District I

1625 N French Dr., Hobbs, NM 88240

District II

1301 W. Grand Ave., Artesia, NM 88210

District III

1000 Rio Brazos Rd., 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

July 21, 2008 For temporary pits, closed-loop sytems, and below-grade

Form C-144

tanks, submit to the appropriate NMOCD District Office

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

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

Type of action: X 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 hability should operations result in pollution of surface water, ground water or the environment Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances
Operator: Burlington Resources Oil & Gas Company, LP OGRID#: 14538
Address: PO Box 4289, Farmington, NM 87499
Facility or well name: Huerfanito Unit No. 098S API Number: 30-045-34572 OCD Permit Number:
U/L or Qtr/Qtr: A (NE/NE) Section: 35 Township: 27N Range: 9W County: San Juan Center of Proposed Design: Latitude: 36.535718'N Longitude: 107.751550'W NAD: 1927 X 1983 Surface Owner: X Federal State Private Tribal Trust or Indian Allotment
Pit: Subsection F or G of 19.15.17.11 NMAC Temporary: Drilling Workover Permanent Emergency Cavitation P&A Lined Unlined Liner type: Thickness mil X LLDPE HDPE PVC Other String-Reinforced Liner Seams: Welded Factory Other Volume: bbl Dimensions L x W x D
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 PVD Other Liner Seams: Welded Factory Other
Alternative Method: Subsection I of 19.15.17.11 NMAC

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 pit, 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 X Alternate Please specify Please see Design Plan			
Netting: Subsection E of 19 15.17 11 NMAC (Applies to permanent pits and permanent open top tanks) X 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 X 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 of 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.			
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	XNo	
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	Yes	XNo	
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 puts and below-grade tanks)	∏Yes ∏NA	XNo	
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (Applied to permanent pits)	Yes XNA	No	
 Visual inspection (certification) of the proposed site; Aerial photo; Satellite image Within 500 horizonal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. 	Yes	XNo	
- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site. Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended - Written confirmation or verification from the municipality; Written approval obtained from the municipality			
 Within 500 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site Within the area overlying a subsurface mine. 	☐Yes ☐Yes	X No	
 Written confirmation or verification or map from the NM EMNRD - Mining and Mineral Division Within an unstable area. 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	XNo	

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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.			
X 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			
Tryatogeologic Data (Temporary and Emergency Fits) - based upon the requirements of Faragraph (2) of Subsection B of 19.15.17.9 X Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17 10 NMAC			
X Design Plan - based upon the appropriate requirements of 19.15 17.11 NMAC			
X Operating and Maintenance Plan - based upon the appropriate requirements of 19 15.17.12 NMAC			
X 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			
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			
Previously Approved Operating and Maintenance Plan API			
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 (I) 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 H2S, 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 X Below-grade Tank Closed-loop System			
Type: Drilling Workover Emergency Cavitation P&A Permanent Pit X Below-grade Tank Closed-loop System Alternative			
Proposed Closure Method: X Waste Excavation and Removal (Below Grade Tank)			
Waste Removal (Closed-loop systems only)			
On-site Closure Method (only for temporary pits and closed-loop systems)			
In-place Burial On-site Trench			
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. X 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			
Confirmation Sampling Flat (if applicable) - based upon the appropriate requirements of Subsection F of 19.13.17.13 NMAC			
X Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC			
X Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC			
X Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC			

