District I

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W. Grand Ave., Artesia, NM 88210

District II

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources

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

July 21, 2008

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

Form C-144

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

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

Type of action:	X Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method
	Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method
	Modification to an existing permit
	Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system,
	below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

Operator: Burlington Resources Oil & Gas Company, LP	OGRID#: 14538
Address: PO Box 4289, Farmington, NM 87499	
facility or well name: SAN JUAN 32-9 UNIT 272S	
API Number: 3004533352	OCD Permit Number:
J/L or Qtr/Qtr: P Section: 21 Township: 32N	Range: 9W County: San Juan
enter of Proposed Design: Latitude: 36.96616°N	Longitude: NAD: X 1927 1983
urface Owner: X Federal State Private Tr	ribal Trust or Indian Allotment
Pit: Subsection F or G of 19.15.17.11 NMAC Temporary: Drilling Workover Permanent Emergency Cavitation P&A Lined Unlined Liner type: Thickness mil String-Reinforced Liner Seams: Welded Factory Other	LLDPE HDPE PVC Other Volume: bbl Dimensions L x W x D
Closed-loop System: Subsection H of 19.15.17.11 NMAC Type of Operation: P&A Drilling a new well Workover or notice of int Drying Pad Above Ground Steel Tanks Haul-off Bins Lined Unlined Liner type: Thickness mil Liner Seams: Welded Factory Other	r Drilling (Applies to activities which require prior approval of a permit or ent) Other LLDPE HDPE PVD Other
X Below-grade tank: Subsection I of 19.15.17.11 NMAC Volume: 120 bbl Type of fluid: Produced V Tank Construction material: Metal Secondary containment with leak detection X Visible sidewalls, line Visible sidewalls and liner Visible sidewalls only Ot Liner Type: Thickness mil HDPE PVC	er, 6-inch lift and automatic overflow shut-off
Visible sidewalls and liner Visible sidewalls only Ot	her

61 .		
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, insti-	tution or chur	ch)
	maton or criar	city
Four foot height, four strands of barbed wire evenly spaced between one and four feet		
X Alternate. Please specify 4' hog wire fencing topped with two strands barbed wire.		
7		
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		- 1
X Signed in compliance with 19.15.3.103 NMAC		15.6
A Signed in compnance with 19.19.3.105 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:		
Administrative approval(s): Requests must be submitted to the appropriate division district of the Santa Fe Environmental Bureau office for cons	ideration of ar	proval.
	deration of up	provan
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.	□Yes	XNo
- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells		
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other watercourse, lakebed, sinkhole, or playa	□Yes	X No
lake (measured from the ordinary high-water mark).		
- Topographic map; Visual inspection (certification) of the proposed site		
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial	□Yes	X No
application.		E
(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)	XNA	
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image		
Within 500 horizonal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering	Yes	X No
purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.		
- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site.		
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	□Yes	X No
adopted pursuant to NMSA 1978, Section 3-27-3, as amended		Z. NO
- Written confirmation or verification from the municipality; Written approval obtained from the municipality		
Within 500 feet of a wetland.	Yes	X No
 US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site 		
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	X No
- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological		
Society; Topographic map Within a 100 year floodylain	Yes	X No
Within a 100-year floodplain - FEMA map	163	ANO

