District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, 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

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.

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

4	1	06

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

Type of action:  Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method  Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method  Modification to an existing permit  Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system, below-grade tank, or proposed alternative method
Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request
Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.
1. Operator:Huntington Energy, L.L.C OGRID #:208706
Address:908 N.W. 71 <sup>st</sup> St., Oklahoma City, OK 73116
Facility or well name:Ute Mountain Ute #105
API Number:30-045-35020 OCD Permit Number:
U/L or Qtr/QtrJ_ Section22 Township32N Range14W County: _San Juan
Center of Proposed Design: Latitude36.97087 Longitude108.29515 NAD: □1927 ☒ 1983
Surface Owner:   Federal   State   Private   Tribal Trust or Indian Allotment
2.
Pit: Subsection F or G of 19.15.17.11 NMAC
Temporary: Drilling Workover
Permanent Emergency Cavitation P&A
Lined Unlined Liner type: Thicknessmil LLDPE HDPE PVC Other
String-Reinforced
Liner Seams: Welded Factory Other Volume: bbl Dimensions: L x W x D
Totalia. — Volume. — Volum
Closed-loop System: Subsection H of 19.15.17.11 NMAC
Type of Operation: P&A Drilling a new well Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)
☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other
☐ Lined ☐ Unlined Liner type: Thickness mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other
Liner Seams: Welded Factory Other Other
N HEOL 21
intent)  Drying Pad
Volume:120_bbl Type of fluid:Produced Water
Volume:120_bbl Type of fluid:Produced Water  Tank Construction material:Metal  Secondary containment with leak detection No. Visible sidewalls liner 6-inch lift and automatic overflow shut-off
Secondary containment with leak detection  Wisible sidewalls, liner, 6-inch lift and automatic overflow shut-off
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other
Liner type: Thickness60mil
5.
Alternative Method:
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

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, institution or church)	hospital,
Four foot height, four strands of barbed wire evenly spaced between one and four feet	
☐ Alternate. Please specify4' hogwire fence with a single strand of barbed wire on top	
Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)  Screen  Netting  Other  Monthly inspections (If netting or screening is not physically feasible)	
8.	
Signs: Subsection C of 19.15.17.11 NMAC	
☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers	
⊠ Signed in compliance with 19.15.3.103 NMAC	
Administrative Approvals and Exceptions:  Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.  Please check a box if one or more of the following is requested, if not leave blank:  Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau consideration of approval.  Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	office for
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 accept material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of a Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying above-grade tanks associated with a closed-loop system.	priate district pproval.
Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.  - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ⊠ No
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ⊠ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  (Applies to temporary, emergency, or cavitation pits and below-grade tanks)  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ⊠ No ☐ NA
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  (Applies to permanent pits)  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No ☑ NA
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.  - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ⊠ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended.  - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ⊠ No
Within 500 feet of a wetland.  - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ⊠ No
Within the area overlying a subsurface mine.  - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☑ No
<ul> <li>Within an unstable area.</li> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mineral Resources; USGS; NM Geological Society; Topographic map</li> </ul>	☐ Yes ☒ No
Within a 100-year floodplain FEMA map	☐ Yes ⊠ No

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

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.) Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if facilities are required.	D NMAC) more than two
Disposal Facility Name: Disposal Facility Permit Number:	
Disposal Facility Name: Disposal Facility Permit Number:	
Will any of the proposed closed-loop system operations and associated activities occur on or in areas that will not be used for future ser   Yes (If yes, please provide the information below)  No	
Required for impacted areas which will not be used for future service and operations:  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	С
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC  Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable sou provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate dist considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Just demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.	trict office or may be
Ground water is less than 50 feet below the bottom of the buried waste.  - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is between 50 and 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is more than 100 feet below the bottom of the buried waste.  - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	Yes No
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).  - Topographic map; Visual inspection (certification) of the proposed site	Yes No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No
Within 500 horizontal feet of a 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.  - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended.  - Written confirmation or verification from the municipality; Written approval obtained from the municipality	Yes No
Within 500 feet of a wetland US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	Yes No
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; Topographic map	☐ 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 puby 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 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 Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC 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	.15.17.11 NMAC
Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC	