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Instructions: Please identify the facility or facilities for the disposa	Above Ground Steel Tanks or Haul-off Bins Only: (19 15.17.13 D NMAC) all of liquids, drilling fluids and drill cuttings. Use attachment if more than two	facilities		
are required Disposal Facility Nama	Disposal Facility Dannie #			
Disposal Facility Name.				
Disposal Facility Name: Disposal Facility Permit #:				
Required for impacted areas which will not be used for future servi	urce and operations upon the appropriate requirements of Subsection H of 19.15 17.13 NMA irements of Subsection I of 19.15.17 13 NMAC	AC		
	- in the closure plan Recommendations of acceptable source material are provided bei opriate district office or may be considered an exception which must be submitted to th			
Ground water is less than 50 feet below the bottom of the bur - NM Office of the State Engineer - iWATERS database searce		Yes No		
Ground water is between 50 and 100 feet below the bottom o - NM Office of the State Engineer - tWATERS database search		Yes No		
Ground water is more than 100 feet below the bottom of the l - NM Office of the State Engineer - IWATERS database search		Yes No		
(measured from the ordinary high-water mark)	of any other significant watercourse or lakebed, sinkhole, or playa lake	Yes No		
- Topographic map; Visual inspection (certification) of the pro	•	Yes No		
 Within 300 feet from a permanent residence, school, hospital, instit Visual inspection (certification) of the proposed site, Aerial pl 	••	Yes No		
Within 500 horizontal feet of a private, domestic fresh water well o purposes, or within 1000 horizontal fee of any other fresh water ween - NM Office of the State Engineer - IWATERS database; Visual				
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				
Within 500 feet of a wetland - US Fish and Wildlife Wetland Identification map; Topograph	. , ,	Yes No		
Within the area overlying a subsurface mine Written confiramtion or verification or map from the NM EM	INRD-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 Within a 100-year floodplain FEMA map		Yes No		
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) In. by a check mark in the box, that the documents are attache	structions: Each of the following items must bee attached to the closued.	ure plan. Please indicate,		
Siting Criteria Compliance Demonstrations - based up	pon 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 17.11 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 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				
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				

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): Ethel Tally Title: Regulatory Technician			
Signature: 2thel Taller Date: 8-28-08			
e-mail address: ethel tally@conocophillips.com Telephone: (505)599-4027			
to main address.			
20 OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)			
OCD Representative Signature: Approval Date: 10-7-08			
Title: Enviro/spec OCD Permit Number:			
Title. Chops spec. Och Termit Author.			
Closure Report (required within 60 days of closure completion): Subsection K of 19 15 17 13 NMAC Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed. Closure Completion Date:			
22			
Closure Method: Waste Excavation and Removal On-site Closure Method Alternative Closure Method Waste Removal (Closed-loop systems only) If different from approved plan, please explain			
23			
Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: Instructions: Please identify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.			
Disposal Facility Name: Disposal Facility Permit Number:			
Disposal Facility Name: Disposal Facility Permit Number:			
Were 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 complitane to the items below) No			
Required for impacted areas which will not be used for future service and operations: Site Reclamation (Photo Documentation)			
Soil Backfilling and Cover Installation			
Re-vegetation Application Rates and Seeding Technique			
24 <u>Closure Report Attachment Checklist:</u> 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 (if applicable) Disposal Facility Name and Permit Number			
Soil Backfilling and Cover Installation			
Re-vegetation Application Rates and Seeding Technique			
Site Reclamation (Photo Documentation)			
On-site Closure Location: Latitude Longitude NAD 1927 1983			
Operator Closure Certification:			
I hereby certify that the information and attachments submitted with this closure report is ture, 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) Title:			
Signature. Date:			
e-mail addressTelephone			

