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

Form C-144 July 21, 2008

District II

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

Pit, Closed-Loop System, Below-Grade Tank, or

 $\label{eq:July 21, 20} July\ 21,\ 20$  For temporary pits, closed-loop systems, and below-grade

1301 W Grand Ave , Artesia, NM 88210 District III tanks, submit to the appropriate NMOCD District Office

1000 Rio Biazos Rd , Aztec, NM 87410 <u>District IV</u> For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office

District IV 1220 S St Francis Dr , Santa Fe, NM 87505

1	<u>Prop</u>	posed Alternative Method Permit or Closure Plan Applic	ation						
298	Type of action:	X Permit of a pit, closed-loop system, below-grade tank, or proposed altern	ative method						
5'	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 p below-grade tank, or proposed alternative method	it, closed-loop system,						
Instruct	ons: Please submit one	application (Form C-144) per individual pit, closed-loop system, below-grade	e tank or alternative request						
a	• • •	of this request does not relieve the operator of liability should operations result in pollution of surface we elieve the operator of its responsibility to comply with any other applicable governmental authority's rule:							
1	tvironnent (voi does approvar re	There are operative of its responsibility to comply with any other applicable governmental authority state.	s, regulations of ordinances						
1 -		Dil & Gas Company, LP OGRID#: 14538							
1	PO Box 4289, Farmingt								
Facility or	well name: San Juan 29								
API Numb		30-039- 30212 OCD Permit Number							
U/L or Qtr/	-	tion: 7 Township: 29N Range: 7W County: Ri							
1	roposed Design: Latitud		<u>W</u> NAD: []1927[X]1983						
Surface Ov	ner: x Federal	State Private Tribal Trust or Indian Allotment							
2 <u>N Pit:</u>	Subsection F or G of 19 15	17 11 NMAC	RCVD DEC 10'10						
Temporar		orkover	on come ou						
Perma		Cavitation P&A	DICT A						
XLined	Unlined	Liner type Thickness 20 mil X LLDPE HDPE PVC C	Other						
X String-	Reinforced								
Liner Sea	ns X Welded X	Factory Other Volume 7700 bbl Dimensions L	120' x W 55' x D 12'						
3									
	sed-loop System: Subse	ection H of 19 15 17 11 NMAC							
Type of C	peration P&A	Drilling a new well Workover or Drilling (Applies to activities which require notice of intent)	prior approval of a permit or						
	ing Pad Above Gro	ound Steel Tanks Haul-off Bins Other							
Line			her						
Liner Sea	~ <u> </u>	Factory Other							
<u> </u>									
X Belo	w-grade tank: Subsection	n I of 19 15 17 11 NMAC							
Volume	max 120	bbl Type of fluid Produced Water							
Tank Con	struction material	Metal							
Secon	dary containment with leak of	detection X Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off							
<u>'</u>	ble sidewalls and liner	Visible sidewalls only Other							
Liner Typ	e Thickness 4	15 mil HDPE PVC X Other LLDPE							
5 Alto	rnativa Mathad								
	rnative Method:								
Submittal	of an exception request is re	equired Exceptions must be submitted to the Santa Fe Environmental Bureau office for	consideration of approval						

6 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.								
7								
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)								
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								
X Signed in compliance with 19 15 3 103 NMAC								
9 Administrative Approvals and Exceptions:								
Justifications and/or demonstrations of equivalency are required Please refer to 19 15.17 NMAC for guidance								
Please check a box if one or more of the following is requested, if not leave blank:								
X Administrative approval(s) Requests must be submitted to the appropriate division district of the Santa Fe Environmental Bureau office for const (Fencing/BGT Liner)	deration of ap	proval						
Exception(s) Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval								
10								
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	X No						
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	X No						
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)	□NA							
- Visual inspection (certification) of the proposed site; Aerial photo, Satellite image								
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.	Yes	∐No						
(Applied to permanent pits)  - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	X NA							
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	X No						
- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site								
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended	Yes	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.	Yes	X No						
- Written confirmation or verification or map from the NM EMNRD - Mining and Mineral Division  Within an unstable area.	Yes	XNo						
- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS, NM Geological Society, Topographic map								
Within a 100-year floodplain - FFMA map	Yes	X No						

