17.19.
Closure Plan (Please complete Boyes 14 through 18 if annlicable) - based upon the appropriate requirements of Subsection C of 19 15 17 9 NMAC
and 19 17 13 17 MMAC
Previously Approved Design (attach copy of design) API Number: or Permit Number:
12. Closed loop Systems Bormit Application Attackment Checklist, Subsection D of 10.15.17.0 NMAC
Listen-loop Systems i et mit Appreadon Attachment CiteChist. Subsection Do 17, 15, 17, 7 NVAC
Instructions. Luch of the following tiens must be anached to the application. I tease indicate, by a check mark in the box, that the abcuments are attached
$\square$ Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 1915 179
$\square$ Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 10 15 17 10 NMAC
Design Plan - based upon the appropriate requirements of 19 15 17 11 NMAC
Department of the state up of the expression of 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:
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)
Dermanent Pits Permit Application Checklist: Subsection B of 1915 179 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 DWorkover DEmergency DCavitation DP&A DPermanent Pit X Below-grade Tank D Closed-loon 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

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Waste Removal Closure For Closed-loop Systems That Utilize Above Ground St Instructions: Please indentify the facility or facilities for the disposal of liquids, dru facilities are required.	eel Tanks or Haul-off Bins Only: (19.15.17.13. Illing fluids and drill cuttings. Use attachment if i	) NMAC) nore than two			
Disposal Facility Name: D	isposal Facility Permit Number:				
Disposal Facility Name: D	isposal Facility Permit Number:				
Will any of the proposed closed-loop system operations and associated activities occu Yes (If yes, please provide the information below) No	Ir on or in areas that will not be used for future serve	vice and operations?			
Required for impacted areas which will not be used for future service and operations <ul> <li>Soil Backfill and Cover Design Specifications based upon the appropriate regulation</li> <li>Re-vegetation Plan - based upon the appropriate requirements of Subsection I of Site Reclamation Plan - based upon the appropriate requirements of Subsection</li> </ul>	: equirements of Subsection H of 19.15.17.13 NMA of 19.15.17.13 NMAC n G of 19.15.17.13 NMAC	C			
<sup>17.</sup> <u>Siting Criteria (regarding on-site closure methods only)</u> : 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the cla provided below. Requests regarding changes to certain siting criteria may require a considered an exception which must be submitted to the Santa Fe Environmental E demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for	osure plan. Recommendations of acceptable sour administrative approval from the appropriate dista Sureau office for consideration of approval. Justi guidance.	ce material are rict office or may be fications and/or			
Ground water is less than 50 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data of	btained 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; Data of	btained 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 of	btained from nearby wells	□ Yes □ No □ NA			
<ul> <li>Within 300 feet of a continuously flowing watercourse, or 200 feet of any other signifiake (measured from the ordinary high-water mark).</li> <li>Topographic map; Visual inspection (certification) of the proposed site</li> </ul>	ficant watercourse or lakebed, sinkhole, or playa	🗋 Yes 🗌 No			
Within 300 feet from a permanent residence, school, hospital, institution, or church ir - Visual inspection (certification) of the proposed site; Aerial photo; Satellite in	n existence at the time of initial application. mage	🗌 Yes 🗌 No			
Within 500 horizontal feet of a private, domestic fresh water well or spring that less the watering purposes, or within 1000 horizontal feet of any other fresh water well or spring - NM Office of the State Engineer - iWATERS database; Visual inspection (cee	han five households use for domestic or stock ing, in existence at the time of initial application. rtification) of the proposed site	🗌 Yes 🗌 No			
<ul> <li>Within incorporated municipal boundaries or within a defined municipal fresh water adopted pursuant to NMSA 1978, Section 3-27-3, as amended.</li> <li>Written confirmation or verification from the municipality; Written approval</li> </ul>	well field covered under a municipal ordinance obtained from the municipality	🗋 Yes 🗌 No			
<ul> <li>Within 500 feet of a wetland.</li> <li>US Fish and Wildlife Wetland Identification map; Topographic map; Visual</li> </ul>	inspection (certification) of the proposed site	🗌 Yes 🗌 No			
<ul><li>Within the area overlying a subsurface mine.</li><li>Written confirmation or verification or map from the NM EMNRD-Mining a</li></ul>	nd Mineral Division	🗌 Yes 🗌 No			
<ul> <li>Within an unstable area.</li> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Society; Topographic map</li> </ul>	& Mineral Resources; USGS; NM Geological	🗌 Yes 🗌 No			
Within a 100-year floodplain. - FEMA map		🗌 Yes 🗌 No			
18. 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 F of 19.15.17.13 NMAC Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements 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 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 I of 19.15.17.13 NMAC
 Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