			ent Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the follo	owing items must be attached to the a	pplication. Please indicate, by a c	heck mark in the box, that the documents are attached.
X Hydrogeologic Repo	ort (Below-grade Tanks) - based up	on the requirements of Paragra	ph (4) of Subsection B of 19.15.17.9 NMAC
Hydrogeologic Data	(Temporary and Emergency Pits)	- based upon the requirements	of Paragraph (2) of Subsection B of 19.15.17.9
X Siting Criteria Com	pliance Demonstrations - based up	on the appropriate requirements	of 19.15.17.10 NMAC
X Design Plan - based	upon the appropriate requirements	s of 19.15.17.11 NMAC	
=	ntenance Plan - based upon the app		17.12 NMAC
	and 19.15.17.13 NMAC	applicable) - based upon the ap	ppropriate requirements of Subsection C of
Previously Approved D	esign (attach copy of design)	API	or Permit
12	344		
	mit Application Attachment Che		
			heck mark in the box, that the documents are attached.
			nents of Paragraph (3) of Subsection B of 19.15.17.9
Siting Criteria Com	pliance Demonstrations (only for o	n-site closure) - based upon the	appropriate requirements of 19.15.17.10 NMAC
Design Plan - based	upon the appropriate requirement	s of 19.15.17.11 NMAC	
Operating and Mair	ntenance Plan - based upon the app	ropriate requirements of 19.15.	17.12 NMAC
Closure Plan (Pleas	e complete Boxes 14 through 18, i	f applicable) - based upon the ar	ppropriate requirements of Subsection C of 19.15.17.9
NMAC and 19.15.1		application outside apoli are ap	propriete requirements of business of 17:10:11:7
Previously Approved D	esign (attach copy of design)	API	
		7 (45) A (45)	
Previously Approved O	perating and Maintenance Plan	API	
13			
Permanent Pits Permit A	application Checklist: Subsection	n B of 19.15.17.9 NMAC	
instructions: Each of the fol	lowing items must be attached to the	application. Please indicate, by a	check mark in the box, that the documents are attached.
Hydrogeologic Rep	ort - based upon the requirements of	of Paragraph (I) of Subsection B	of 19.15.17.9 NMAC
Siting Criteria Com	pliance Demonstrations - based up	on the appropriate requirements	of 19.15.17.10 NMAC
Climatological Fact			
	ng Design Plans - based upon the a	ppropriate requirements of 19.1	5.17.11 NMAC
=	Structural Integrity Design: based		
	ign - based upon the appropriate re	The state of the s	
	and Compatibility Assessment - b		
=	ality Assurance Construction and In		
=	ntenance Plan - based upon the app		17.12 NMAC
=	rtopping Prevention Plan - based up		
=	lous Odors, including H2S, Preven		ou initiality
Emergency Respons		aron a man	
	eam Characterization		
Monitoring and Insp Erosion Control Pla			
	n d upon the appropriate requirement	to of Subsection C of 10 15 17 (NMAC and 10 15 17 13 NMAC
Closure Plan - based	i upon the appropriate requirement	s of Subsection C of 19.15.17.9	7 NMAC and 19.15.17.13 NMAC
14			
Proposed Closure: 19.15	5.17.13 NMAC te the applicable boxes, Boxes 14 thro	ough 18 in regards to the propose	d closure plan
	orkover Emergency Cavita	tion P&A Permanent	Pit X Below-grade Tank Closed-loop System
Alternative			
Proposed Closure Method:	X Waste Excavation and Remov		
	Waste Removal (Closed-loop	1 × 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	On-site Closure Method (only	for temporary pits and closed-loc	op systems)
	In-place Burial	On-site Trench	
	Alternative Closure Method (Exceptions must be submitted to	the Santa Fe Environmental Bureau for consideration)
is .			
15 Waste Evenyation and P.	emovel Closure Dlan Charliff	(10.15.17.13 NMAC) Footoood	Each of the following items must be attached to the de-
	mark in the box, that the documents of		: Each of the following items must be attached to the closure plan
	edures - based upon the appropriate		MAC
			s of Subsection F of 19.15.17.13 NMAC
	ame and Permit Number (for liquid		
=			ents of Subsection H of 19.15.17.13 NMAC
=	 based upon the appropriate requirements 	ements of Subsection I of 19.15	5.17.13 NMAC
X Site Reclamation Pl	an - based upon the appropriate rec	quirements of Subsection G of 1	19.15.17.13 NMAC

