#### District I 1629 N French Dr., Hobbs, NM 88240

District II

1301 W Grand Ave , Artesia, NM 88210

1000 Rio Brazos Rd , Aztec, NM 87410

District IV

#### State of New Mexico Energy Minerals and Natural Resources

Department
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-144 July 21, 2008

For temporary pits, closed-loop sytems, 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

1220 S St Francis Dr., Santa Fe, NM 87505	ариорган миссы ынистопие
3038	Pit, Closed-Loop System, Below-Grade Tank, or
Prop	posed 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
	of this request does not relieve the operator of hability should operations result in pollution of surface water, ground water or the heve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances
Operator: Burlington Resources O	il & Gas Company, LP OGRID#: 14538
Address: PO Box 4289, Farmingto	on, NM 87499
Facility or well name: Quinn 337S	
API Number:	30-045-33510 OCD Permit Number
U/L or Qtr/Qtr: P(SESE) Sect	ion: 18 Township: 31N Range: 8W County: San Juan
Center of Proposed Design: Latitude	e: <b>36.892552' N</b> Longitude: <b>107.710357' W</b> NAD: <b>X</b> 1927 1983
Surface Owner: X Federal	State Private Tribal Trust or Indian Allotment
X String-Reinforced	Factory Other Volume. 7000 bbl Dimensions L 120' x W 55' x D 12'
3 Closed-loop System: Subsective of Operation. P&A	tion H of 19.15.17.11 NMAC  Drilling a new well  Workover or Drilling (Applies to activities which require prior approval to a
Lined Unlined Lin	Drilling a new well
Below-grade tank: Subsection Volume: Tank Construction material	Type of fluid:    OIL CUNS. DIV. DIST
Tank Construction material  Secondary containment with leak d  Visible sidewalls and liner  Liner Type: Thickness	etection Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off  Visible sidewalls only Other  mil HDPE PVC Other
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 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 4' 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)			
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.	Yes	XNo	
(Applies to temporary, emergency, or cavitation pits and below-grade tanks)  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	□NA		
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  (Applied to permanent pits)  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	Yes XNA	No	
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	Yes	XNo	
<ul> <li>Written confirmation or verification from the municipality; Written approval obtained from the municipality</li> <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	XNo	
Within the area overlying a subsurface mine.  - Written confirmation or verification or map from the NM EMNRD - Mining and Mineral Division	Yes	XNo	
Within an unstable area.  - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	Yes	XNo	
Within a 100-year floodplain	Yes	XNo	

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    X			
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			
12			
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			
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 X 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)			
X On-site Closure Method (only for temporary pits and closed-loop systems)			
X In-place Burial			
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			
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			

Form C-144 Oil Conservation Division Page 3 of 5

16	AL C. 10: 17: 1 W 1 MIDL O 1 (10.15.17.12.D.ND4.6)		
Instructions: Please identify the facility or facilities for the disp	ze Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13 D NMAC) osal of liquids, drilling fluids and drill cuttings. Use attachment if more than two	facilities	
are required Disposal Facility Name:	Disposal Facility Permit #:		
Disposal Facility Name: Disposal Facility Permit #.			
	nd associated activities occur on or in areas that will not be used for future s		
Re-vegetation Plan - based upon the appropriate re	ed upon the appropriate requirements of Subsection H of 19.15.17 13 NMA	c	
17			
certain siting criteria may require administrative approval from the a	iy: 19.15.17 10 NMAC ince in the closure plan Recommendations of acceptable source material are provided bel ppropriate district office or may be considered an exception which must be submitted to the fequivalency are required. Please refer to 19 15.17 10 NMAC for guidance.	e Santa Fe Environmental Bureau office	
Ground water is less than 50 feet below the bottom of the - NM Office of the State Engineer - IWATERS database so		Yes X No	
Ground water is between 50 and 100 feet below the bottom	m of the buried waste	Yes X No	
- NM Office of the State Engineer - iWATERS database se	arch; USGS; Data obtained from nearby wells	□N/A	
Ground water is more than 100 feet below the bottom of the	he buried waste.	X Yes No	
- NM Office of the State Engineer - iWATERS database se	arch; USGS, Data obtained from nearby wells	N/A	
Within 300 feet of a continuously flowing watercourse, or 200 f (measured from the ordinary high-water mark).  - Topographic map, Visual inspection (certification) of the	feet of any other significant watercourse or lakebed, sinkhole, or playa lake	Yes XNo	
	nstitution, or church in existence at the time of initial application.	Yes X No	
Visual inspection (certification) of the proposed site; Aeria	••	Yes X No	
purposes, or within 1000 horizontal fee of any other fresh water NM Office of the State Engineer - iWATERS database; V	ell or spring that less than five households use for domestic or stock watering well or spring, in existence at the time of the initial application.  Isual inspection (certification) of the proposed site nunicipal fresh water well field covered under a municipal ordinance adopted	Yes XNo	
- Written confirmation or verification from the municipality Within 500 feet of a wetland		Yes X No	
- US Fish and Wildlife Wetland Identification map; Topogr Within the area overlying a subsurface mine	raphic map; Visual inspection (certification) of the proposed site	Yes X No	
- Written confirantion or verification or map from the NM	EMNRD-Mining and Mineral Division		
Within an unstable area Engineering measures incorporated into the design; NM B	Yes X No		
Topographic map Within a 100-year floodplain FEMA map		Yes X No	
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) by a check mark in the box, that the documents are attached	Instructions: Each of the following items must bee attached to the closuched.	re plan. Please indicate,	
hand '	d 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 19.15.17.11 NMAC			
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 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			
X   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			
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			