0 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): <u>Kim Champlin</u>	Title: <u>Environmental Representative</u>
Signature: Kim, Mana Xin	Date: 11/14/08
e-mail address: kim champlin@ytoenergy.com	
20. <u>OCD Approval</u> : X Permit Application (including closure plan) Clos	nure Plan (only) OCD Conditions (see attachment)
OCD Representative Signature: <u>Jaclyn Burdine</u>	Approval Date: 09/12/2022
Title: Environmental Specialist-A	OCD Permit Number: <u>BGT1</u>
21. <u>Closure Report (required within 60 days of closure completion)</u> : Subse Instructions: Operators are required to obtain an approved closure plan p The closure report is required to be submitted to the division within 60 day section of the form until an approved closure plan has been obtained and	ection K of 19.15.17.13 NMAC prior to implementing any closure activities and submitting the closure report. as of the completion of the closure activities. Please do not complete this the closure activities have been completed.
	Closure Completion Date:
<ul> <li>22.</li> <li>Closure Method:</li> <li>Waste Excavation and Removal On-Site Closure Method A</li> <li>If different from approved plan, please explain.</li> </ul>	Iternative Closure Method 🗌 Waste Removal (Closed-loop systems only)
<sup>23.</sup> Closure Report Regarding Waste Removal Closure For Closed-loop Sy. Instructions: Please indentify the facility or facilities for where the liquid two facilities were utilized.	stems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: s, drilling fluids and drill cuttings were disposed. Use attachment if more than
Disposal Facility Name:	Disposal Facility Permit Number:
Disposal Facility Name:	Disposal Facility Permit Number:
Were the closed-loop system operations and associated activities performed Yes (If yes, please demonstrate compliance to the items below)	on or in areas that will not be used for future service and operations? No
Required for impacted areas which will not be used for future service and op         Site Reclamation (Photo Documentation)         Soil Backfilling and Cover Installation         Re-vegetation Application Rates and Seeding Technique	perations:
24.         Closure Report Attachment Checklist: Instructions: Each of the follow 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	ing items must be attached to the closure report. Please indicate, by a check sure) Longitude NAD: 1927 1983
<ul> <li>25.</li> <li>Operator Closure Certification:</li> <li>I hereby certify that the information and attachments submitted with this clobelief. I also certify that the closure complies with all applicable closure red</li> </ul>	osure report is true, accurate and complete to the best of my knowledge and quirements and conditions specified in the approved closure plan.
Name (Print):	Title:
Signature:	Date:
e-mail address:	Telephone:
	16 of Sec



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	_	· · · · · · · · · · · · · · · · · · ·	Client:	XTO Energy
Lodestar Service	s, Inc.	Pit Permit	Project:	Pit Permits
PO Box 4465, Durange	. CO 81302	Siting Criteria	Revised:	26-Sep-08
	,,	Sitting Criteria	Prepared by:	Brooke Herb
, , , , , , , , , , , , , , , , , , ,				
API#:		3004530754	USPLSS:	T30N,R12W,S11H
			-	
Name:	LITTI	E STINKER #1M	Lat/Long:	36.82861, -108.06083
Depth to groundwater:		> 100 ft	Geologic formation:	Nacimiento Formation
Distance to closest continuously flowing watercourse:	1.60 mile	s NW of the Animas River		
Distance to closest significant watercourse, lakebed, playa lake, or sinkhole:	1610' V	V of Barton Arroyo		
			Soil Type:	Entisols
Permanent residence, school, hospital, institution or church within 300'		No	_	
			Annual	8.21 inches (Farmington)
Domestic fresh water well or spring within 500'		No	Precipitation Precipitation Notes:	no significant precip events
Any other fresh water well or spring within 1000'		No	·	
Within incorporated municipal boundaries		No	Attached Documents:	Groundwater report and Data; FEMA Flood Zone Map
Within defined municipal fresh water well field		No		Aerial Photo, Topo Map, Mines Mills and Quarries Map
Wetland within 500'		No	Mining Activity:	
Within unstable area		No		SUU NE OF Spencerville Pit
Within 100 year flood plain	No - FE	MA Flood Zone 'X'		
Additional Notes:				

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# LITTLE STINKER #1M Below Ground Tank Siting Criteria and Closure Plan

### Well Site Location

Legals: T30N, R12W, Section 11, Quarter Section H Latitude/Longitude: approximately 36.82861, -108.06083 County: San Juan County, NM General Description: near Glade Run

### General Geology and Hydrology

The San Juan Basin is a typical Rocky Mountain basin with a gently dipping southern flank and a steeply dipping northern flank. Asymmetrically layered Tertiary sandstones and shales, along with Quaternary alluvial deposits dominate surficial geology (Dane and Bachman, 1965). The proposed below ground tank location will be located on the flanks of the Farmington Glade between Aztec and La Plata, New Mexico. Within the Farmington Glade, the Tertiary Nacimiento Formation is exposed, along with Quaternary alluvial and aeoloian sands surrounding the center of the wash.

Cretaceous and Tertiary sandstones, as well as Quaternary alluvial deposits serve as the primary aquifers in the San Juan basin (Stone et al., 1983). In most of the proposed area, the Nacimiento Formation lies at the surface. Thickness of the Nacimiento ranges from 418 to 2232 feet (Stone et al., 1983). Aquifers within the coarser and continuous sandstone bodies of the Nacimiento Formation are between 0 and 1000' deep in this section of the basin (Stone et al., 1983). Groundwater within these aquifers flows toward the nearby San Juan River and its tributaries.

The prominent soil type at the proposed site is entisols, which are defined as soils that do not show any profile development. Soils are basically unaltered from their parent rock. Miles of arroyos, washes and intermittent streams exist as part of the drainage network towards the La Plata River (www.emnrd.state.nm.us). These features often cut into soil and other unconsolidated materials, contributing to sedimentation downstream. The sudden influx of water from storm events easily erodes soils that cover the area.