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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
X   Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (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 or Permit
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
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  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:   X   Drilling   Workover   Emergency   Cavitation   P&A   Permanent Pit   X   Below-grade Tank   Closed-loop System   Alternative
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
X Confirmation Sampling Plan (if applicable) - 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)
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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16  Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel	Tanks or Haul-off Rins Only: (19 15 17 13 D NMAC)		
Instructions Please identify the facility or facilities for the disposal of liquids, drilling j facilities are reasured			İ
1	Disposal Facility Permit #		
	Disposal Facility Permit #		
Will any of the proposed closed-loop system operations and associated activities  Yes (If yes, please provide the information  No			
Required for impacted areas which will not be used for future service and operations  Soil Backfill and Cover Design Specification - based upon the appropriat Re-vegetation Plan - based upon the appropriate requirements of Subsect Site Reclamation Plan - based upon the appropriate requirements of Subsect	tion I of 19 15 17 13 NMAC	AC	
17  Siting Criteria (Regarding on-site closure methods only: 19 15 17 10 NMAC Instructions Lach siting criteria requires a demonstration of compliance in the closure plan certain siting criteria may require administrative approval from the appropriate district office office for consideration of approval Justifications and/or demonstrations of equivalency are to	Recommendations of acceptable source material are provided by or may be considered an exception which must be submitted to		
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 obtain	ned from nearby wells	Yes	X No
Ground water is between 50 and 100 feet below the bottom of the buried waste		□ □Yes	X No
<ul> <li>NM Office of the State Engineer - tWATERS database search, USGS, Data obtain</li> </ul>	ned from nearby wells	□ N/A	AINO
•			□N.
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 obtain	ned from nearby wells	X Yes	∐No
*	•		
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other signification (measured from the ordinary high-water mark)	nt watercourse or lakebed, sinkhole, or playa lake	Yes	X No
- Topographic map, Visual inspection (certification) of the proposed site		□v <sub>aa</sub>	VNs
Within 300 feet from a permanent residence, school, hospital, institution, or church in ex  - Visual inspection (certification) of the proposed site, Aerial photo, satellite image	istence at the time of initial application	Yes	X No
		Yes	X No
Within 500 horizontal feet of a private, domestic fresh water well or spring that less that purposes, or within 1000 horizontal fee of any other fresh water well or spring, in exister - NM Office of the State Engineer - iWATERS database, Visual inspection (certification)	nce at the time of the initial application	_	
Within incorporated municipal boundaries or within a defined municipal fiesh water well pursuant to NMSA 1978, Section 3-27-3, as amended	·	Yes	X No
<ul> <li>Written confirmation or verification from the municipality, Written approval obtain</li> <li>Within 500 feet of a wetland</li> </ul>	rea from the municipanty	Yes	XNo
US Fish and Wildlife Wetland Identification map, Topographic map, Visual inspe	ction (certification) of the proposed site	1 tes	23,140
Within the area overlying a subsurface mine		Yes	X No
- Written confirantion or verification or map from the NM EMNRD-Mining and Mi	neral Division		[]
Within an unstable area	to trace and a large	Yes	X No
<ul> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mir Topographic map</li> </ul>	erai Resources, USGS, NM Geological Society,		
Within a 100-year floodplain - FEMA map		Yes	XNo
18 On-Site Closure Plan Checklist: (19 15 17 13 NMAC) Instructions: Each of	of the following items must bee attached to the closi	re plan. Plea	se indicate,
by a check mark in the box, that the documents are attached.			
X Siting Criteria Compliance Demonstrations - based upon the appropriate	•		
X Proof of Surface Owner Notice - based upon the appropriate requiremen			
Construction/Design Plan of Burial Trench (if applicable) based upon the		10.15.15.1.	
Construction/Design Plan of Temporary Pit (for in place burial of a dryii		19 15 17 II N	MAC
Protocols and Procedures - based upon the appropriate requirements of I     Confirmation Sampling Plan (if applicable) - based upon the appropriate		,	
X   Waste Material Sampling Plan - based upon the appropriate requirement	·	•	
X   Disposal Facility Name and Permit Number (for liquids, drilling fluids a		annot be achies	zed)
X   Soil Cover Design - based upon the appropriate requirements of Subsect	<del>-</del>	ot co domo	/
X Re-vegetation Plan - based upon the appropriate requirements of Subsec			
X   Site Reclamation Plan - based upon the appropriate requirements of Sub			

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19
Operator Application Certification:
I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief
Name (Print) Jamie Goodwin Title Regulatory Technician
Signature ( 1000 (7000000 Date ) d/// (
e-mail address Jamie L.Goodwin@conocophillips com Telephone 505-326-9784
20 OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)
OCD Representative Signature:Approval Date:Approval Date:Approval Date:Approval Date:Approval Date:Approval Date:Approval Date:Approval Date:Approval Date:
Title: Ompliana Office OCD Permit Number:
Closure Report (required within 60 days of closure completion):  Subsection K of 19 15 17 13 NMAC Instructions Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed  Closure Completion Date:
22
Closure Method:
Waste Excavation and Removal On-site Closure Method Alternative Closure Method Waste Removal (Closed-loop systems only)
If different from approved plan, please explain
Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:  Instructions: Please 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 compliant to the items below)
Required for impacted areas which will not be used for future service and operations
Site Reclamation (Photo Documentation)
Soil Backfilling and Cover Installation
Re-vegetation Application Rates and Seeding Technique
24
Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in
the box, that the documents are attached.
Proof of Closure Notice (surface owner and division)
Proof of Deed Notice (required for on-site closure)
Plot Plan (for on-site closures and temporary pits)
Confirmation Sampling Analytical Results (if applicable)
Waste Material Sampling Analytical Results (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
25
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 address Telephone



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

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest) (NAD83 UTM in meters)

(In feet)

Sub Q Q Q

Depth Depth Water

OD Number basin Use County 6416 4 Sec Tws Rng X Y Well WaterColumn

SJ 00028 IND SJ 4 1 2 01 29N 08W

in the second 
Average Depth to Water: 300 feet

Minimum Depth: 300 feet

Maximum Depth: 300 feet

Record Count: 1

PLSS Search:

**Section(s):** 1, 12, 13

Township: 29N

Range: 08W



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

(quarters are	1=NW 2=N	E 3=SW 4=SE)	)
---------------	----------	--------------	---

	(qua	ters are	smalle	st to larg	est) (N	IAD83 UTN	/I in meters)		(In feet)	
POD Number	Sub basin Use Coun	Q Q ty 64 16		ec Tws	Rng	X	*	5 E .	epth Wa /aterCol	
SJ 00541	STK RA	4 4	. 1 0	6 29N	07W	266691	4070968*	360	360	0
SJ 00580	DOM RA	3	2 0	5 29N	07W	268604	4071023*		160	
SJ 00807	SAN SJ	4	2 0	6 29N	07W	267398	4071055*	290	255	35
SJ 02636	DOM RA	2 1	3 0	5 29Ñ	07W	267888	4070745*	300	200	100
SJ 03453	SAN RA	4 1	4 0	5 29N	07W	268692	4070519*	355	20	335
						Avera	age Depth to	Water:	199 feet	
							Minimum	Depth:	20 feet	;
•							Maximum	Depth:	360 feet	