•
of Derator 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.
Jame (Print):Catherine Smith Title:Regulatory
Date:
-mail address:csmith@huntingtonenergy.com Telephone:405-840-9876
DCD Approval: Permit Application (including closure plan) Closure Plan (only) COD Conditions (see attachment)
OCD Representative Signature: Brund Sill Approval Date: 10-7-09  October Permit Number:
Citle: Fruiro (5)pec OCD Permit Number:
Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this ection of the form until an approved closure plan has been obtained and the closure activities have been completed.
Closure Completion Date:
Discretion Method:  Waste Excavation and Removal On-Site Closure Method Alternative Closure Method Waste Removal (Closed-loop systems only)  If different from approved plan, please explain.
3. Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: nstructions: Please indentify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than wo facilities were utilized.
Disposal Facility Name: Disposal Facility Permit Number:
Disposal Facility Name: Disposal Facility Permit Number:
Vere the closed-loop system operations and associated activities performed on or in areas that will not be used for future service and operations?  Yes (If yes, please demonstrate compliance to the items below) No
lequired for impacted areas which will not be used for future service and operations:  Site Reclamation (Photo Documentation)  Soil Backfilling and Cover Installation  Re-vegetation Application Rates and Seeding Technique
Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.  Proof of Closure Notice (surface owner and division)  Proof of Deed Notice (required for on-site closure)  Plot Plan (for on-site closures and temporary pits)  Confirmation Sampling Analytical Results (if applicable)  Waste Material Sampling Analytical Results (required for on-site closure)  Disposal Facility Name and Permit Number  Soil Backfilling and Cover Installation  Re-vegetation Application Rates and Seeding Technique  Site Reclamation (Photo Documentation)  On-site Closure Location: Latitude
s. Operator Closure Certification:
hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and elief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.
Jame (Print):
ignature:Date:
-mail address: Telephone:

DISTŘICT I P.O. Box 1980, Hobbs, N.M BB241-1980

#### State of New Mexico Energy, Minerals & Natural Resources Department

Form C-1 Revised October 12, 20 Instructions on be

1301 W. Grand Avenue, Artesia, N.M. 88210

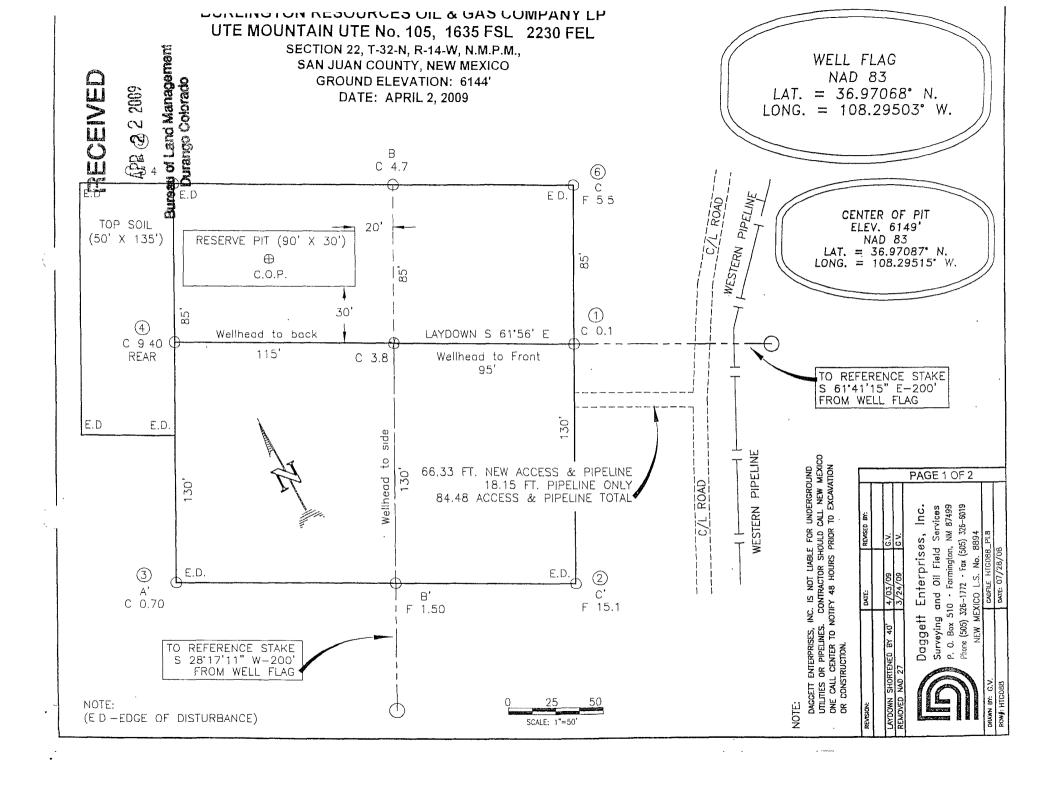
OIL CONSERVATION DIVISION 1220 South St. Francis Dr.