The climate of the region is arid, averaging just over 8 inches of rainfall annually. As is typical of the southwestern United States monsoonal weather patterns, most precipitation falls from August through October. The heaviest rainfall occurs in the summer in isolated, intense cloudbursts. November through June is relatively dry. Snow generally falls from December to mid-February and averages less than one-half inch in depth. However, most recharge occurs during the winter months during snowmelt periods from the upper elevations (Western Regional Climate Center www.wrcc.dri.edu).

The predominant vegetation is sagebrush and grasses with a more restricted pinon-juniper association (Dick-Peddie, 1993).

# Site Specific Hydrogeology

Depth to groundwater is estimated to be greater than 100 feet. This estimation is based on data from Stone and others, 1983 and depth to groundwater data published on the New Mexico State Engineer's iWaters Database website. Local topography and proximity to surface hydrologic features are also taken into consideration.

Local aquifers include sandstones within the Nacimiento Formation, which ranges from 0 to 1000 feet deep in this area, as well as shallow aquifers within Quaternary alluvial deposits (Stone et al., 1983). The 1000-foot depth range for Nacimiento aquifers covers an area over 20 miles wide, and depth decreases towards the margin of the San Juan Basin. The site in question is more centrally located, and depth to the aquifer is expected to be closer to 1000 feet. It is well known that groundwater close to the Animas River can be shallow, as the Quaternary deposits near the river itself form shallow aquifers. However, the proposed site is situated over a mile to the north-northwest of the Animas River, and is approximately 310 feet higher in elevation (Google Earth).

Groundwater data available from the NM State Engineer's iWaters Database for wells near the proposed site are attached. A map showing the location of wells in reference to the proposed pit location is also included. Pinpoints show locations of wells and the labels for each pinpoint indicate depth to groundwater in feet. Wells are clustered near populated areas to the south of the site. The wells have a depth to groundwater range of 17 to 123 feet below ground surface. These wells vary in topographical elevation, but are all at least 85 feet lower in elevation then the proposed site. The closest well to the site is 2275 feet to the south, and has a depth to groundwater of 122 feet below ground surface. This well is approximately 100 feet lower in elevation from the site. A well to the west has a depth to groundwater of 82 feet, and is approximately 85 feet lower in elevation then the proposed site.





State Engineer	ownloads
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Aevico Of	OD Repo
New A	

Township: 30N Range: 12M Sections: 2,10,11,12,13,14,16

POD / Surface Data ReportAvg Depth to Water ReportWater Column Report

# WATER COLUMN REPORT 09/18/2008

1

,	quarter	s ar	1=		=NE	3=51	4=SE)					
	quarter	s are	a bid	age	it t	o smal	lest)		Depth	Depth	Water	(in fee
POD Number	TVB	Rng	Sec	9		Zone	×	X	Well	Water	Column	
SJ 02643	30N	12W	02	3	2				195	140	55	
SJ 02707	30N	124	02	3	3				235	135	100	
SJ 03767 POD1	30N	124	10	1	2		265151	2121325	265	82	183	
SJ 02128	30N	124	10	3					140	60	80	
SJ 00945	30N	124	10	3					130	02	60	
SJ 00421	30N	124	10	4	_				126	43	83	
SJ 00142	30N	12W	11	4	2				192	122	70	
SJ 00651	30N	124	11	4	4				193	123	70	
SJ 03129	30N	124	12	3	2				44	35	6	
SJ 03027	30N	124	12	3	3				100			
SJ 00384	30N	124	12	4	2				57	20	37	
SJ 03020	30N	124	12	4	4				52	30	22	
SJ 00643	30N	124	12	4	_				75	51	24	
SJ 03757 POD1	30N	124	12	4	_		266123	2118278	22	12	10	
SJ 00322	30N	124	12	4	11				66	40	26	
SJ 00888	30N	124	13	1					81	50	31	
SJ 00518	30N	124	13	1					55	15	40	
SJ 00935	30N	124	13	1					54	10	44	
SJ 00337	30N	124	13	1					43	17	26	
SJ 00316	30N	124	13	1					56	30	26	
SJ 00773	30N	124	13	1	-				68	50	18	
SJ 00821	30N	124	13	-	-				42	15	27	
SJ 03063	30N	124	13	H	-				40	25	15	

Released to Imaging: 4/24/2023 4013218@PM1

25	36	31	22	37	15	17	13	46	20	21	22		40	45	49	35	20	39	22	52	55	25	31	37	45	28	30	124	57	43	81	60	22	32	40	105
43	15 25	18	38	50	45	20	25	26	30	30	50		10	10	16	15	23	9	15	8	10	15	8	9	50	50	80	56	100	53	29	105	55	20	35	60
68	51	49	60	87	60	37	38	72	50	51	72	50	50	55	65	50	43	45	37	60	65	40	39	43	95	78	10	80	57	96	10	65	77 50	52	75	65