19	
Operator Application	
	formation submitted with this application is true, accurate and complete to the best of my knowledge and belief.
Name (Print)	Kelly Jeffery Title: Regulatory Technician
Signature:	Date: 1-22-09
e-mail address:	Telephone 505-599-4025
OCD Approval:	Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)
OCD Representative S	Signature: Stundon Tough Approval Date: 2-9-09
Title: F	Signature: Structon Fought Approval Date: 2-9-09  OCD Permit Number:
11tic	och fernit Number.
21	
Closure Report (requir	red within 60 days of closure completion): Subsection K of 19 15 17 13 NMAC
Instructions Operators are	re required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure
	bmitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an speen obtained and the closure activities have been completed.
approved comme plan has	· 🗖
<u> </u>	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 ap	pproved plan, please explain.
23	
Closure Report Regardin	g Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:
	ify 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	e: Disposal Facility Permit Number.
Disposal Facility Name	
· ·	ystem operations and associated activities performed on or in areas that will not be used for future service and operations?
	demonstrate compliane to the items below)
Required for unpacted of	areas which will not be used for future service and operations.
	Photo Documentation)
Soil Backfilling an	d Cover Installation
Re-vegetation App	dication Rates and Seeding Technique
24	
	achment 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 docum	
<u> </u>	Notice (surface owner and division)
= = = = = = = = = = = = = = = = = = = =	otice (required for on-site closure)
	site closures and temporary pits)
=	mpling Analytical Results (if applicable)
<del>_</del>	Sampling Analytical Results (if applicable)
= '	Name and Permit Number
=	and Cover Installation
= -	oplication Rates and Seeding Technique
	(Photo Documentation)
On-site Closure L	Longitude: Latitude: NAD 1927 1983
25 Operator Clasura Cort	lifications
Operator Closure Cert	ottication: formation and attachments submitted with this closure report is ture, accurate and complete to the best of my knowledge and belief I also certify that
	all applicable closure requirements and conditions specified in the approved closure plan.
·	
Name (Print):	Title.
Signature.	Date <sup>.</sup>
e-mail address:	Telephone.

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

1 OD Reports and Downloads			
Township: 31N Range: 08W Sections: 7,8,18,17,19,20			
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 WATERS Menu Help			
WATER COLUMN REPORT 01/22/2009			
(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are biggest to smallest) Depth Depth Wate			
POD Number Tws Rng Sec q q q Zone X Y Well Water Colum			

No Records found, try again

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

rod Reports and Downloads
Township: 31N Range: 09W Sections: 12,13,24
NAD27 X: Y: Zone: Search Radius:
County: Basin: Number: Suffix:
Owner Name: (First) (Last) C Non-Domestic C Domestic
POD // Surface Data Report.  Water Column Report
WATER COLUMN REPORT 01/22/2009
WATER COLUMN REPORT 01/22/2009
(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

#### 30-045-24367

# DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS NORTHWESTERN NEW MEXICO (Submit 3 copies to OCD Aztec Office)

Operator MERIDIAN OIL INC.	Location: Unit F Sec. 18 Twp 31 Rng 8
Name of Well/Wells or Pipeline Servi	.ced QUINN #5A
	cps 6239w
Elevation N/A Completion Date 10/25/	86 Total Depth 500' Land Type* N/A
Casing, Sizes, Types & Depths	
If Casing is cemented, show amounts	& types usedN/A
If Cement or Bentonite Plugs have be	en placed, show depths & amounts used
Depths & thickness of water zones wi Fresh, Clear, Salty, Sulphur, Etc	th description of water when possible: 220' & 260'
Depths gas encountered: N/A	
Type & amount of coke breeze used:	2500 lbs.
Depths anodes placed: 450', 390', 380',	370', 360', 360', 320', 310', 300'
Depths vent pipes placed: 470'	IN EVENNE
Vent pipe perforations: 180'	MAY 3 R 1600
Remarks: gb #1	/ OIL CON DA
	WIST. 3 CIV.