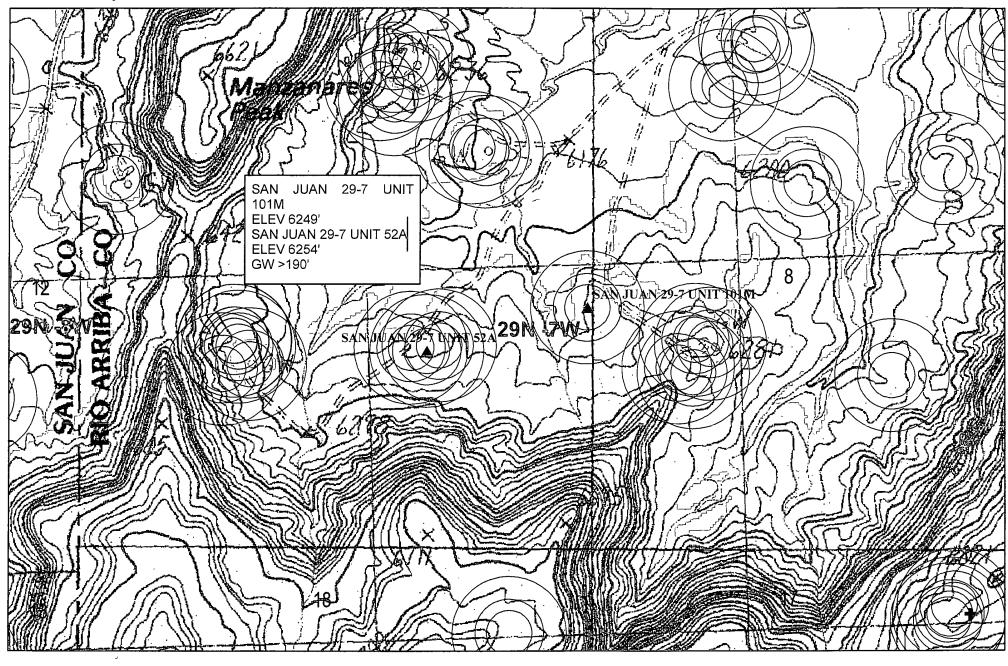
**Record Count: 5** 

PLSS Search:

Section(s): 6, 5, 7, 8, 18, 17 Township: 29N

Range: 07W

\*UTM location was derived from PLSS - see Help



Data Source Aerial flown locally Sedgewick in 2005.
 Wetlands Data Aquired from U.S. Fish and Wildlife Http://wetlandswms.er.usgs.gov LISCS Tono

500 200 300

COPCathodic iWaters

1,200 600 Feet 1:10.000

NAD\_1983\_SP\_ NM West\_FIPS\_ 3003 DEC 08 2010

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

operator Meridino Oil INC. Location: Unit J Sec. 07 Two 29 Rag 07
Name of Well/Wells.or Pipeline Serviced
SAN JUAN 29-7 #52A
Elevation 6274 Completion Date 3/17/95 Total Depth 430 Land Type F
Casing Strings, Sizes, Types & Depths 3/14 Set 98 of 8 PVc Casing.
NO GAS, WATER, OF Boulders Were ENCOUNTERED DURING CASING.
If Casing Strings are cemented, show amounts & types used CemenTed
WITH 20 SACKS.
If Cement or Bentonite Plugs have been placed, show depths & amounts used
Depths & thickness of water zones with description of water: Fresh, Clear,
Salty, Sulphur. Etc. Duller reported damp at 190' and small
water seep at 280. No sample was taken.
Depths gas encountered: None
Ground bed depth with type & amount of coke breeze used: 430 Death.
" Their 55 sacks of loverio 5/12 who breeze \$ 100/h suchs?
Depths anodes placed: 410,400,390,380,370,360,350,335,315, 281-273-265-257-249, 240
Depths vent pipes placed: Susface to 430
Vent pipe perforations: Bollom 280' DECENTED
Remarks: JAN 1 1 1996 U
OIL COM DIV
DIST. 2

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.

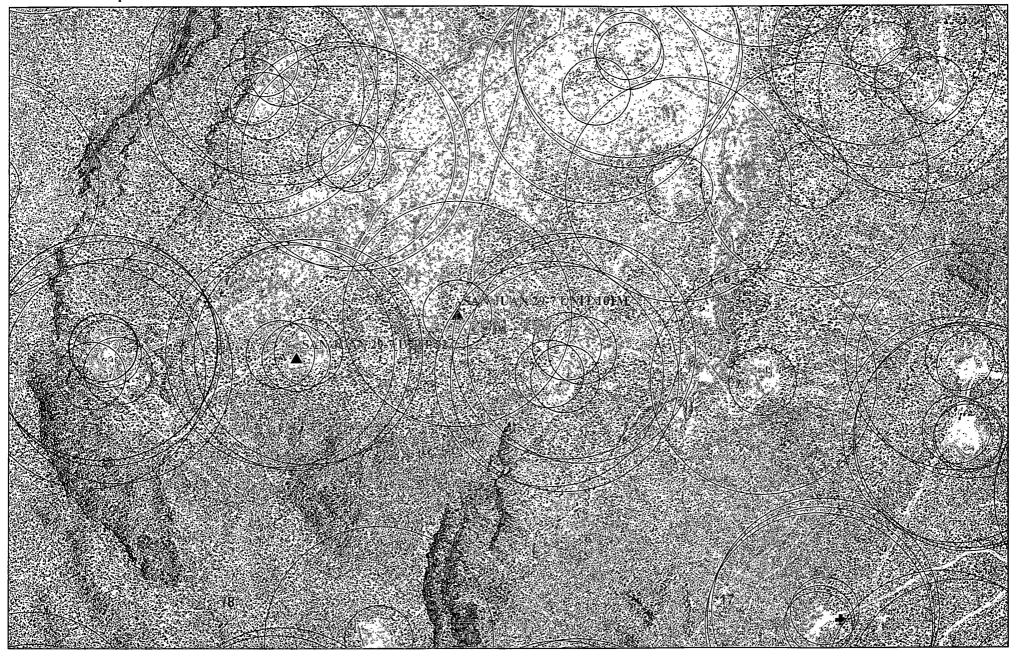
### NEW MEXICO OIL CONSERVATION COMMISSION WELL LOCATION AND ACREAGE DEDICATION PLAT