SJ 02803	NOE	124	13	3	2	6.4
SJ 02114	SON	12W	13	2	2	100
SJ 01403	30N	124	13	2	2	44.
SJ 01773	NOE	12W	13	3		
SJ 00299	NOE	124	13	3	2	
SJ 00123	30N	124	14	ч	-	-
SJ 00854	SON	124	14	-	4	
SJ 00667	NOE	124	14	2	2	d.
SJ 01161	NOE	124	14	2	4	
SJ 00105	SON	124	14	3	н	
SJ 00596	NOE	124	14	3	н	
SJ 00735	SON	124	14	3	н	6.1
SJ 00676	NOE	124	14	3	2	
SJ 00574	30N	124	14	3	2	
SJ 03318	NOE	124	14	3	3	A.
SJ 00129	SON	124	14	3	4	
SJ 00124	NOE	124	14	3	4	
SJ 01674	NOE	124	14	3	4	
SJ 00107	NOE	124	14	3	4	
SJ 00271	30M	124	14	3	4	
SJ 00508	NOE	124	14	3	4	21
SJ 00458	SON	124	14	4	-	
SJ 03472	30N	124	14	4	2	-
SJ 02739	SON	12W	14	4	2	2.1
SJ 03643	SON	124	14	4	2	-
SJ 00290	SON	124	14	4	3	
SJ 00482	SON	124	14	4	3	
SJ 00367	NOE	124	15			
SJ 02168	SON	124	15			
SJ 01178	SON	12W	15	-	4	
SJ 03401	SON	124	15	-	4	1.1
SJ 01881	SON	124	15	3		
SJ 00817	30N	1.2W	15	2	3	A.
SJ 03108	30N	124	15	2	4	-
SJ 03432	30N	124	15	3	4	2.1
SJ 02120	NOE	12W	15	3		
SJ 01162	NOE	12W	15	3		
SJ 00709	30N	124	15	3		
SJ 00883	30N	124	15	3		
SJ 00145	SON	124	15	3		

60	29	28	60	28	60	40	30	30	43	38	36	52	23	60	23	30	31	22	47	129	50	61		32
60 35	21	22	30	30	30	60	30	20	30	30	32	40	20	30	35	66	28	30	8	75	95	35		25
120 55	50	20	90	58	60	100	60	50	73	68	68	92	43	90	58	96	59	52	55	204	145	96	60	57

5J 02760 5J 03238 5J 01793	30N 30N 30N 30N	12W 12W 12W	15 15 15		0 00 00 00 10 10 10 10 10 10 10 10 10 10
SJ 00710 SJ 00816	30N	12W		15	15 3 15 3
SJ 00730 SJ 00717	30N	124		15	15 3 15 3
5J 01215 SJ 01037	30N	124		15	15 3 15 3
SJ 00684	30N	124		510	15 3
SJ 00928	30N	124		2	12
SJ 00714	30N	12W	-	5	5 3
5J 00828 (1) 5J 00731	30N	124		<b>N</b> N	
SJ 00912	30N	124	-	5	5 3
SJ 01438	30N	12W	-	5	5 3
SJ 00828	30N	124		S	5 3
SJ 00481	30N	12W		5	5 3
SJ 00516	30N	12W	-	5	5 3
5J 00927	30N	12W	-	5	5 4
SJ 00594	30N	12W	-	S	5 4
SJ 00810	SON	124	-	5	4
SJ 03159	30N	12W	-	s	5
SJ 02514	30N	124	-	ŝ	5 4







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# XTO Energy Inc. San Juan Basin (Northwest New Mexico) General Design and Construction Plan For Below-Grade Tanks

In accordance with Rule 19.15.17.11 NMAC the following information describes the design and construction of below-grade tanks on XTO Energy Inc. (XTO) locations. This is XTO's standard procedure for all below-grade tanks. A separate plan will be submitted for any below-grade tank which does not conform to this plan.

#### **General Plan**

- 1. XTO will design and construct below-grade tanks to contain liquids and solids and prevent contamination of fresh water and protect public health and environment.
- 2. XTO will post a well sign, in compliance with 19.15.3.103 NMAC, on the existing well site operated by XTO where the existing below-grade tank is located. The sign will list the Operator on record as the operator, the location of the well site by unit letter, section, township, range, and emergency telephone numbers.
- 3. XTO is requesting approval of an alternative fencing to be used on below-grade tank locations. Below-grade tank locations will be fenced utilizing 48" steel mesh field-fence (hogwire) with pipe railing along the top. A 6' chain link fence will be utilized around the well pad if the well site is within a city limits or ¼ mile of a permanent residence, school, hospital, institution or church. Below-grade tanks located within 1000' of a permanent residence, school, hospital, institution or church will be fenced by 6' chain link fence with at least two strands of barbed wire at the top. All gates associated with below-grade tanks will remain closed and locked when responsible individuals are not on site.
- 4. XTO shall construct below-grade tanks with an expanded metal covering or solid vaulted top on the top of the below-grade tank.
- 5. XTO will ensure that below-grade tanks are constructed of materials resistant to the below-grade tank's particular contents and resistant to damage from sunlight. Tanks will be constructed of A36 carbon steel with 3/16" sides and ¼" bottom. (See attached drawing).
- 6. The below-grade tank system will have a properly constructed foundation consisting of a level base free of rocks, debris, sharp edges or irregularities to prevent punctures, cracks or indentations of the liner or tank bottom. Sand bedding (4") will be placed on top of a level foundation to ensure prevention of punctures, cracks or indentations of the liner or tank bottom.
- XTO will construct a berm and/or diversion ditch in a manner that prevents the collection of surface water run-on. Below-grade tanks will be equipped with automatic high level shut-off devices as well as manually operated shut-off valves. (See attached drawing).
- 8. XTO will construct and use below-grade tanks that do not have double walls. The below-grade tank sidewalls will be open for visual inspection for leaks. The sidewalls of the cellar will be constructed with 2" X 12" pine sidewalls and 4" X 4" pine brace posts. The below-grade tank