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.

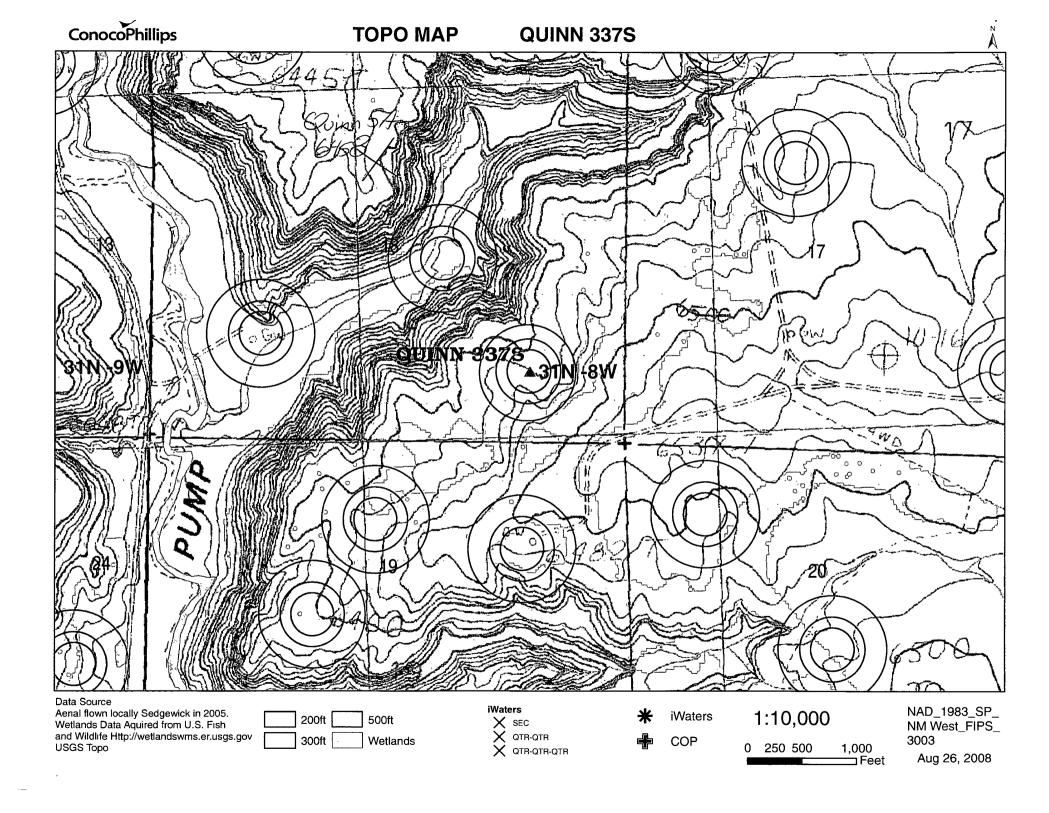
<sup>\*</sup>Land Type may be shown: F-Federal; I-Indian; S-State; P-Fee. If Federal or Indian, add Lease Number.