propriate District Off. State Lease - 4 Cop Fee Lease - 3 Cop

#### 1000 Rio Brazos Rd., Aztec, N.M. 87410 APR 2 2 2009 Santa Fe, NM 87504-2088 DISTRICT IV ☐ AMENDED REPOR 1220 South St. Francis Dr., Santa Fe, NM 87505 Buyes of Land Monscoment WELL LOCATION AND ACREAGE DEDICATION PRAT <sup>1</sup>API Number \*Pool Code a Pool Name Creek - Dakota 715 99 Barker 20 Well Number Property Code <sup>b</sup>Property Name 18725 UTE MOUNTAIN UTE 105 OGRID No. \*Operator Name Elevation BURLINGTON RESOURCES OIL & GAS COMPANY LP 14538 5144 <sup>10</sup> Surface Location Feet from the North/South line UL or lot no. Section Township Range Lot. Idn Feet from the East/West line County 22 32-N 14-W 1635 SOUTH 2230 **EAST** SAN JUAN <sup>11</sup> Bottom Hole Location If Different From Surface Lot Idn Feet from the North/South line UL or lot no. Section Township Range Feet from the East/West line County 14 Consolidation Code <sup>12</sup> Dedicated Acres 15 Joint or Infill 15 Order No. SE-160 NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION 16 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a works interest or unleased mineral interest in the land mointing the proposed bottom hale location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the 15/2009 Catherine Smith FD. 3 1/4" AC. 1986 B.L.M. SURVEYOR CERTIFICATION SURFACE LOCATION ш 00-01-48 E 640.03' (M) I hereby vertify that the well location shown on this plat LAT: 36.97068" N. (NAD 83) was plotted from field notes of actual surveys made by LONG: 108.29503" W. (NAD 83) me or under my supervision, and that the same is true 2640.03 and correct to the best of my knowledge and belief. 2230 Date of Surv RU Z 635 SET PIN & CAP W/ LS. No. 8894 POSSIGNAL WITNESS CORNER FD. 3 1/4" AC. 1986 B.L.M. N 89-59-55 W FD. 3 1/4" AC. Certificate Number 2639.61' (M)

(33' SOUTH)