XTO Energy Inc. San Juan Basin (Northwest New Mexico) General Design and Construction Plan For Below-Grade Tanks Page 2

> bottom will be elevated a minimum of 6" above the underlying ground surface and the belowgrade tank will be underlain with a geomembrane liner to divert leaked liquid to a location that can be visually inspected. (See attached drawing).

- XTO will equip below-grade tanks designed in this manner with a properly functioning automatic high-level shut off control device and manual controls to prevent overflows. (See attached drawing).
- 10. XTO will demonstrate to the OCD that the geomembrane liner complies with the specifications of Subparagraph (a) of Paragraph (4) of Subsection I of 19.15.17.11 NMAC and obtain approval from OCD prior to the installation of the design. 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 acidics and alkaline solutions. The liner material shall be resistant to ultraviolet light. Liner compatibility shall comply with EPA SW-846 method 9090A. (See attached drawing).
- 11. The general specifications for design and construction are attached.



# XTO Energy Inc. San Juan Basin (Northwest New Mexico) General Maintenance and Operating Plan For Below-Grade Tanks

In accordance with Rule 19.15.17.12 NMAC the following information describes the operation and maintenance of below-grade tanks on XTO Energy Inc. (XTO) locations. This is XTO's standard procedure for all below-grade tanks. A separate plan will be submitted for any below-grade tank which does not conform to this plan.

#### **General Plan**

- 1. XTO will operate and maintain below-grade tanks to contain liquids and solids, maintain the integrity of the liner and secondary containment system, prevent contamination of fresh water and protect public health and the environment. Fluid levels will be monitored weekly and high levels will be removed as necessary. Monthly inspections will be conducted to monitor integrity of below-grade tank systems and below-grade tanks will be equipped with automatic high-level shut-off devices.
- 2. XTO will not allow below-grade tanks to overflow and will use berms and/or diversion ditch to prevent surface run on to enter the below-grade tank. Below-grade tanks will be equipped with automatic high-level shut-off control devices as well as manually operated shut-off valves. See attached drawing for vault design and placement of diversion berms and shut-off devices.
- 3. XTO will continuously remove any visible or measurable layer of oil from the fluid surface of below-grade tanks in order to prevent significant accumulation of oil.
  - XTO will inspect the below-grade tank monthly and maintain written records for five years. Monthly inspections will consist of documenting the following: (see attached template), Well Name
    - API # Sec., Twn., Rng. XTO Inspector's name Inspection date and time Visible tears in liner Visible signs of tank overflow Collection of surface run on Visible layer of oil Visible signs of tank leak Estimated freeboard
- 5. XTO will maintain adequate freeboard to prevent over topping of the below-grade tank. High level shut-off devices control the freeboard at an average of 28" beneath the top of the tank.
- 6. XTO will not discharge into or store any hazardous waste in any below-grade tank.
- 7. If a below-grade tank develops a leak, or if any penetration of a below-grade tank occurs below the liquids surface, XTO will remove all liquids above the damage or leak line within 48 hours,

XTO Energy Inc. San Juan Basin (Northwest New Mexico) General Maintenance and Operating Plan For Below-Grade Tanks Page 2

notify the appropriate division district office within 48 hours of the discovery and repair the damage or replace the below-grade tank. If an existing below-grade tank does not meet current requirements of Paragraphs 1-4 of Subsection I of 19.15.17.11 NMAC the tank will be modified or retrofitted to comply. If compliance can not be achieved XTO will implement the approved closure plan.

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# XTO Energy Inc. San Juan Basin (Northwest New Mexico) General Closure Plan For Below-Grade Tanks

In accordance with Rule 19.15.17.13 NMAC the following information describes the closure requirements of below-grade tanks on XTO Energy Inc. (XTO) locations. This is XTO's standard procedure for all below-grade tanks. A separate plan will be submitted for any below-grade tank which does not conform to this plan.