Form C-144

Oil Conservation Division

16		
Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Stee Instructions: Please identify the facility or facilities for the disposal of liquids, drilling		cilities
Disposal Facility Name:	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 appropriate Re-vegetation Plan - based upon the appropriate requirements of Subsection Site Reclamation Plan - based upon the appropriate requirements of Subsection Plan - based upon the appropriate requirements.	tion I of 19.15.17.13 NMAC	
Siting Criteria (Regarding on-site closure methods only: 19.15.17.10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recertain siting criteria may require administrative approval from the appropriate district office of for consideration of approval. Justifications and/or demonstrations of equivalency are required.	tecommendations of acceptable source material are provided below or may be considered an exception which must be submitted to the S	
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 obta	ined from nearby wells	Yes No
Ground water is between 50 and 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtai		Yes No
	ned from hearby wers	
Ground water is more than 100 feet below the bottom of the buried waste.	and from a reduced to	Yes No
 NM Office of the State Engineer - iWATERS database search; USGS; Data obtain 	ned from nearby wells	∐N/A
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other signific (measured from the ordinary high-water mark).	ant watercourse or lakebed, sinkhole, or playa lake	Yes No
- Topographic map; Visual inspection (certification) of the proposed site	the state of the s	□vas □Na
 Within 300 feet from a permanent residence, school, hospital, institution, or church in c Visual inspection (certification) of the proposed site; Aerial photo; satellite image 	existence at the time of initial application.	Yes No
		Yes 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 existence of the State Engineer - iWATERS database; Visual inspection (certification within incorporated municipal boundaries or within a defined municipal fresh water we	ence at the time of the initial application. ation) of the proposed site	∏Yes ∏No
 pursuant to NMSA 1978, Section 3-27-3, as amended. Written confirmation or verification from the municipality; Written approval obta 	sined from the municipality	
Within 500 feet of a wetland - US Fish and Wildlife Wetland Identification map: Topographic map; Visual insp	Yes No	
Within the area overlying a subsurface mine.	central (certification) of the proposed one	Yes No
- Written confiramtion or verification or map from the NM EMNRD-Mining and M	fineral Division	
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mi	neral Resources; USGS; NM Geological Society;	Yes No
Topographic map		Dva Dva
Within a 100-year floodplain FEMA map		Yes No
18 On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the Checklist: (19.15.17.13 NMAC) Instructions:	of the following items must bee attached to the closure	plan. Please indicate,
by a check mark in the box, that the documents are attached.		
Siting Criteria Compliance Demonstrations - based upon the appropriate		
Proof of Surface Owner Notice - based upon the appropriate requiremen		
Construction/Design Plan of Burial Trench (if applicable) based upon the		15 17 11 11 12 14
Construction/Design Plan of Temporary Pit (for in place burial of a dryin Protocols and Procedures - based upon the appropriate requirements of		.15.17.11 NMAC
Confirmation Sampling Plan (if applicable) - based upon the appropriate		
Waste Material Sampling Plan - based upon the appropriate requirement		
Disposal Facility Name and Permit Number (for liquids, drilling fluids a		not be achieved)
Soil Cover Design - based upon the appropriate requirements of Subsect	SHOULD HAVE SELECTED AND A SELECTION OF THE PROPERTY OF THE PR	
Re-vegetation Plan - based upon the appropriate requirements of Subsec	tion I of 19.15.17.13 NMAC	
Site Reclamation Plan - based upon the appropriate requirements of Sub		

19 Operator Application Certification:		
I hereby certify that the information submitted with this application is true, accur	rate and complete to the	best of my knowledge and belief.
Name (Print): Crystal Tafoya	Title:	Regulatory Technician
Signature: Model Todow	Date:	12/22/2008
e-mail address: crystal tafoya@conocophilips.com	Telephone:	505-326-9837
OCD Approval: Permit Application (including closure plan)	Closure Plan (only)	OCD Conditions (see attachment)
OCD Representative Signature:		Approval Date:
Title:	OCD Pern	nit Number:
Closure Report (required within 60 days of closure completion); Substitutions: Operators are required to obtain an approved closure plan prior to report is required to be submitted to the division within 60 days of the completion approved closure plan has been obtained and the closure activities have been continued to the closure activities activities have been continued to the closure activities ac	o implementing any closs on of the closure activitie ompleted.	are activities and submitting the closure report. The closure
22		
Closure Method: Waste Excavation and Removal On-site Closure Method If different from approved plan, please explain.	Alternative Closure	Method Waste Removal (Closed-loop systems only)
23		The second secon
Closure Report Regarding Waste Removal Closure For Closed-loop Systems Instructions: Please identify the facility or facilities for where the liquids, drill		
were utilized. Disposal Facility Name:	Disposal Facility	Permit Number:
Disposal Facility Name:	Disposal Facility	
Were the closed-loop system operations and associated activities performed of		
Yes (If yes, please demonstrate compliane to the items below)	No	
Required for impacted areas which will not be used for future service and op	verations:	
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 follo	owing items must be atta	ched 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 the closure complies with all applicable closure requirements and conditions sp	The state of the s	
Name (Print):	Title:	
Signature:	Date:	
e-mail address:	Telephone:	