1986 B.L.M.



# **BURLINGTON RESOURCES OIL & GAS COMPANY LP** UTE MOUNTAIN UTE No. 105, 1635 FSL 2230 FEL

SECTION 22, T-32-N, R-14-W, N.M.P.M. SAN JUAN COUNTY, NEW MEXICO **GROUND ELEVATION: 6144' DATE: APRIL 2, 2009** 

Bureau of Land Management Durango Colorado 2 2 2009

EXISTING DISTURBED AREA = 0.00 ACRES

NEW PIPELINE AREA  $184' \times 40' = 0.17$  ACRES (84.48' TAKE OFF TO E.O.L./99.72' E.O.L TO WELL FLAG) SOIL STORAGE = 0.16 ACRÉS (SPOIL = 0.00/TOP SOIL = 0.16)

TOTAL PERMITTED AREA = 1.37 ACRES

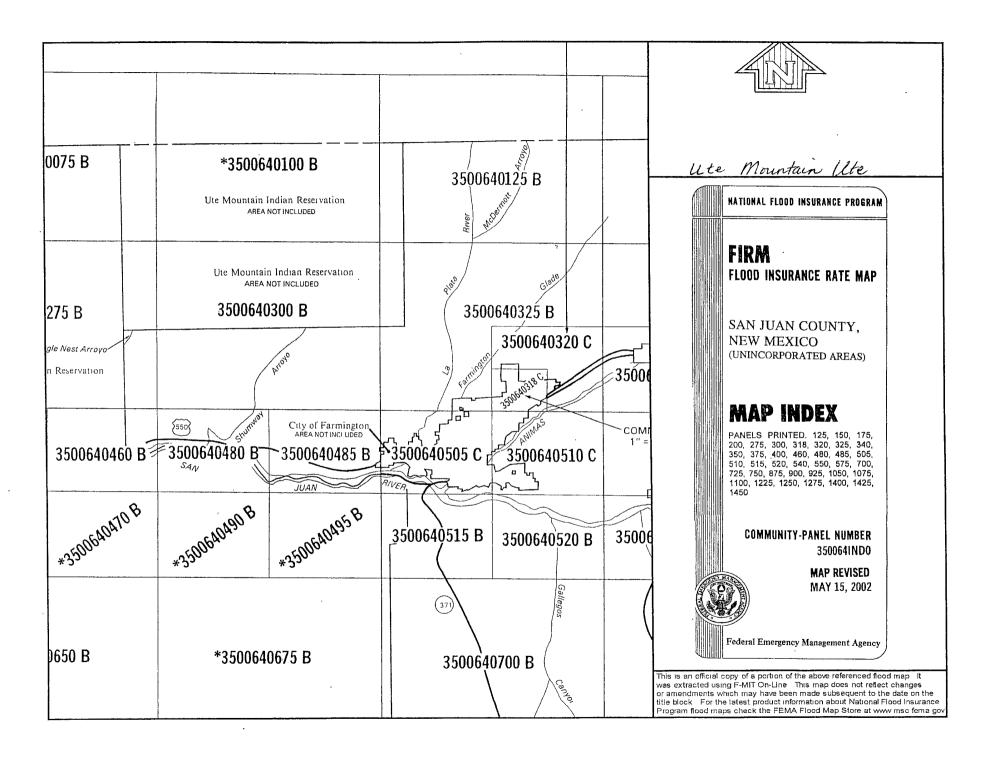
NEW DISTURBED AREA = 1.04 ACRES PERMITTED AREA = 1.04 ACRES

NOTE:

- 1) ESTIMATED VOLUMES CALCULATED BY AVERAGE END AREA AT CROSS SECTION SHOWN.
- 2) RESERVE PIT DIKE: TO BE 6' ABOVE DEEP SIDE (OVERFLOW 3' WIDE AND 1' ABOVE SHALLOW SIDE). BLOW PIT: OVERFLOW PIPÈ HALFWAY BETWEEN TOP AND BOTTOM AND TO EXTEND OVER PLASTIC LINER AND INTO BLOW PIT.
- 3) DAGGETT ENTERPRISES, INC. IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PÍPELINES. CONTRACTOR SHOULD CALL UTILITY NOTIFICATION CENTER OF NEW MEXICO TO BE NOTIFIED 48 HOURS PRIOR TO EXCAVATION OR CONSTRUCTION.