ok E

1950

Form C-102 Supersedes C-128 Effective 1-1-65

All distances must be from the outer boundaries of the Section Well No. Operator SAN JUAN 29-7 UNIT (SF 078943A 52A EL PASO NATURAL GAS COMPANY Range Unit Letter County Section 29N 7W Rio Arriba Actual Footage Location of Well; 1790 South 11,50 East feet from the line and line leat from the Ground Level Elev: Producing Formation Pool Dedicated Acreage: <del>-6254</del> Mesa Verde Blanco 320.00 1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below. 2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty). 3. If 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. etc? If answer is "yes," type of consolidation \_\_\_\_\_\_ Unitization 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 Commislocation restaked 10-31-85. CERTIFICATION I hereby certify that the information con-NOV 21 1985 tained herein is true and complete to the best of my knowledge and bellet. **GUREAU OF LAND MANAGEMENT** ARMINGTON RESOURCE AREA Drilling Clerk El Paso Natural Gas  $\odot$ 11-20-85 Sec. I hereby certify that the well location shown on this plat was platted from field under my supervision, and that the same 14501 is true and correct to the East of my knowledge and belief. OL CON. DIV. October 31, 1985 Registered Professional Engin

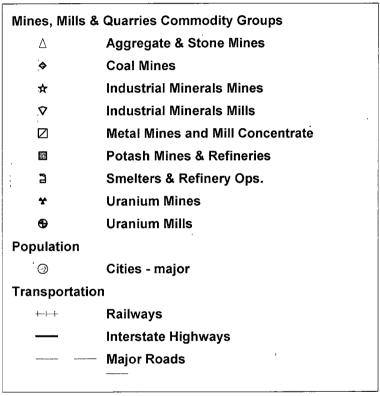


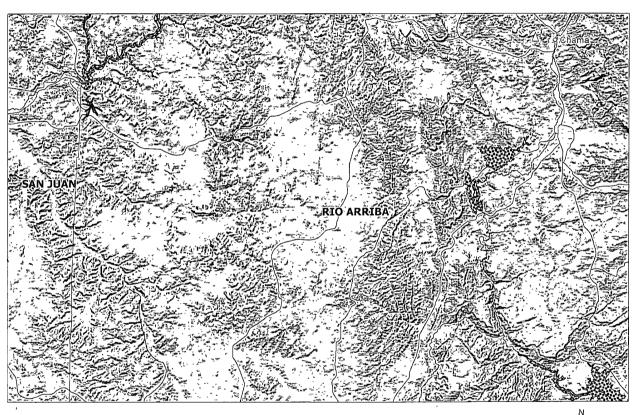
Data Source
Aerial flown locally Sedgewick in 2005.
Wetlands Data Aquired from U.S. Fish and Wildlife Http://wetlandswms.er.usgs.gov

\_\_\_\_\_ 300 \_\_\_\_ 1000\_ COPCathodic★ Waters

0 600 1,200 Feet 1:10.000 NAD\_1983\_SP\_ NM West\_FIPS\_ 3003 DFC 07 2010

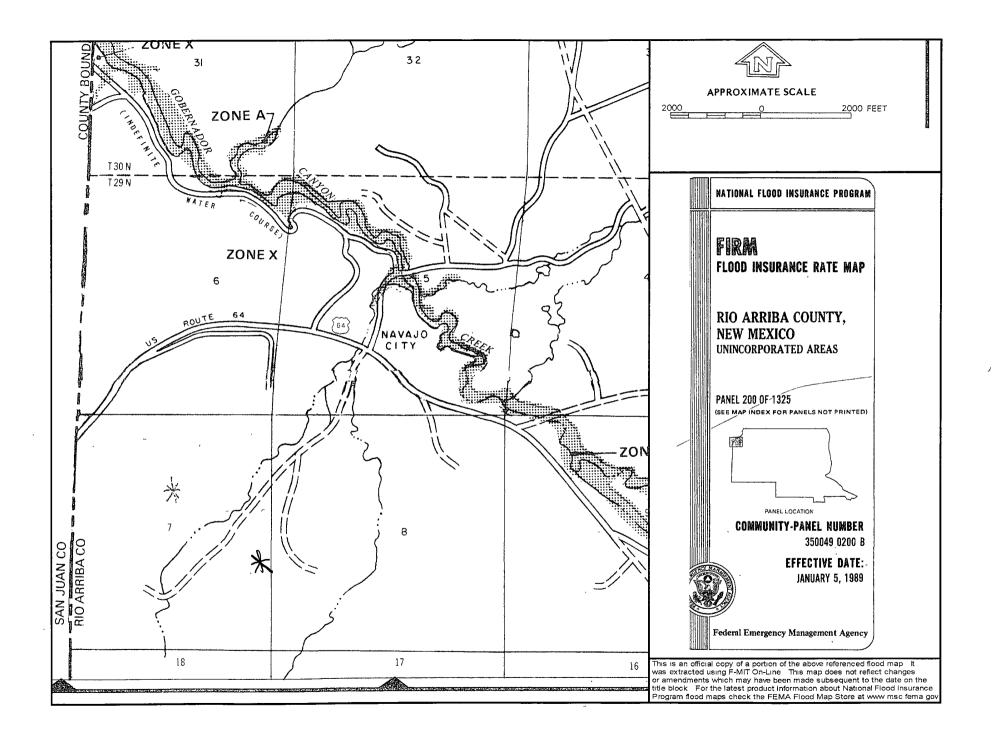
### San Juan 29-7 Unit 101M Mines, Mills and Quarries











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

The San Juan Unit 101M 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 Cathodic well data from the San Juan 29-7 Unit 52A has an elevation of 6254' and groundwater depth of 190'. The subject well has an elevation of 6249' which is lesser than the San Juan 29-7 Unit 52A, therefore the groundwater depth is greater than 185'. 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 Juan 29-7 Unit 101M

#### 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.

#### Goodwin, Jamie L

To:

Subject:

'Mark\_Kelly@blm gov' SURFACE OWNERE NOTIFICATION\_SAN JUAN 29-7 UNIT 101M

The subject well (SAN JUAN 29-7 UNIT 101M) will have a temporary pit that will be closed on-site. Please let me know if you have any questions or concerns.