New Mexico Office of the State Engineer POD Reports and Downloads

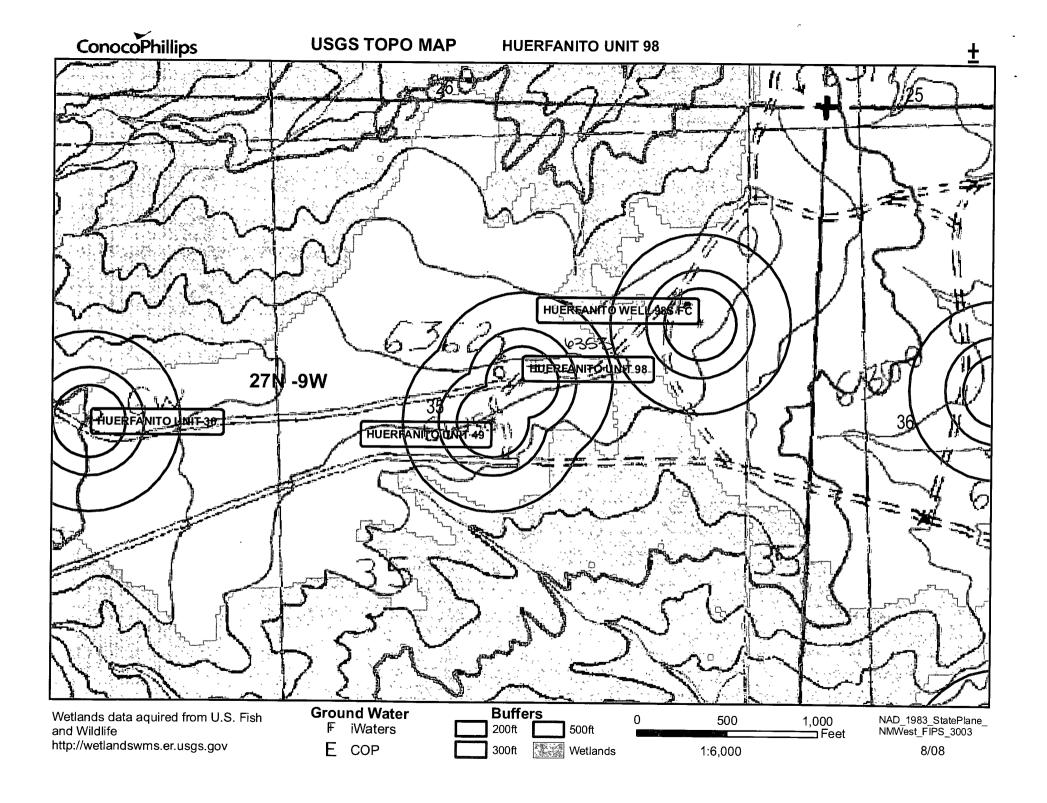
1				
Township: 27N Range: 09W Sections: 25,26,27,34,35,36				
NAD27 X: Zone: Search Radius:				
County: Basin: Number: Suffix:				
Owner Name: (First) (Last) C Non-Domestic C Domestic				
POD//Surface Data Report Avg Depth to Water Report Water Column Report				
Clear Form iWATERS Menu Help				
WATER COLUMN REPORT 08/27/2008				
(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are biggest to smallest) POD Number Tws Rng Sec q q q Zone X Y Well Water Column				

No Records found, try again

New Mexico Office of the State Engineer POD Reports and Downloads

_				
Township: 26N Range: 09W Sections: 1,2,3				
NAD27 X: Y: Zone:	Search I	Radius:		
County: Basin:	Numbe	r:	Suffix	i :
Owner Name: (First) (Last) © All	O Non-I	Oomestic	C Dome	estic
POD / Surface Data Report Avg Depti	n to Water F	Report		
Water Column Report	Section 1981	1, 98, 99, 19		
Clear Form WATERS Menu	Help	·		
WATER COLUMN REPORT (quarters are 1=NW 2=NE 3=SW 4=SE)	08/27/20	008		
(quarters are biggest to smallest)		Depth	Depth	Wat∈
POD Number Tws Rng Sec q q q Zone X	Y	Well	Water	Colum
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SJ 02962 26N 09W 01 3 2 3		1500		