WELL FLAG NAD 83 LAT. =  $36.97068^{\circ}$  N. LONG. = 108.29503° W.

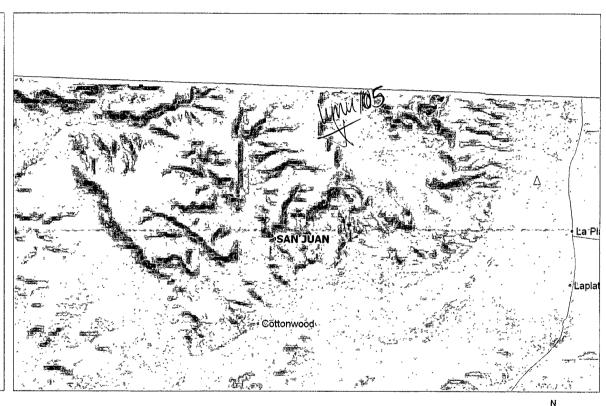
	PAGE 2 OF 2						
REVISED BY:	S.V	6.٧	es, Inc. 1 Services 1, NM 87499 05) 326-6019 8894	_PadNotes	3		
DATE	4/03/09	3/24/09	Daggett Enterprises, Inc. Surveying and Oil Field Services P O. Box 510 · Farmington, NM B7499 Phone (505) 326–1772 · Fox (505) 326–6019 NEW MEXICO L.S No. 8894	CADFILE: HTG088_PadNotes	DATE. 10/28/08		
	40,		Daggett Surveying P O. Box 5 Phone (505) 3				
REVISION.	LAYDOWN SHORTENED 40'	REMOVED NAD 27		DRAWN ST: G.V	ROW#: HTG088		

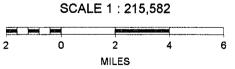


No Information Available APPROXIMATE SCALE 2000 FEET NATIONAL FLOOD INSURANCE PROGRAM FIRM FLOOD INSURANCE RATE MAP SAN JUAN COUNTY, NEW MEXICO UNINCORPORATED AREAS PANEL 300 OF 1450 (SEE MAP INDEX FOR PANELS NOT PRINTED) PANEL LOCATION COMMUNITY-PANEL NUMBER 350064 0300 B **EFFECTIVE DATE:** Ute Mountain **AUGUST 4, 1988** Indian Reservation (AREA NOT INCLUDED) Federal Emergency Management Agency This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www msc fema gov

# UMU 105 Mines, Mills, and Quarries Web Map

	- Major Roads			
	Interstate Highways			
+-+-+	Railways			
Transportation				
<b>®</b>	Cities (2000 Census)			
Population				
€	Uranium Mills			
*	Uranium Mines			
2	Smelters & Refinery Ops.			
	Potash Mines & Refineries			
	Metal Mines and Mill Concentrate			
▼	Industrial Minerals Mills			
*	Industrial Minerals Mines			
•	Coal Mines			
Δ	Aggregate & Stone Mines			
Mines, Mills 8	& Quarries Commodity Groups			









# New Mexico Office of the State Engineer Wells with Well Log Information

No wells found.

Basin/County Search:

Basin: San Juan

County: San Juan

Subbasin: La Plata

PLSS Search:

Township: 32N

Range: 14W

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.



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

No records found.

Basin/County Search:

Basin: San Juan

County: San Juan

Subbasin: La Plata

PLSS Search:

Township: 32N

Range: 14W



# New Mexico Office of the State Engineer

# **Point of Diversion by Location**

(with Owner Information)

No PODs found.

POD Search:

POD Basin: San Juan

Basin/County Search:

Basin: San Juan

County: San Juan

Subbasin: La Plata

PLSS Search:

Township: 32N

Range: 14W

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.