Thank you, Jamie Goodwin ConocoPhillips 505-326-9784

Jamie.L.Goodwin@conocophillips.com

DISTRICT I 1625 N. French Dr., Hobbs, N.M. 88240

State of New Mexico Energy, Minerals & Natural Resources Department

Form C=102 Revised October 12, 2005

DISTRICT II 1301 West Grand Avenue, Artesia; N.M. 88210.

OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

Submit to Appropriate District Office State Lease - 4 Copies Fée Lease - 3 Copies

Certificate Number

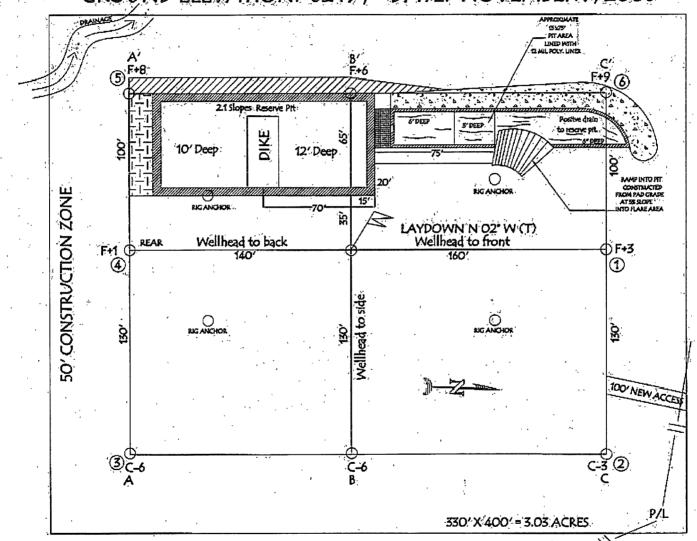
DISTRICT HI 1000 Rio Brazos Rd;; Aztec: N.M. 87410

LOT 8

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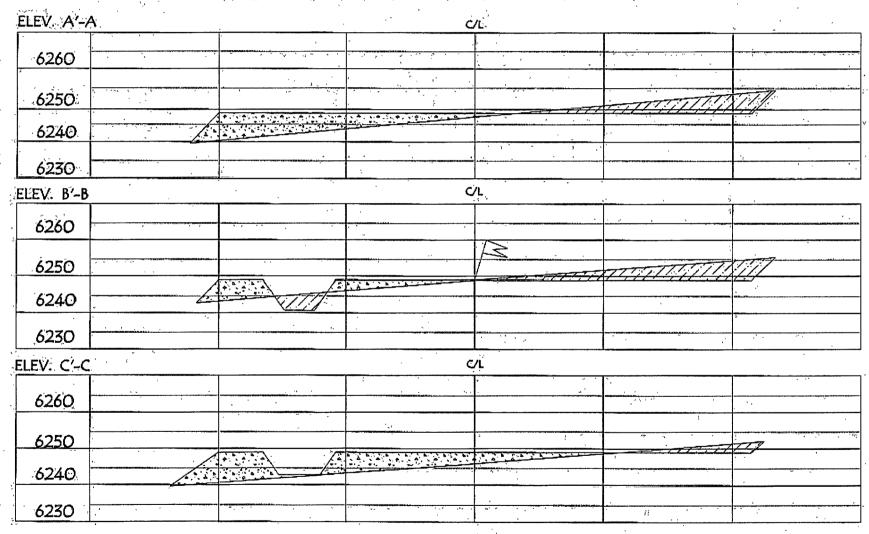
### BURLINGTON RESOURCES OIL & GAS COMPANY LP SAN JUAN 29-7 UNIT 101M, 2135' FSL & 30' FEL SECTION 7, T-29- N, R-7-W, NMPM, RIO ARRIBA COUNTY, NM GROUND ELEVATION: 6249', DATE: NOVEMBER 7, 2006



LATITUDE: 36° 44,3463', N. LONGITUDE: 107, 36:2057', W. NAD2

RESERVE PLT DIKE: TO BE 8' ABOVE

# BURLINGTON RESOURCES OIL & GAS COMPANY LP SAN JUAN 29-7 UNIT 101M, 2135' FSL & 30' FEL SECTION 7, T-29-N, R-7-W, NMPM, RIO ARRIBA COUNTY, NM GROUND ELEVATION: 6249', DATE: NOVEMBER 7, 2006



NOTE: VECTOR SURVEYS IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES.
CONTRACTOR SHOULD CALL ONE CALL FOR LOCATION OF ANY MARKED OR UNMARKED BURIED
PIPLINES OR CABLES ON WELL PAD AND OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.

# 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.

- 1 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.
- 6. 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.

- 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.
- 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

- 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
  - 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)500

- 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) Source No. two (better quality) Purity 50 percent 80 percent Purity Germination 40 percent Germination 63 percent Percent PLS 20 percent Percent PLS 50 percent 5 lb. bulk seed required to make 2 lb. bulk seed required to make