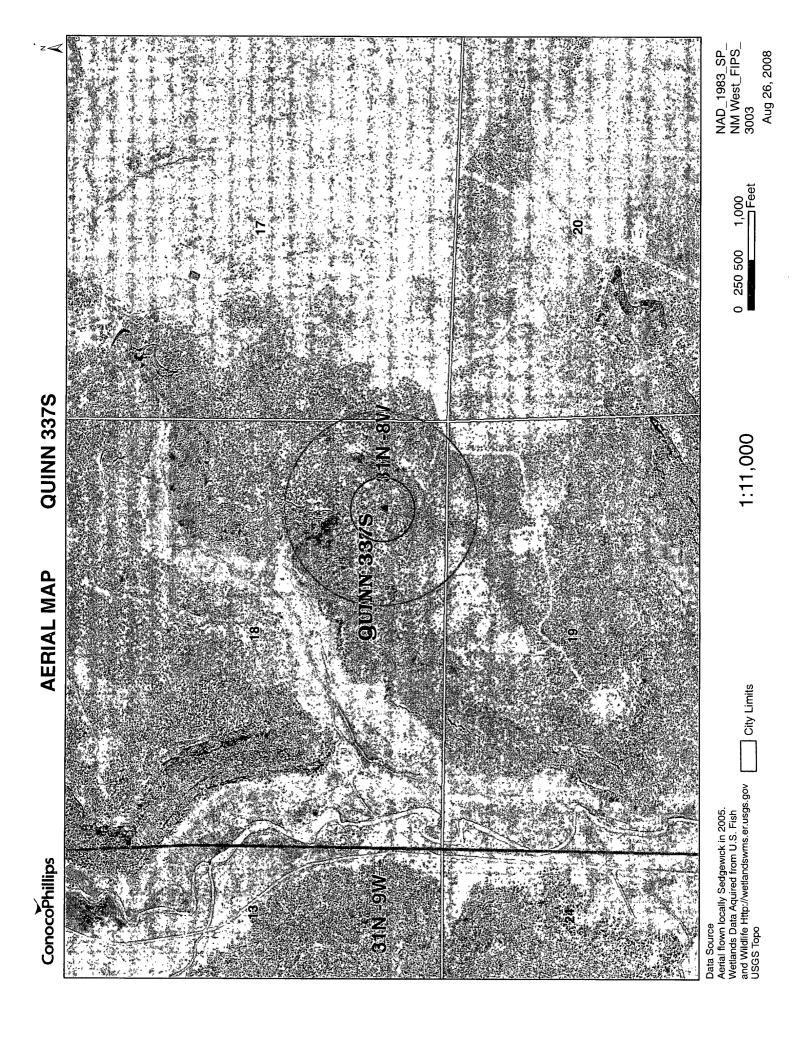
### ENERGY AND MINERALS DEPARTMENT

#### P O. HOX 2088 SANTA FE, NEW MEXICO 87501

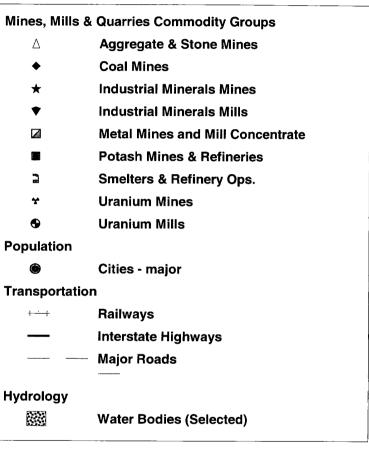
torm trius Revised 10-1-18

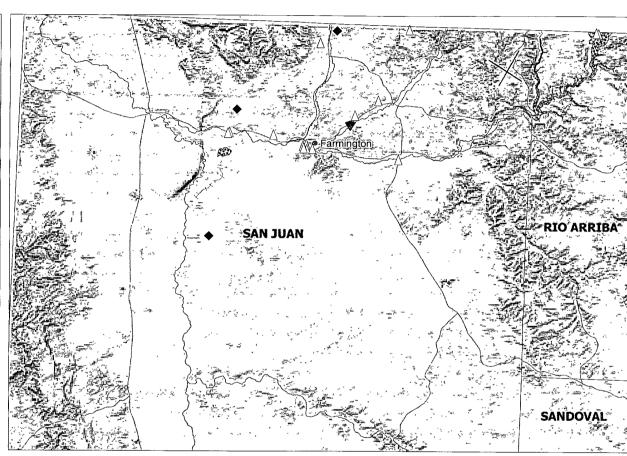
All distances must be from the roter boundaries of the Section. hrll 110. 14-110101 SUPRON ENERGY CORPORATION QUINN Honge County . Unit Letter ".ecuon 18 31 NORTH 8 WEST SAN JUAN Actual Lastage Laration of Well; 1650 NORTH line and WEST feet from the feet from the Juducing Formation Pool Dedicated Acresqua Cround Level Eler. BLANCO BASIN DAIC 6458 MESA VERDE-DAKOTA <u> 330.16</u> Arina 1. Outline the acrenge dedicated to the subject well by colored pencil or hachure marks on the plat below. 2. Il more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty). 589°50'E 4530.9' 3./Il more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etd? Il answer is "yes!" type of consplidation \_ No. If answer is "no." list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.)\_ No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Division. 3ec. 7 CERTIFICATION I hereby certify that the Information contained herein is true and complete to the best of my knowledge and belief. Rudy D. Motto Position 850371 Area Superintendent 1833.48 2657.82 Supron Energy Corporation Mesaverde May 16, 1980 Dakota Jeale 4"=1 Mile 1000'-Sec. 18 Lots No. 1,2,3,4 and the E/2 of the Sw. 31980 500 18 T-3/10/ CON. COM. DIST. 3 March 4, <u> 1980</u> Quinn No. 5 *Y*ames P. Leese Certificate No. 1463