# **General Plan**

- 1. XTO will close below-grade tanks within the time periods provided in 19.15.17.13 NMAC, or by an earlier date that the division requires because of imminent danger to fresh water, public health or the environment.
- XTO will close a below-grade tank 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 five years after June 16, 2008, if not retrofitted to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC.
- 3. XTO will close a permitted below-grade tank within 60 days of cessation of the below-grade tank's operation or as required by the transitional provisions of Subsection B of 19.15.17.17 NMAC in accordance with a closure plan that the appropriate division district office approves. The closure report will be filed on form C-144.
- 4. XTO will remove liquids and sludge from below-grade tanks prior to implementing a closure method and will dispose of the liquids and sludge in a division-approved facility. Approved facilities and waste streams include:

Envirotech Permit No. NM01-0011 and IEI Permit No. NM 01-0010B Soil contaminated by exempt petroleum hydrocarbons Produced sand, pit sludge and contaminated bottoms from storage of exempt wastes Basin Disposal Permit No. NM01-005

- Produced water
- 5. XTO will remove the below-grade tank and dispose of it in a division approved facility or recycle, reuse, or reclaim it in a manner that the appropriate division district office has approved prior to removal. Any associated liners will be removed, properly cleaned and disposed of per 19.15.9.712 NMAC at San Juan County Landfill. Documentation of the final disposition will be included in the closure report.
- 6. XTO will remove any on-site equipment associated with a below-grade tank unless the equipment is required for some other purpose.
- 7. XTO will test the soils beneath the below-grade tank to determine whether a release has occurred. At a minimum 5 point composite sample will be collected along with individual grab samples from any area that is wet, discolored or showing other evidence of a release. Samples will be

XTO Energy Inc. San Juan Basin (Northwest New Mexico) General Closure Plan For Below-Grade Tanks Page 2

analyzed for BTEX, TPH and chlorides to demonstrate that the benzene concentration, as determined by EPA SW-846 methods 8021B or 8260B or EPA method that the division approves, does not exceed 0.2 mg/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 100mg/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. XTO will notify the division of its results on form C-141.

- 8. If XTO or the division determines that a release has occurred, XTO will comply with 19.15.3.116 NMAC and 19.15.1.19NMAC as appropriate.
- 9. If the sampling program demonstrates that a 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, XTO will backfill the excavation with compacted, non-waste containing, earthen material; construct a division prescribed soil cover; recontour and re-vegetate the site.
- Notice of Closure operations will be given to the Aztec Division District III office between 72 hours and one week prior to the start of closure activities via email or verbally. The notification will include the following:
  - i. Operator's name
  - ii. Well Name and API Number
  - iii. Location by Unit Letter, Section, Township, and Range

The surface owner shall also be notified prior to the implementation of any closure operations of below-grade tanks as per the approved closure plan using certified mail, return receipt requested.

- 11. Re-contouring of location will match fit, shape, line, form and texture of the surrounding area. Re-shaping will include drainage control, prevent ponding, and prevent erosion. Natural drainages will be unimpeded and water bars and/or silt traps will be placed in areas where needed to prevent erosion on a large scale. Final re-contour shall have a uniform appearance with smooth surface, fitting the natural landscape.
- 12. A minimum of 4 feet of cover shall be achieved and the cover shall include 1 foot of suitable material to establish vegetation at the site, or the background thickness of topsoil, whichever is greater. Soil cover will be constructed to the site's existing grade and ponding of water and erosion of the cover material will be prevented with drainage control, natural drainages and silt traps where needed.
- 13. XTO will seed the disturbed areas the first growing season after the operator closes the pit. Seeding will be accomplished via drilling on the contour whenever practical or by other divisionapproved methods. BLM or Forest Service stipulated seed mixes will be used on federal lands. Vegetative cover will equal 70% of the native perennial vegetative cover (un-impacted) consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintain that cover through two successive growing seasons. Repeat seeding or planting will be continued until successful vegetative growth occurs.

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XTO Energy Inc. San Juan Basin (Northwest New Mexico) General Closure Plan For Below-Grade Tanks Page 3

- 14. All closure activities will include proper documentation and be available for review upon request and will be submitted in closure report form to OCD within 60 days of closure of the below-grade tank. Closure report will be filed on form C-144 and incorporate the following:
  - i. Proof of closure notice to division and surface owner;
  - ii. Details on capping and covering, where applicable;
  - iii. Inspection reports;
  - iv. Confirmation sampling analytical results;
  - v. Disposal facility name(s) and permit number(s);
  - vi. Soil backfilling and cover installation;
  - vii. Re-vegetation application rates and seeding techniques, (or approved alternative to re-vegetation requirements if applicable);
  - viii. Photo documentation of the site reclamation.

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV 1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

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

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QUESTIONS

Action 142283

QUESTIONS OGRID: Operator: HILCORP ENERGY COMPANY 372171 1111 Travis Street Action Number: Houston, TX 77002 142283 Action Type: [C-144] Legacy Below Grade Tank Plan (C-144LB)

#### QUESTIONS

Facility and Ground Water

Please answer as many of these questions as possible in this group. More information will help us in	lentify the appropriate associations in the system.
Facility or Site Name	LITTLE STINKER 1M
Facility ID (f#), if known	Not answered.
Facility Type	Below Grade Tank - (BGT)
Well Name, include well number	LITTLE STINKER 1M
Well API, if associated with a well	3004530754
Pit / Tank Type	Not answered.
Pit / Tank Name or Identifier	Not answered.
Pit / Tank Opened Date, if known	Not answered.
Pit / Tank Dimensions, Length (ft)	Not answered.
Pit / Tank Dimensions, Width or Diameter (ft)	Not answered.
Pit / Tank Dimensions, Depth (ft)	Not answered.
Ground Water Depth (ft)	Not answered.
Ground Water Impact	Not answered.
Ground Water Quality (TDS)	Not answered.