1 lb. PLS 1 lb. PLS

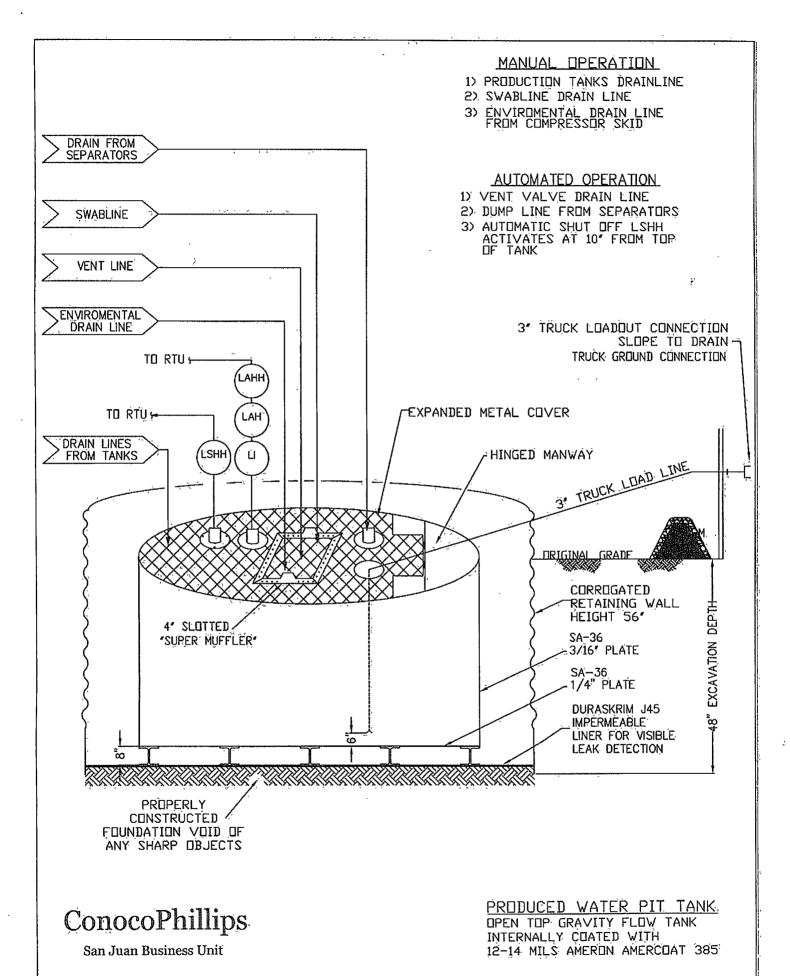
15. The temporary pit will be located with a steel marker, no less than four inches in diameter, cemented in a hole three feet deep in the center of the onsite burial upon the abandonment of all the wells on the pad. The marker will be flush with the ground to allow access of the active well pad and 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.

#### 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.

- BR will design and construct a properly sized and approved BGT which will contain liquids and should prevent contamination of fresh water to protect the public health and environment.
- BR signage will comply with 19.15.3.103 NMAC when BR is the operator. If BR is not the operator it will comply with 19.15.17.11NMAC. BR includes Emergency Contact information on all signage.
- 3. BR has approval to use alternative fencing that provides better protection. BR constructs 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. BR ensures that all gates associated with the fence are closed and locked when responsible personnel are not onsite.
- 4. BR will construct a screened, 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 as shown on design drawing and specification sheet.
- 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 as shown on design drawing.
- 7. BR shall operate and install the below-grade tank to prevent the collection of surface water run-on. BR has built in shut off devices that do not allow a belowgrade tank to overflow. BR constructs berms and corrugated retaining walls at least 6" above ground to keep from surface water run-on entering the below grade tank as shown on the design plan.
- 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 has equipped the below-grade tanks with the ability to detect high level in the tank and provide alarm notification and shutdown process streams into the tank. Once high level is detected RTU logic closes the inlet separator sales valve and does not permit vent valve to open. This shutdown of the sales valve and gagging of the vent valves prevents any hydrocarbon process streams from entering the pit tank once a high level is detected. Furthermore, an electronic page is sent to the BR MSO for that well site and to the designated contract "Water-Hauling" Company indicating a high level and that action must be taken to address this alarm. The environmental drain line from BR's compressor skid under normal operating conditions is in the open position. The environmental drain line is in place to capture any collected rain water or spilled lubricants from our compressor skids. The swab drain line is a manually operated drain and by normal operating procedures is in the closed position. The tank drain line is also a manually operated drain and during normal operations it is in the closed position.
- 10. The geomembrane liner consists of a 45-mil flexible LLDPE material manufactured by Rayen Industries as J45BB. This product is a four layer reinforced laminated containing no adhesives. The outer layers consist of a high strength polyethylene film manufactured using virgin grade resins and stabilizers for UV resistance in exposed applications. The J45BB is reinforced with 1300 denier (minimum) tri-directional scrim reinforcement. It exceeds ASTMD3083 standard by 10%. J45BB has a warranty for 20 years from Rayen Industries and is attached. It is typically used in Brine Pond, Oilfield Pit liner and other industrial applications. The manufacture specific sheet is attached and the design attached displays the proper installation of the liner.
- 11. The general specification for design and construction are attached in the BR document.



# DURASKRIM®

# BOJE62145

PROPERTIES	TEST METHOD	- J8	)BB	J36	3B	J45	38
		Min. Roll Averages	Typical Roll Averages	Min. Roll Averages	Typical Roll Averages	Min, Roll Averages	Typical Roll Averages
Appearance		Black	/Black	Black/	Black	Black/l	3lack
Thickness	ASTM D 5199	27 mil	30 mil	32 mil	36 mil	40 mil	45 mil
Weight Lbs Per MSF (oz/yd²)	ASTM D 5261	126 lbs (18.14)	140 lbs (20.16)	151 lbs (21.74)	168 lbs (24.19)	189 lbs (27.21)	210 lbs (30.24)
Construction		**Extr	usion laminated	with encapsulat	ed tri-direction:	al scrim reinforc	ement
Ply Adhesion	ASTM D 413	16 lbs	20 lbs	19 lbs	24 lbs	25 lbs	31 lbs
1" Tensile Strength	ASTM D 7003	88 lbf MD 63 lbf DD	110 lbf MD 79 lbf DD	90 lbf MD 70 lbf DD	113 lbf MD 87 lbf DD	110 lbf MD 84 lbf DD	138 lbf MD 105 lbf DD
1 Tensile Elongation @ Break %-(Film Break)	ASTM D 7003	550 MD 550 DD	750 MD 750 DD	550 MD 550 DD	750 MD 750 DD	550 MD 550 DD	750 MD 750 DD
1° Tensile Elongation @ Reak % (Sorim Break)	ASTM D 7003	20 MD 20 DD	33 MD 33 DD	20 MD 20 DD	30 MD 31DD	20 MD 20 DD	36 MD 36 DD
Tongue Tean Strength	ASTM D 5884	75 lbf MD 75 lbf DD	97 lbf MD 90 lbf DD	75 lbf MD 75 lbf DD	104 lbf MD 92 lbf DD	100 lbf MD 100 lbf DD	117 lbf MD 118 lbf DD
Grab Tensile	ASTM D 7004	180 lbf MD 180 lbf DD	218 lbf MD 210 lbf DD	180 lbf MD 180 lbf DD	222 lbf MD 223 lbf DD	220 lbf MD 220 lbf DD	257 lbf MD 258 lbf DD
/Trapezoid-Tear	ASTM D 4533	120 lbf MD 120 lbf DD	146 lbf MD 141 lbf DD	130 lbf MD 130 lbf DD	189 lbf MD 172 lbf DD	160 lbf MD 160 lbf DD	193 lbf MD 191 lbf DD
Dimensional Stability	ASTM D 1204	<1	<0.5	<1	<0.5	<1 <sup>-</sup>	<0.5
Puncture Resistance	ASTM D 4833	50 lbf	64 lbf	65 lbf	83 lbf	80 lbf	99 lbf
Maximum Use Temperature		180° F					
Minimum Use Temperature		-70° F					