Record Count: 2



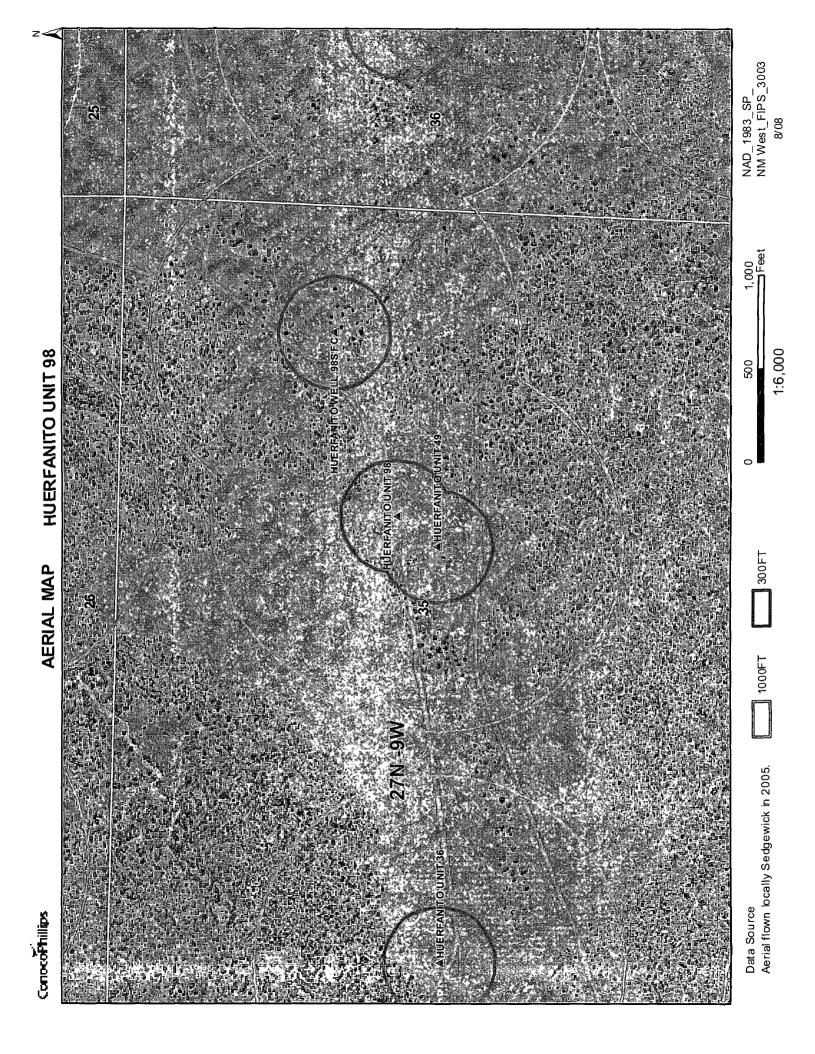
3682

DATA SHEET FOR DEEP GROUND BED CATHODIC. PROTECTION WELLS NORTHWESTERN NEW MEXICO

Operator Metidian Oil INC. Location: Unit O Sec. 35 Twp 27 Rng 09
Name of Well/Wells.or Pipeline Serviced
HUEFFANITO UNIT#98M AND HUEFFANITO UNIT #30-35
Elevation Completion Date 9/21/93 Total Depth 355 Land Type F
Casing Strings, Sizes, Types & Depths 9/16 Set 59 of 8"PVC CASING.
NO GAS, WATER, OF Boulders Were ENCOUNTERED DUTING CASING.
If Casing Strings are cemented, show amounts & types used <u>ComenTed</u>
WITH 16 SACKS.
If Cement or Bentonite Plugs have been placed, show depths & amounts used
NONE
Depths & thickness of water zones with description of water: Fresh, Clear,
Salty, Sulphur, Etc. WIT A Seep AT 105, And A Fresh WATER
Vein AT 160. A WATER SAMPLE WAS TAKEN.
Depths gas encountered: Nowe
Ground bed depth with type & amount of coke breeze used: 355 DepTW.
Used 93 SACKS OF ASBUTY 218R (4650*)
Depths anodes placed: 322, 310, 300, 283, 275, 265, 256, 220, 213, 203, 195, 185, 175, 165, + 155
Depths vent pipes placed: Surface To 355.
Vent pipe perforations: Bottom 250' DECEIVED
Remarks:
OIL CON. DIV.
\ DIST. 3

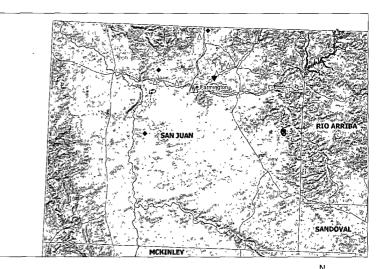
If any of the above data is unavailable, please indicate so. Copies of all logs, including Drillers Log, Water Analyses & Well Bore Schematics should be submitted when available. Unplugged abandoned wells are to be included.