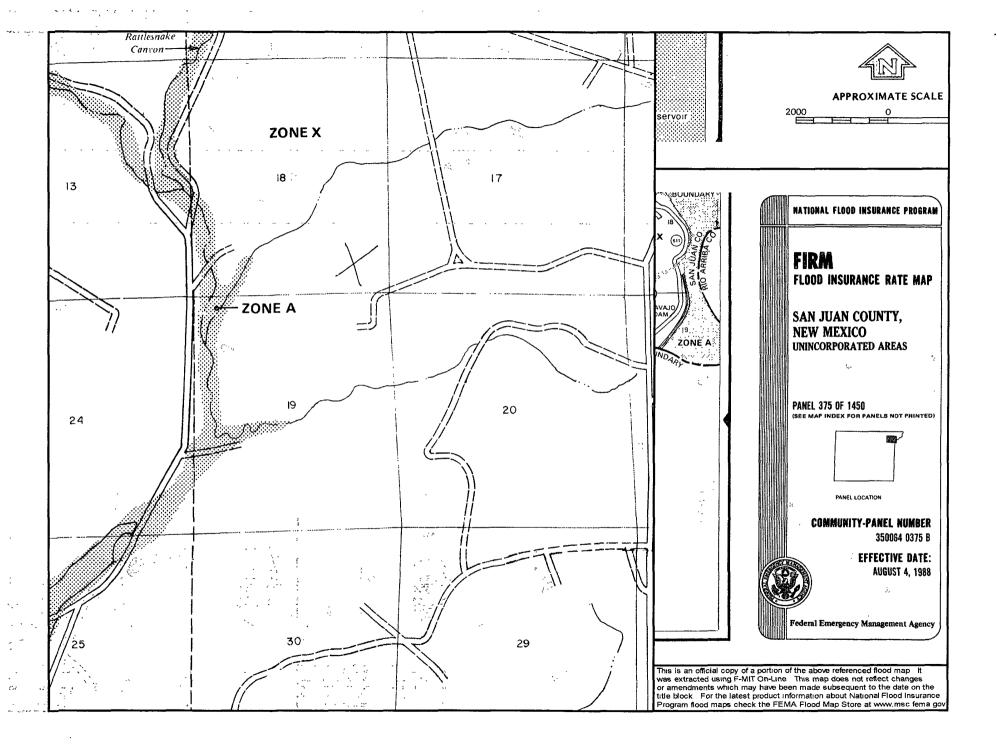
## Quinn 337S Mines, Mills, and Quarries Web Map











#### Siting Criteria Compliance Demonstration & Hydro Geologic Analysis

The Quinn 337S is not located in an unstable area. The location is not over a mine and is not on the side of a hill as indicated on the Mines, Mills and Quarries Map and Topographic Map. The location of the excavated pit material will not be located within 300' of any continuously flowing watercourse or 200' from any other watercourse as indicated on the Topographic Map. The location is not within a 100-year floodplain area as indicated on the FEMA Map. The groundwater depth is considered to be greater than 100' as determined by the topographic map and the Cathodic well data from the Quinn 5A with an elevation of 6458' and groundwater depth of 220'. The subject well has an elevation of 6423'. There are no iWATERS data points located in the area as indicated on the TOPO Map. The hydro geologic analysis indicates the groundwater depth and the San Jose formation will create a stable area for this new location.

#### Hydrogeological report for San Jose Formation

#### **Regional Hydrogeological context:**

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

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

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

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.

l

#### Jeffery, Kelly R

From:

Sent:

Jeffery, Kelly R Thursday, January 22, 2009 7:50 AM ' (Mark\_kelly@nm.blm.gov)'

To: Subject:

Surface Owner Notification

Contacts:

Kelly Mark

The following location temporary pit will be closed on-site. Please let me know if you have any questions. Thank you! Quinn 337S.