# **UMU 105**

Siting Criteria Compliance Demonstration & Hydro Geologic Analysis

The subject well is not located in an unstable area. Visual inspection has been performed: location is not within 300' of flowing watercourse or 200' from any other water course or lake bed; not within 300' of any permanent residence, school, or institution; not within 500' of any private water well or spring. The topographic map confirms visual inspection of water course. FEMA Map and iWaters search do not include any information regarding the Ute Mountain Ute lands.

# Hydrogeological Report for Ute Mountain Ute #105

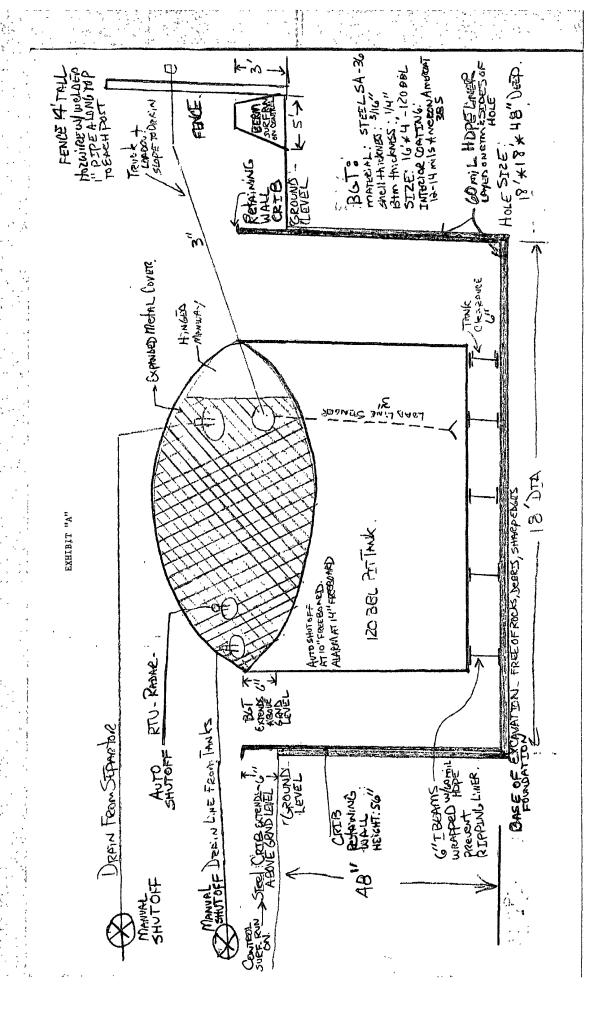
## Regional Hydrogeolocial Context:

The San Jose Formation of Eocene age occurs in New Mexico and Colorado, and its outcrop forms the land surface over much of the eastern half of the central basin. It overlies the Nacimiento Formation in the area generally south of the Colorado-New Mexico State line and overlies the Animas Formation in the area generally north of the State line.

The San Jose Formation was deposited in various fluvial-type environments. In general, the unit consists of an interbedded sequence of sandstone, siltstone, and variegated shale. Thickness of the San Jose Formation generally increases from west to east (200 feet in the west and south to almost 2,700 feet in the center of the structural basin). Ground water is associated with alluvial and fluvial sandstone aquifers. Thus, the occurrence of ground water is mainly controlled by the distribution of sandstone in the formation. The distribution of such sandstone is the result of original depositional extent plus any post-depositional modifications, namely erosion and structural deformation. Transmissivity data for San Jose Formation are minimal. Values of 40 and 120 feet squared per day were determined from two aquifer tests (Stone et al., 1983, table 5). The reported or measured discharge from 46 water wells completed in San Jose Formation ranges from 0.15 to 61 gallons per minute and the median is 5 gallons per minute. Most of the wells provide water for livestock and domestic use.

The San Jose Formation is a very suitable unit for recharge from precipitation because soils that form on the unit are sandy and highly permeable and therefore readily absorb precipitation. However, low annual precipitation, relatively high transpiration and evaporation rates, and deep dissection of the San Jose Formation by the San Juan River and its tributaries all tend to reduce the effective recharge to the unit.