MD = Machine Direction

DD = Diagonal Directions



Note: Minimum Roll Averages are set to take into account product variability in addition to testing variability between laboratories.

\*Dimensional Stability Maximum Value

\*\*DURA-SKRIM J30BB, J36BB & J45BB are a four layer reinforced laminate containing no adhesives. The outer layers consist of a high strength polyethylene film manufactured using virgin grade resins and stabilizers for UV resistance in exposed applications. DURA-SKRIM J30BB, J36BB & J45BB are reinforced with a 1300 denier (minimum) tri-directional scrim reinforcement.

Note: RAVEN INDUSTRIES MAKES NO WARRANTIES AS TO THE FITNESS FOR A SPECIFIC USE OR MERCHANTABILITY OF PRODUCTS REFERRED TO, no guarantee of satisfactory results from reliance upon contained information or recommendations and disclaims all liability for resulting loss or damage.

PLANT LOCATION

Sioux Falls, South Dakota

SALES OFFICE

RAVEN INDUSTRIES P.O. Box 5107 Sioux Falls, SD 57117-5107 (605) 335-0174 (605) 331-0333 FAX 800-635-3456

08/06

### RAVEN INDUSTRIES INC. EXPOSED GEOMEMBRANE LIMITED WARRANTY

Raven Industries Inc. warrants Dura-Skrim J30BB, J36BB, and J45BB to be free from manufacturing defects and to be able to withstand normal exposure to sunlight for a period of 20 years from the date of sale for normal use in approved applications in the U.S and Canada, excluding Hawaii. This warranty is effective for products sold and shipped from January 1, 2008 to December 31, 2008. These dates will be updated prior to December 31, 2008.

This Limited Warranty does not include damages or defects in the Raven geomembrane resulting from acts of God, casualty or catastrophe including but not limited to: earthquakes, floods, piercing hail, or tornadoes. The term "normal use" as used herein does not include, among other things improper handling during transportation, unloading, storage or installation, the exposure of Raven geomembranes to harmful chemicals, atypical atmospheric conditions, abuse of Raven geomembranes by machinery, equipment or people; improper site preparation or covering materials, excessive pressures or stresses from any source or improper application or installation. Raven geomembrane material warranty is intended for commercial use only and is not in effect for the consumer as defined in the Magnuson Moss Warranty or any similar federal, state, or local statues. The parties expressly agree that the sale hereunder is for commercial or industrial use only.

Should defects or premature loss of use within the scope of the above Limited Warranty occur, Raven Industries Inc. will, at its option, repair or replace the Raven geomembrane on a pro-rata basis at the then current price in such manner as to charge the Purchaser/User only for that portion of the warranted life which has elapsed since purchase of the material. Raven Industries Inc. will have the right to inspect and determine the cause of any alleged defect in the Raven geomembrane and to take appropriate steps to repair or replace the Raven geomembrane if a defect exists which is covered under this warranty. This Limited Warranty extends only to Raven's geomembrane, and does not extend to the installation service of third parties nor does it extend to materials furnished or installed by others in connection with the intended use of the Raven geomembranes.

Any claim for any alleged breach of this warranty must be made in writing, by certified mail, to the General Manager of Engineered Films Division of Raven Industries Inc. within ten (10) days of becoming aware of the alleged defect. Should the required notice not be given, the defect and all warranties are waived by the Purchaser, and Purchaser shall not have any rights under this warranty. Raven Industries Inc. shall not be obligated to perform repairs or replacements under this warranty unless and until the area to be repaired or replaced is clean, dry, and unencumbered. This includes, but is not limited to, the area made available for repair and/or replacement of Raven geomembrane to be free from all water, dirt, sludge, residuals and liquids of any kind. If after inspection it is determined that there is no claim under this Limited Warranty, Purchaser shall reimburse Raven Industries Inc. for its costs associated with the site inspection.

In the event the exclusive remedy provided herein fails in its essential purpose, and in that event only, the Purchaser shall be entitled to a return of the purchase price for so much of the material as Raven Industries Inc. determines to have violated the warranty provided herein. Raven Industries Inc. shall not be liable for direct, indirect, special, consequential or incidental damages resulting from a breach of this warranty including, but not limited to, damages for loss of production, lost profits, personal injury or property damage. Raven Industries Inc. shall not be obligated to reimburse Purchaser for any repairs, replacement, modifications or alterations made by Purchaser unless Raven Industries Inc. specifically authorized, in writing, said repairs, replacements, modifications or alteration in advance of them having been made. Raven Industry's liability under this warranty shall in no event exceed the replacement cost of the material sold to the Purchaser for the particular installation in which it failed.

Raven Industries Inc. neither assumes nor authorizes any person other than the undersigned of Raven Industries Inc. to assume for it any other or additional liability in connection with the Raven geomembrane made on the basis of the Limited Warranty. The Limited Warranty on the Raven geomembrane herein is given in lieu of all other possible material warranties, either expressed or implied, and by accepting delivery of the material; Purchaser waives all other possible warranties, except those specifically given. This Limited Warranty may only be modified by written document mutually executed by Owner and Raven Industries Inc.