· DISTRICT I P.O. Box 1980, Hobbs, N.M. 88241-1980 DISTRICT II

811 South First, Artesia, N.M. 88210

1000 Rio Brazos Rd., Astec, N.M. 87410

DISTRICT III

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

Form C-102 Revised Febuary 21, 1994

OIL CONSERVATION DIVISION

P.O. Box 2088 7865 JAN Santa Fe, NM 87504-2088

Instructions on back Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

2040 South Pacheco, Santa Fe, NM 87504-2088

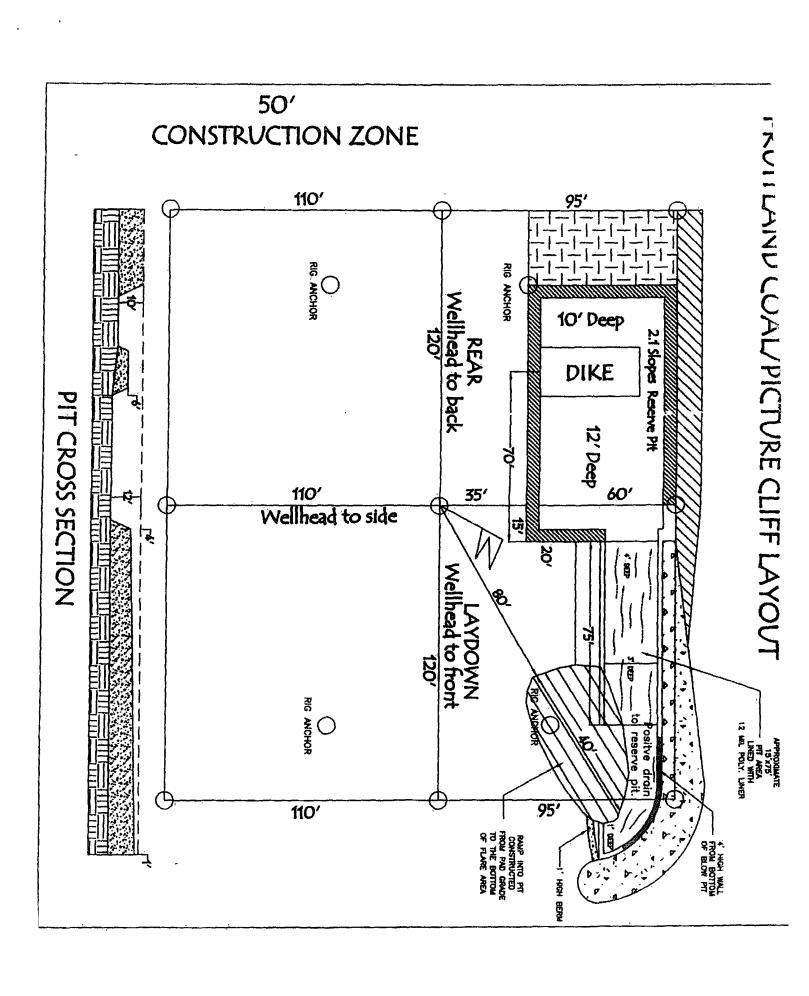
RECEIVED ☐ AMENDED REPORT GTO FARMINGTON HM

#### WELL LOCATION AND ACREAGE DEDICATION PLAT Pool Code API Number \*Pool Name 30-045-Fruitland Coa 71629 BASIA Well Number Property Code Property Name 7407 QUINN **337S** OGRID No. Operator Name • Elevation 2807 KOCH EXPLORATION 6423

<sup>10</sup> Surface Location North/South line UL or lot no. Section Township Lot Idn Feet from the Feet from the East/West line County Range 900 8 W 675 SOUTH **EAST** SAN JUAN P 18 31 N <sup>11</sup> Bottom Hole Location If Different From Surface UL or lot no. Section Township Range Lot Idn Feet from the North/South line | Feet from the East/West line County Dedicated Acres " Joint or Infill <sup>14</sup> Consolidation Code Morder No. 320

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED

OR A NON-STAN	DARD UNIT HAS BEEN	N APPROVED BY	THE DIVISION
18 N 89 51'41' W 1833.48'	N 89°51'41" W	2657.82	17 OPERATOR CERTIFICATION
is a	Lease #SF		I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief
2.2883.2	Quinn 33	100	
2 × 2 × 2	1185' FNL & 12	10' FEL	
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			18 SURVEYOR CERTIFICATION
.88:		Ì	I hereby certify that the well location shown on this plat was plotted from field nates of actual surveys made by me or under my supervision, and that the same to true and
500.5	[ <b>l</b> .	#	correct to the best of my belief.
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# Burlington Resources Oil & Gas Company, LP San Juan Basin Pit Design and Construction Plan