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



LOMIL HOPE



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

TENTED PROPERTY	TENT METHOD	PRECLIENCY		. 14	ALUE		
Product Gode			HDE 0304000	HDE	MDE	HIDE	FILM
Тикіожая (инжици क्षश्तक्षक) मार्थ (инп)	ASTM D 5189	Every roll	30 (0.78)	40 (1.00)	80 (1.50)	BO (2.00)	7 THE !!
Lowest Individual resident (-10%)			27 (0.69)	36 (0.91)	54 (1.40)	72 (11.800)	i water
<b>Denery, р/ст</b>	ASTM D 1505	200,000 lb	0.84	0.94	0.94	(7), (9)×(	Silitaria
Tenalle Properties (each direction)	ASTM D 6690, Types IV	20,000 lb	·   · · · · · · · · · · · · · · · · · ·		<del> </del>	<del></del>	and section is seen to see the section of the secti
Strength at Break, lixter (Nimm)	Dumbell, 2 lpm		114 (20)	152 (27)	228 (40)	30-4 (53)	- काम्बर स्वार
Spangin at Yink!, Indin (Nimm)			89 (11)	84 (15)	126 (22)	158 (29)	F SHAME CAN
Elongation at Break, %	G.L. 2.0 in (51 mm)		700	700	700	71000	The view
Elongation at Yield, 95	G.L. 1,3 in (33 mm)		12	12	12	17	i wit
Tean Pointistence, & (N)	ASTM D 1004	45,000 lb	21 (93)	28 (125)	<b>42 (187)</b>	55 (249)	Pay press
Puncture Remediance, (b (N)	ASTM D 4833	45,000 lb	5-6 (240)	72 (3220)	106 (460)	144 (840)	150 (157
Certoon Black Content, W	ASTM D 16031/4218	20,000 b	2.0	20	20	2.0	hamilton series
Cerbon Black Dispension	ASTM D 5595	45,000 b	+ Note 1	+ Note 1	+ Note 1	+ Nege 1	· 1255; 1
Notared Constant Tensile Load, hr	ASTM D SSB7, Appendix	200,000 %	300	300	300	500	All Colors
REFERENCE PROPERTY	FREQUENCY		BULAY JANINGH				
Эхойжите влашавоп Пµте min	ASTM D 3895, 200° C. C <sub>2</sub> , 1 360	200,000 to	>100	>100	>100	>100	ان ماراند ده سعن ادمانه مان سه راد هسار ده سعن ادمانه
रेज़ी L <del>angth<sup>(1)</sup> (इट्टाम्क्फ्फाब्रा</del> क), री (ता)			1,120 (341)	877 (2 <del>85</del> )	580 (171)	4360 (1981)	Park (Mill)
toli Wieth <sup>(1)</sup> , f. (m)			22.5 (6.9)	22.5 (5.9)	22.5 (E.9)	325 (8.9)	Salle (Birth)
ROS Ares, ff: (m²)			25,200 (2,341)	18,575 (1,819)	12,500	8,675 (808)	The River

#### BUYER

- \*Note1. Dispersion only appears to near spherost aggromerates. 9 of 10 views shall be Ontopory 1 or 2. No more than 1 view from Category 3.
- GSG HD is available in role weighing about 3,900 lb (1,769 kg).
- All GSS peomembranes have demonstrated stability of 22% when hazind with ASTM D 1204 and LTB of <77° C when tested with ASTM D 746.</li>
- ». This is sent and writte here a formation of  $\pm$  1%.
- PMackford

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

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

#### General Plan:

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

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

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

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

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

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

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

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

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

#### General Plan:

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

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

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

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

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

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

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

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

### Closure Timelines:

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

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

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

### Closure Method & Procedures:

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

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

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