#### Below-Grade Tank

Subsection I of 19.15.17.11 NMAC	
Volume / Capacity (bbls)	120
Type of Fluid	Produced Water
Pit / Tank Construction Material	Steel
Secondary containment with leak detection	Not answered.
Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off	Not answered.
Visible sidewalls and liner	Not answered.
Visible sidewalls only	Not answered.
Tank installed prior to June 18. 2008	True
Other, Visible Notation. Please specify	Not answered.
Liner Thickness (mil)	Not answered.
HDPE (Liner Type)	Not answered.
PVC (Liner Type)	Not answered.
Other, Liner Type. Please specify (Variance Required)	Not answered.

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

QUESTIONS, Page 2

Action 142283

**QUESTIONS** (continued) Operator: OGRID: HILCORP ENERGY COMPANY 372171 1111 Travis Street Action Number: Houston, TX 77002 142283 Action Type: [C-144] Legacy Below Grade Tank Plan (C-144LB)

QUESTIONS

...

Fencing	
Subsection D of 19.15.17.11 NMAC (Applies to permanent pits, temporary pits, and below-grade tank	s)
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)	Not answered.
Four foot height, four strands of barbed wire evenly spaced between one and four feet	Not answered.
Alternate, Fencing. Please specify (Variance Required)	4' hogwire

Netting	
Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)	
Screen	Not answered.
Netting	Not answered.
Other, Netting. Please specify (Variance May Be Needed)	expanded metal or solid vaulted top

Signs	
Subsection C of 19.15.17.11 NMAC (If there are multiple operators at a site, each operator must have	e their own sign in compliance with Subsection C of 19.15.17.11 NMAC.)
12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers	Not answered.
Signed in compliance with 19.15.16.8 NMAC	True

Variances and Exceptions	
Justifications and/or demonstrations ofequivalency are required. Please refer to 19.15.17 NMAC for Please check a box if one or more of the following is requested, if not leave blank:	guidance.
Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.	Not answered.
Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval	Not answered.

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

QUESTIONS, Page 3

Action 142283

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**QUESTIONS** (continued) HILCORP ENERGY COMPANY

OGRID:	
	372171
Action N	umber:
	142283
Action Ty	/ре:
	[C-144] Legacy Below Grade Tank Plan (C-144LB)

#### QUESTIONS

# Siting Criteria (regarding permitting)

1111 Travis Street Houston, TX 77002

19.15.17.10 NMAC

Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Siting criteria does not apply to drying pads or above-grade tanks.

Siting Criteria, General Siting						
No						
True						
Not answered.						
Not answered.						

Siting Criteria, Below Grade Tanks						
Within 100 feet of a continuously flowing watercourse, significant watercourse, lakebed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark)	Νο					
Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption	No					

Proposed Closure Method						
Below-grade Tank	Below Grade Tank - (BGT)					
Waste Excavation and Removal	True					
Alternate Closure Method. Please specify (Variance Required)	Not answered.					
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Operator Application Certification						
Registered / Signature Date	11/14/2008					

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

#### ACKNOWLEDGMENTS

Operator:	OGRID:			
HILCORP ENERGY COMPANY	372171			
1111 Travis Street	Action Number:			
Houston, TX 77002	142283			
	Action Type:			
	[C-144] Legacy Below Grade Tank Plan (C-144LB)			

#### ACKNOWLEDGMENTS

V	I acknowledge that I have received prior approval from the OCD to submit documentation of a legacy below-grade tank on behalf of my operator.
	I hereby certify that the information submitted with this documentation is true, accurate and complete to the best of my knowledge and belief.

ACKNOWLEDGMENTS

Action 142283

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

CONDITIONS

Operator:	OGRID:			
HILCORP ENERGY COMPANY	372171			
1111 Travis Street	Action Number:			
Houston, TX 77002	142283			
	Action Type:			
	[C-144] Legacy Below Grade Tank Plan (C-144LB)			

#### CONDITIONS

Created By	Condition	Condition Date
jburdine	None	9/12/2022

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Action 142283



March 8, 2023

**New Mexico Oil Conservation Division** New Mexico Energy, Minerals, and Natural Resources Department 1000 Rio Brazos Road Aztec, New Mexico 87410

## Re: Preliminary Site Characterization Assessment Little Stinker #1M San Juan County, New Mexico Hilcorp Energy Company

To Whom it May Concern:

Ensolum, LLC (Ensolum), on behalf of Hilcorp Energy Company (Hilcorp), presents this *Preliminary Site Characterization Assessment* associated with the closure of the the below grade tank (BGT) located on the Little Stinker #1M natural gas production well pad (Site). The Site is located in Section 11, Township 30 North, Range 12 West in San Juan County, New Mexico.

# SITE CHARACTERIZATION

The Site is located approximately 2 miles west of Aztec, New Mexico, on land managed by the United States Bureau of Land Management (BLM). As part of the site characterization, local geology/hydrogeology and nearby sensitive receptors were assessed in accordance with Title 19, Chapter 15, Part 17, Section 13 of the New Mexico Administrative Code (NMAC). This information is further discussed below.