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

#### **General Plan:**

- BR will design and construct a properly sized and approved temporary pit which will contain liquids and solids and should prevent contamination of fresh water and protect public health and environment.
- 2. Prior to constructing the pit, topsoil will be stockpiled in the construction zone for later use in restoration.
- 3. BR will sign the well location in compliance with 19.15.3.103 NMAC.
- 4. BR shall construct all new fences around the temporary pit utilizing 48" steel mesh field-fence (hogwire) on the bottom with a single strand of barbed wire on top. T-posts shall be installed every 12 feet and corners shall be anchored utilizing a secondary T-post. Temporary pits will be fenced at all times excluding drilling or workover operations, when the front side of the fence will be temporarily removed for operational purposes.
- 5. BR shall construct the temporary pit so that the foundation and interior slopes are firm and free of rocks, debris, sharp edges or irregularities to prevent liner failure.
- BR shall construct the pit so that the slopes are no steeper than two horizontal feet to one vertical foot.
- 7. Pit walls will be walked down by a crawler type tractor following construction.
- 8. All temporary pits will be lined with a 20-mil, string reinforced, LLDPE liner, complying with EPA SW-846 method 9090A requirements.
- Geotextile will be installed beneath the liner when rocks, debris, sharp edges or irregularities cannot be avoided.
- 10. All liners will be anchored in the bottom of a compacted earth-filled trench at least 18 inches deep.
- 11. BR will minimize liner seams and orient them up and down, not across a slope. Factory seams will be used whenever possible. BR will ensure all field seams are welded by qualified personnel. Field seams will be overlapped four to six inches and will be oriented parallel to the line of maximum slope. BR will minimize the number of field seams in corners and irregularly shaped areas.
- 12. The liner shall be protected from any fluid force or mechanical damage through the use of mud pit slides, or a manifold system.
- 13. The pit shall be protected from run-off by constructing and maintaining diversion ditches around the location or around the perimeter of the pit in some cases.
- 14. The volume of the pit shall not exceed 10 acre-feet, including freeboard.
- 15. Temporary blow pits will be constructed to allow gravity flow to discharge into lined drill pit.
- 16. The lower half of the blow pit (nearest lined pit) will be lined with a 20-mil, string reinforced, LLDPE liner. The upper half of the blow pit will remain unlined as allowed in Rule 19.15.17.11 F.11.
- 17. BR will not allow freestanding liquids to remain on the unlined portion of a temporary blow pit.

#### Burlington Resources Oil & Gas Company, LP San Juan Basin Maintenance and Operating Plan

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

#### General Plan:

- 1. BR will operate and maintain a temporary pit to contain liquids and solids and maintain the integrity of the liner and liner system to prevent contamination of fresh water and protect public health and environment.
- 2. BR will conserve drilling fluids by transferring liquids to pits ahead of the rigs whenever possible. All other drilling fluids will be disposed at Basin Disposal Inc., permit # NM-01-005.
- 3. BR will not discharge or store any hazardous waste in any temporary pit.
- 4. If any pit liner's integrity is compromised, or if any penetration of the liner occurs above the liquid's surface, then BR shall notify the Aztec Division office by phone or email within 48 hours of the discovery and repair the damage or replace the liner.
- 5. If a leak develops below the liquid's level, BR shall remove all liquids above the damaged liner within 48 hours and repair the damage or replace the liner. BR shall notify the Aztec Division office by phone or email within 48 hours of the discovery for leaks less than 25 barrels. BR shall notify the Aztec Division office as required pursuant to Subsection B of 19.15.3.116 NMAC shall be reported within twenty-four (24) hours of discovery of leaks greater than 25 barrels. In addition, immediate verbal notification pursuant to Subsection B, Paragraph (1), and Subparagraph (d) of 19.15.3.116 NMAC shall be reported to the division's Environmental Bureau Chief.
- 6. The liner shall be protected from any fluid force or mechanical damage through the use of mud pit slides, or a manifold system.
- 7. The pit shall be protected from run-off by constructing and maintaining diversion ditches around the location or around the perimeter of the pit in some cases.
- 8. BR shall immediately remove any visible layer of oil from the surface of the temporary pit after cessation of a drilling or workover operation. Oil absorbent booms will be utilized to contain and remove oil from the pit's surface. An oil absorbent boom will stored on-site until closure of pit.
- 9. Only fluids generated during the drilling or workover process may be discharged into a temporary pit.
- 10. BR will maintain the temporary pit free of miscellaneous solid waste or debris.
- 11. During drilling operations, BR will inspect the temporary pit at least once daily to ensure compliance with this plan. Inspections will be logged in the IADC reports. BR will file this log with the Aztec Division office upon closure of the pit.
- 12. After drilling operations, BR will inspect the temporary pit weekly so long as liquids remain in the temporary pit. A log of the inspections will be stored at BR's office electronically and will be filed with the Aztec Division office upon closure of the pit.
- 13. BR shall maintain at least two feet of freeboard for a temporary pit.
- 14. BR shall remove all free liquids from a temporary pit within 30 days from the date the operator releases the drilling rig.
- 15. BR shall remove all free liquids from a cavitation pit within 48 hours after completing cavitation. BR may request additional time to remove liquids from the Aztec Division office if it is not feasible to remove liquids within 48 hours.