Limited Warranty is extended to the purchaser/owner and is non-transferable and non-assignable; i.e., there are no third-party beneficiaries to this warranty.

Purchaser acknowledges by acceptance that the Limited Warranty given herein is accepted in preference to any and other possible materials warranties.

THIS LIMITED WARRANTY SHALL BE GOVERNED BY SOUTH DAKOTA LAW AND VENUE FOR ALL LEGAL PROCEEDINGS IN CONNECTION WITH THIS LIMITED WARRANTY SHALL BE IN MINNEHAHA COUNTY, SOUTH DAKOTA. RAVEN INDUSTRIES INC. MAKES NO WARRANTY OF ANY KIND OTHER THAN THAT GIVEN ABOVE AND HEREBY DISCLAIMS ALL WARRANTIES, BOTH EXPRESSED OR IMPLIED, OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THIS IS THE ONLY WARRANTY THAT APPLIES TO THE MATERIALS REFERRED TO HEREIN AND RAVEN INDUSTRIES INC. DISCLAIMS ANY LIABILITY FOR ANY WARRANTIES GIVEN BY ANY OTHER PERSON OR ENTITY, EITHER WRITTEN OR ORAL.

RAVEN INDUSTRIES' WARRANTY BECOMES AN ÓBLIGATION OF RAVEN INDUSTRIES INC. TO PERFORM UNDER THE WARRANTY ONLY UPON RECEIPT OF FINAL PAYMENT AND EXECUTION BY A DULY AUTHORIZED OFFICER OF RAVEN INDUSTRIES INC.

### 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 Tank (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.

- 1. BR will operate and maintain a BGT to contain liquids and solids and maintain the integrity of the liner, liner system and secondary containment system to prevent contamination of fresh water and protect public health and environment. BR will accomplish this by performing an inspection on a monthly basis, installing cathodic protection, and automatic overflow shutoff devices as seen on the design plan.
- 2. BR will not discharge into or store any hazardous waste in the BGT.
- 3. BR shall operate and install the below-grade tank to prevent the collection of surface water run-on. BR has built in shut off devices that do not allow a belowgrade tank to overflow. BR constructs berms and corrugated retaining walls at least 6" above ground to keep from surface water run-on entering the below grade tank as shown on the design plan.
- 4. As per 19.17.15.12 Subsection D, Paragraph 3, BR will inspect the below-grade tank at least monthly reviewing several items which include 1) containment berms adequate and no oil present, 2) tanks had no visible leaks or sign of corrosion, 3) tank valves, flanges, and hatches had no visible leaks and 4) no evidence of significant spillage of produced liquids. In addition, BR's multi-skilled operators (MSOs) are required to visit each well location once per week. If detected on either inspection, BR shall 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. The written record of the monthly inspections will include the items listed above and will be maintained for five years.
- 5. BR shall require and maintain a 10" adequate freeboard to prevent overtopping of the below-grade tank.
- 6. If the below grade tank develops a leak, or if any penetration of the pit liner or below grade tank, occurs below the liquid's surface, then BR shall remove all liquid above the damage or leak line within 48 hours. BR shall notify the appropriate district office. BR shall repair or replace the pit liner or below grade tank, within 48 hours of discovery. If the below grade tank or pit liner does not demonstrate integrity, BR shall promptly remove and install a below grade tank or pit liner that complies with Subsection I of 19.15.17.11 NMAC. BR shall notify the appropriate district office of a discovery of leaks less than 25 barrels 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.

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

In accordance with Rule 19.15.17.13 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 Subsection A of 19.15.17.13 NMAC. This will include a) below-grade tanks that do not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC or is not included in Paragraph (5) of Subsection I of f19.15.17.11 NMAC within five years, if not retrofitted to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC; b) permitted below-grade tanks within 60 days of cessation of the below-grade tank's operation., or c) an earlier date that the division requires because of imminent danger to fresh water, public health or the environment. For any closure, BR will file the C144 Closure Report as required.
- 2. 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. The facilities to be used will be Basin Disposal (Permit #NM-01-005) and Envirotech Land Farm (Permit #NM-01-011). The liner after being cleaned well (Subsection D, Paragraph 1, Subparagraph (m) of 19.15.9.712 NMAC) will be disposed of at the San Juan County Regional Landfill located on CR 3100.
- 3. BR will receive prior approval to remove the below-grade tank and dispose of it in a division-approved facility or recycle, reuse, or reclaim it in a manner that the appropriate division district office approves. Documentation of how the below-grade tank was disposed of or recycled will be provided in the closure report.
- 4. 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.
- 5. 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.
- 6. 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.

- 7. 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.
- 8. Notice of Closure will be given prior to closure to the Aztec Division office between 72 hours and one week via email or verbally. The notification of closure will include the following:
  - i. Operator's name
  - ii. Location by Unit Letter, Section, Township, and Range. Well name and API number.
- 9. The surface owner shall be notified of BR's closing of the below-grade tank prior to closure as per the approved closure plan via certified mail, return receipt requested.
- 10. Re-contouring of location will match fit, shape, line, form and texture of the surrounding. Re-shaping will include drainage control, prevent ponding, and prevent erosion. Natural drainages will be unimpeded and water bars and/or silt traps will be place in areas where needed to prevent erosion on a large scale. Final re-contour shall have a uniform appearance with smooth surface, fitting the natural landscape.
- 11. 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 federally jurisdicted lands and division-approved seed mixtures (administratively approved if required) will be utilized on all State or private 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. If alternate seed mix is required by the state, private owner or tribe, it will be implemented with administrative approval if needed. BR will repeat seeding or planting will be continued until successful vegetative growth occurs.
- 12. 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.
- 13. All closure activities will include proper documentation and be available for review upon request and will be submitted to OCD within 60 days of closure of the belowgrade tank. Closure report will be filed on C-144 and incorporate the following:
  - Soil Backfilling and Cover Installation
  - Re-vegetation application rates and seeding techniques
  - Photo documentation of the site reclamation
  - Confirmation Sampling Results
  - Proof of closure notice