#### **Geology and Hydrogeology**

Based on United States Geological Survey (USGS) geologic mapping, the Site is located within the Tertiary Nacimiento Formation. In the report titled "Hydrogeology and Water Resources of San Juan Basin, New Mexico" (Stone, et. al., 1983), the Nacimiento Formation contains interbedded black carbonaceous mudstones and white, coarse-grained sandstones and ranges in thickness from 418 to 2,232 feet. Groundwater is generally located within the sandstone units of the formation, with hydrogeologic characteristics highly variable depending on the location within the basin.

#### **Potential Sensitive Receptors**

Potential nearby receptors were assessed through desktop reviews of USGS topographic maps, Federal Emergency Management Administration (FEMA) Geographic Information System (GIS) maps, New Mexico Office of the State Engineer (NMOSE) database, aerial photographs, and site-specific observations.

Based on the New Mexico Oil Conservation Division (NMOCD) approved BGT permit (NMOCD Form C-144, approved on September 12, 2022), groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs). The nearest fresh-water well to the Site is NMOSE permitted domestic

Hilcorp Energy Company Little Stinker #1M March 8, 2023

# E ENSOLUM

water well SJ-00142, located approximately 2,300 feet to the south and approximately 98 feet lower in elevation (Appendix A). The recorded depth to water on the NMOSE database is 122 feet bgs.

The nearest significant watercourse to the Site is a second order tributary to Barton Wash, located approximately 930 feet southwest of the Site. The Site is greater than 200 feet from any lakebed, sinkhole, or playa lake, and greater than 300 feet from any wetland (Figure 1). No wellhead protection areas, springs, or domestic/stock wells are located within 1000 feet from the Site (Figure 1). The Site is not within a 100-year floodplain, overlying a subsurface mine, or located within an area underlain by unstable geology (area designated as low potential karst by the BLM). Schools, hospitals, institutions, churches, and/or other occupied permanent residence or structures are not located within 300 feet of the Site.

# SITE CLOSURE CRITERIA

Based on the information presented above and in accordance with the Table 1, Closure Criteria for Soils Beneath Below-Grade Tanks, Drying Pads Associated with Closed-Loop Systems, and Pits where Contents are Removed (19.15.17.13 NMAC), the following closure criteria should be applied to the Site:

- Chloride: 20,000 milligrams per kilogram (mg/kg)
- Total Petroleum Hydrocarbons (TPH) as a combination of gasoline range organics (GRO), diesel range organics (DRO), and motor oil range organics (MRO): 2,500 mg/kg
- TPH-GRO + TPH-DRO: 1,000 mg/kg
- A combination of benzene, toluene, ethylbenzene, and xylenes (BTEX): 50 mg/kg
- Benzene: 10 mg/kg

We appreciate the opportunity to provide this report to the NMOCD. If you should have any questions or comments regarding this document, please contact the undersigned.

Sincerely, Ensolum, LLC

Devin Hencmann Senior Managing Geologist (970) 403-6023 dhencmann@ensolum.com

Attachments:

Figure 1: Site Characterization

Appendix A: NMOSE Point of Diversion Summary, Well SJ-00142

Received by OCD: 4/21/2023 9:49:57 AM





# New Mexico Office of the State Engineer **Point of Diversion Summary**

		Casing Perform	ations:		<b>То</b> 16	р I 2	Bottom 192	<b>1</b> 2				
					16	2	192	2 San	dstone/Gra	avel	/Conglomerate	
	Wate	er Bearing Stratifica	tions:		То	n I	Bottom	Des	cription			
Casing Siz	asing Size: 5.30 Depth Well:				192 feet			De	122 feet			
Pump Type:			Pipe Discharge Size:					Es	timated Yield:	10 GPM		
Log File D	ate:	04/05/1977	PCW I	Rev D	ate:					So	urce:	Artesian
Drill Start	Date:	03/25/1977	Drill F	inish	Dat	e:	0.	3/30/19	977	Plı	ig Date:	
Driller Na	me:	WILLIAM HOOD										
<b>Driller License:</b> 717			Driller	<b>Driller Company:</b> WESTERN WATER WELLS								
	SJ 0	0142	2	4	4	11	30N	12W	2270	72	4079533* 🌍	
Well Tag	POD	Number	Q64	Q16	Q4	Sec	Tws	Rng		Х	Y	
	(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest) (					(NAD8	(NAD83 UTM in meters)					

#### \*UTM location was derived from PLSS - see Help

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

3/8/23 2:34 PM

POINT OF DIVERSION SUMMARY

# Little Stinker #1M

Pit Closure Pictures.

# Little Stinker #1M 04/19/23





# View Looking North

View Looking South

**Released to Imaging:** 4/24/2023 4:13:18 PM



# View Looking East Released to Imaging: 4/24/2023 4:13:18 PM

View Looking West

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV 1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Operator:	OGRID:		
HILCORP ENERGY COMPANY	372171		
1111 Travis Street	Action Number:		
Houston, TX 77002	209657		
	Action Type:		
	[C-144] Below Grade Tank Plan (C-144B)		

#### CONDITIONS

Created By Condition

Because release confirmed and variance requested see incident #NSCW2311457655. Operator must fill out C-141 for closure. 4/24/2023 scwells

CONDITIONS

Action 209657

Condition Date