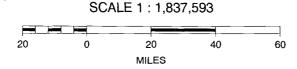
Land Type may be shown: F-Federal; I-Indian; S-State; P-Fee. If Federal or Indian, add Lease Number.



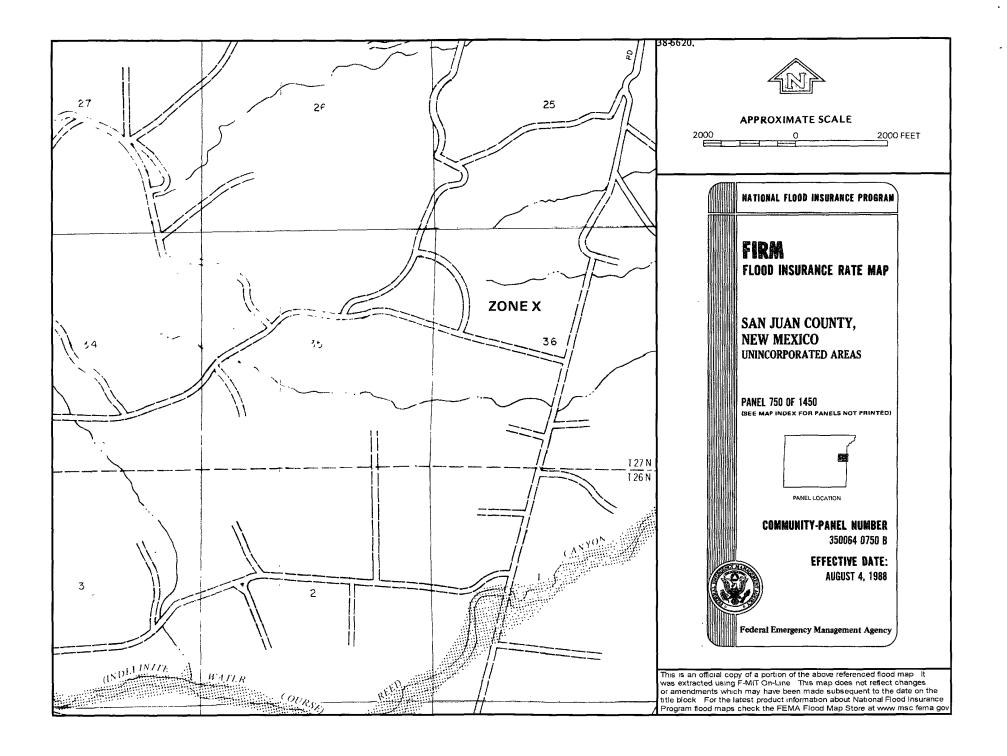
Huerfanito Unit 98S / Mines, Mills and Quarries Web Map

Mines, Mill	s & Quarries Commodity Groups
Δ	Aggregate & Stone Mines
•	Coal Mines
*	Industrial Minerals Mines
•	Industrial Minerals Mills
	Metal Mines and Mill Concentrate
	Potash Mines & Refineries
	Smelters & Refinery Ops.
*	Uranium Mines
•	Uranium Mills









Siting Criteria Compliance Demonstrations

The Huerfanito Unit 98S is not located in an unstable area. The location is not over a mine and is not on the side of a hill. The location of the excavated pit material will not be located within 300' of any continuously flowing watercourse or 200' from any other watercourse.

Hydrogeological Report for Huerfanito Unit 98S

Regional Geological context:

The Nacimiento Formation is of Paleocene age (Baltz, 1967, p. 35). It crops out in a broad band inside the southern and western margins of the central basin and in a narrow band along the west face of the Nacimiento Uplift. The Nacimiento is a nonresistant unit and typically erodes to low, rounded hills or forms badland topography.

The Nacimiento Formation occurs in approximately only the southern two-thirds of the San Juan Basin where it commformably overlies and intertongues with the Ojo Alamo Sandstone (Fassett, 1974, p. 229). The Nacimiento Formation grades laterally into the main part of the Animas Formation (Fassett and Hinds, 1971, p. 34); thus, in this area, the two formations occupy the same stratigraphic interval.