#### Burlington Resources Oil & Gas Company, LP San Juan Basin Closure Plan

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

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 pit closure. Closure report will be filed on C-144 and incorporate the following:

- · Details on Capping and Covering, where applicable.
- Plot Plan (Pit Diagram)
- Inspection Reports
- Sampling Results
- C-105
- Copy of Deed Notice will be filed with County Clerk

#### **General Plan:**

- All free standing liquids will be removed at the start of the pit closure process from the pit and disposed of in a division—approved facility or recycle, reuse or reclaim the liquids in a manner that the appropriate division district office approves. The facilities to be used will be Basin Disposal (Permit #NM-01-005) and Envirotech Land Farm (Permit #NM-01-011).
- 2. The preferred method of closure for all temporary pits will be on-site burial, assuming that all the criteria listed in sub-section (B) of 19.15.17.13 are met.
- 3. The surface owner shall be notified of BR's closing of the temporary pit prior to closure as per the approved closure plan via certified mail, return receipt requested.
- 4. Within 6 months of the Rig Off status occurring BR will ensure that temporary pits are closed, re-contoured, and reseeded.
- 5. 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.
- 6. Liner of temporary pit shall be removed above "mud level" after stabilization. Removal of liner will consist of manually or mechanically cutting liner at mud level and removing all remaining liner. Care will be taken to remove "All" of the liner i.e., edges of liner entrenched or buried. All excessive liner will be disposed of at the San Juan County Landfill located on CR 3100.
- 7. Pit contents shall be mixed with non-waste containing, earthen material in order to achieve the solidification process. The solidification process will be accomplished using a combination of natural drying and mechanically mixing. Pit contents will be mixed with non-waste, earthen material to a consistency that is deemed a safe and stable. The mixing ratio shall not exceed 3 parts clean soil to 1 part pit contents.
- 8. A five point composite sample will be taken of the pit using sampling tools and all samples tested per Subsection B of 19.15.17.13(B)(1)(b). In the event that the criteria are not met, all contents will be handled per Subparagraph (a) of Paragraph (1) of Subsection B of 19.15.17.13 i.e., Dig and haul.

Components	Tests Method	Limit (mg/Kg)
Benzene	EPA SW-846 8021B or 8260B	0.2
BTEX	EPA SW-846 8021B or 8260B	50
TPH	EPA SW-846 418.1	2500
GRO/DRO	EPA SW-846 8015M	500
Chlorides	EPA 300.1	/1000/800

- 9. Upon completion of solidification and testing standards being passed, the pit area will be backfilled with compacted, non-waste containing, earthen material. 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. If standard testing fails BR will dig and haul all contents pursuant to 19.15.17.13.i.a. After doing such, confirmation sampling will be conducted to ensure a release has not occurred.
- 10. During the stabilization process if the liner is ripped by equipment the Aztec OCD office will be notified within 48 hours and the liner will be repaired if possible. If the liner can not be repaired then all contents will be excavated and removed.
- 11. Dig and Haul Material will be transported to the Envirotech Land Farm located 16 miles south of Bloomfield on Angel Peak Road, CR 7175. Permit # NM010011
- 12. Re-contouring of location will match fit, shape, line, form and texture of the surrounding. Reshaping 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.
- 13. Notification will be sent to OCD when the reclaimed area is seeded.
- 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 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.

Туре	Variety or Cultivator	PLS/A
Western wheatgrass	Arriba	3.0
Indian ricegrass	Paloma or Rimrock	3.0
Slender wheatgrass	San Luis	2.0
Crested wheatgrass	Hy-crest	3.0
Bottlebrush Squirreltail	Unknown	2.0
Four-wing Saltbrush	Delar	.25

Species shall be planted in pounds of pure live seed per acre: Present Pure Live Seed (PLS) = Purity X Germination/100 Two lots of seed can be compared on the basis of PLS as follows:

Source No. One (poor quality)

Purity

Source No. One (poor quality)

Purity

Source No. two (better quality)

Source No. two (better quality)

Purity

Source No. two (better quality)

Source No. two (better quality)

Purity

Source No. two (better quality)

Source No. two (better quality)

Purity

Source No. two (better quality)

Source No. two (better quality)

5 lb. bulk seed required to make 2 lb. bulk seed required to make

1 lb. PLS 1 lb. PLS

15. The temporary pit will be located with a steel marker, no less than four inches in diameter, cemented in a hole three feet deep in the center of the onsite burial upon the abandonment of all the wells on the pad. The marker will be flush with the ground to allow access of the active well pad and for safety concerns. The marker will include a threaded collar to be used for future abandonment. The top of the marker will contain a welded steel 12" square plate that indicates the onsite burial of the temporary pit. The plate will be easily removable and a four foot tall riser will be threaded into the top of the collar marker and welded around the base with the operator's information at the time of all wells on the pad are abandoned. The operator's information will include the following: Operator Name, Lease Name, Well Name and number, Unit Number, Section, Township, Range and an indicator that the marker is an onsite burial location.