Strata of the Nacimiento Formation were deposited in lakebeds in the central basin area with lesser deposition in stream channels (Brimhall, 1973, p. 201). In general, the Nacimiento consists of drab, interbedded black and gray shale with discontinuous, white, medium- to very coarse grained arkosic sandstone (Stone e al., 1983, p.30). Stone et al. indicated that the formation may contain more sandstone than commonly reported because some investigators assume the slope-forming strata in the unit area shales, whereas in many places the strata actually are poorly consolidated sandstones. Total thickness of the Nacimiento Formation ranges from about 500 to 1,300 feet. The unit generally thickens from the basin margins toward the basin center (Steven et al., 1974). The sandstone deposits within the Nacimiento Formation are much thinner than the total thickness of the formation because their environment of deposition was localized stream channels (Brimhall, 1973, p. 201). The thickness of the combined San Jose, Animas, and Nacimiento Formations ranges from 500 to more than 3.500 feet.

Hydraulic Properties:

Reported well yields for 53 wells completed in either the Animas or Nacimiento Formations range from 2 to 90 gallons per minute and the median yield is 7.5 gallons per minute. The primary use of water from Nacimiento and Animas Formations is domestic and livestock supplies. There are no known aquifer tests for the Animas or Nacimiento Formations, but specific capacities reported for six wells range from 0.24 to 2.30 gallons per minute per foot of drawdown (Levings et al., 1990).

The Animas and Nacimiento Formations are in many ways hydrologically similar to the San Jose Formation because sands in both units produce approximately the same quantities of water. However, the greater percentage of fine materials in the Animas and Nacimiento Formations may restrict downward vertical leakage to the Ojo Alamo Sandstone or Kirtland Shale. The poorly cemented fine material is highly erodible, forms a badland terrain, and supports only spotty vegetation. These conditions are more conductive to runoff than retention of precipitation.

References:

Baltz, E.H., 1967, Stratigraphy and regional tectonic implications of part of Upper Cretaceous rocks, east-central San Juan Basin, New Mexico: USGS Professional Paper

552, 101 p.

Brimhall, R.M., 1973, Ground-water hydrology of Tertiary rocks of the San Juan Basin, New Mexico, in Fassett, J.E., ed., Cretaceous and Tertiary rocks of the Southern Colorado Plateau: Four Corners Geological Society Memoir, p. 197-207.

Fassett, J.E., 1974, Cretaceous and Tertiary rocks of the eastern San Juan Basin, New Mexico and Colorado, in Guidebook of Ghost Ranch, central-northern New Mexico: New Mexico Geological Society, 25th Field Conference, p. 225-230.

Fassett, J.E., and Hinds, J.S., 1971, Geology and fuel resources of the Fruitland Formation and Kirtland Shale of the San Juan Basin, New Mexico and Colorado: USGS Professional Paper 676, 76 p.

Levings, G.W., Craigg, S.d., Dam, W.L., Kernodle, J.M., and Thorn, C.R., 1990, Hydrogeology of the San Jose, Nacimiento, and Animas Formations in the San Juan structural basin, New Mexico, Colorado, Arizona, and Utah: USGS Hydrologic Investigations Atlas HA-720-A, 2 sheets.

Stone, W.J., Lyford, F.P., Frenzel, P.F., Mizell, N.H., and Padgett, E.T., 1983, Hydrogeology and water resources of San Juan Basin, New Mexico: New Mexico Bureau of Mines and Mineral Resources, Hydrologic Report 6.

Burlington Resources Oil & Gas Company, LP San Juan Basin Below Grade Tank Design and Construction

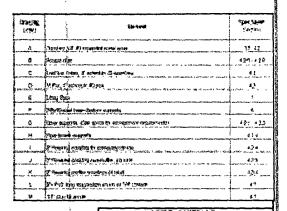
In accordance with NMAC 19.15.17 the following information describes the design and construction of below grade tanks on Burlington Resources Oil & Gas Company, LP (BR) locations. This is BR's standard procedure for all below grade tanks (BGT). A separate plan will be submitted for any BGT which does not conform to this plan.

General Plan:

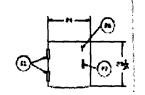
- 1. BR will design and construct a BGT to contain liquids and to prevent contamination of fresh water and protect public health and environment.
- 2. BR will use the general location sign posted on location. If no general sign is posted a separate sign at the location of the BGT will be provided.
- 3. BR shall construct fencing around the BGT using 4 foot hog wire fencing topped with two strands of barbed wire, or with a pipe top rail. A six foot chain link fence topped with three strands of barbed wire will be use if the well location is within 1000 feet of permanent residence, school, hospital, institution or church.
- 4. BR will construct a expanded metal covering on the top of the BGT
- 5. BR shall ensure that a below-grade tank is constructed of materials resistant to the below-grade tank's particular contents and resistant to damage from sunlight.
- 6. The BR below-grade tank system shall 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.
- 7. BR shall construct a below-grade tank to prevent overflow and the collection of surface water run-on.
- 8. BR will construct and use a below-grade tank that does not have double walls. The below-grade tank's side walls will be open for visual inspection for leaks, the below-grade tank's bottom is elevated a minimum of six inches above the underlying ground surface and the below-grade tank is underlain with a geomembrane liner to divert leaked liquid to a location that can be visually inspected.
- 9. BR 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.
- 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
- 11. The general specification for design and construction are attached in the BR

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Burlington Resources Oil & Gas Company, LP San Juan Basin Below Grade Tank Maintenance and Operating Plan

In accordance with Rule 19.15.17 the following information describes the operation and maintenance of Below Grade Pit (BGT) on Burlington Resources Oil & Gas Company, LP (BR) locations. This is BR's standard procedure for all BGT. A separate plan will be submitted for any BGT which does not conform to this plan.

General Plan:

- 1. BR will operate and maintain a BGT to contain liquids and solids and prevent contamination of fresh water and protect public health and environment.
- 2. BR shall not allow a below-grade tank to overflow or allow surface water run-on to enter the below-grade tank.
- 3. BR 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 overtime.
- 4. BR shall inspect the below-grade tank at least monthly and maintain a written record of each inspection for five years.
- 5. BR shall maintain adequate freeboard to prevent overtopping of the below-grade tank.

Burlington Resources Oil & Gas Company, LP San Juan Basin Below Grade Tank Closure Plan

In accordance with Rule 19.15.17.12 NMAC the following information describes the closure requirements of Below Grade Tanks (BGTs) on Burlington Resources Oil & Gas Company, LP locations hereinafter known as BR locations. This is BR's standard procedure for all BGTs. A separate plan will be submitted for any BGT which does not conform to this plan.

General Requirements:

- 1. BR shall close a below-grade tank 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.
- 2. BR shall close an existing 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. BR shall 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 C-144
- 4. BR 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.
- BR shall 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.
- 6. If there is any on-site equipment associated with a below-grade tank, then BR shall remove the equipment, unless the equipment is required for some other purpose.
- 7. BR shall test the soils beneath the below-grade tank to determine whether a release has occurred. BR 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 0.2 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 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. BR shall notify the division of its results on form C-141.

- 8. If BR or the division determines that a release has occurred, then BR shall comply with 19.15.3.116 NMAC and 19.15.1.19 NMAC, as appropriate.
- If contamination is confirmed by field sampling. BR will follow the Guidelines For Remediation Of Leaks, Spills, and Releases NMOCD August 1993 when remediating contaminants identified
- 10. 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, then BR shall backfill the excavation with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover; recontour and re-vegetate the site.
- 11. Notice of Closure will be given to the Aztec Division office between 72 hours and one week of closure 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.
- 12. 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:
 - Details on Capping and Covering, where applicable.
 - Sampling Results
- 13. 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.
- 14. BR shall 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 division-approved methods. BLM or Forest Service stipulated seed mixes will 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.

- 15. A minimum of four feet of cover shall be achieved and the cover shall include one foot of suitable material to establish vegetation at the site, or the background thickness of topsoil, whichever is greater.
- 16. The surface owner shall be notified of BR's closing of the below-grade tank as per the approved closure plan using certified mail, return receipt requested.