New Mexico Office of the State Engineer POD Reports and Downloads

Township: 32N Range:	09W Sections: 15,16,17,20,21,22,27,28,29
NAD27 X: Y:	Zone: Search Radius:
County: Basin:	Number: Suffix:
Owner Name: (First)	(Last)
POD / Surface Data Report	Avg Depth to Water Report Water Column Report
Clear F	orm iWATERS Menu Help
(markers are 1-MT	WATER COLUMN REPORT 01/10/2009

Zone

Depth

843

Well

Depth

580

Water

Water (in

263

Column

(quarters are biggest to smallest)

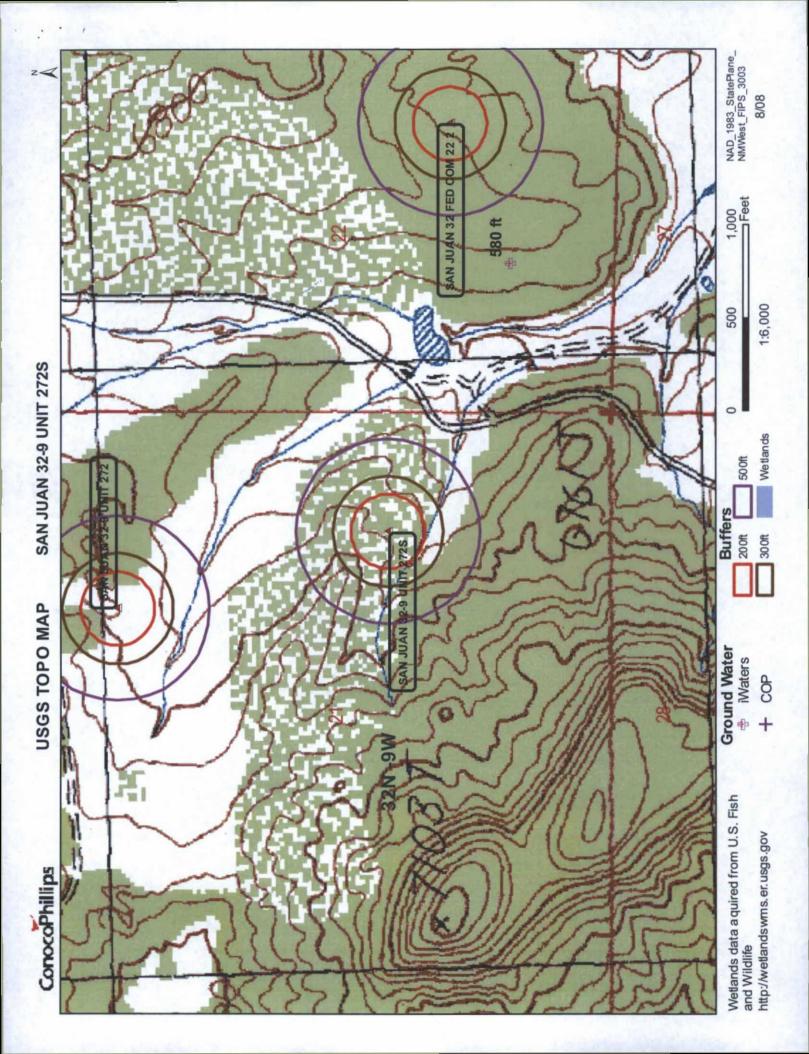
Tws Rng Sec q q q

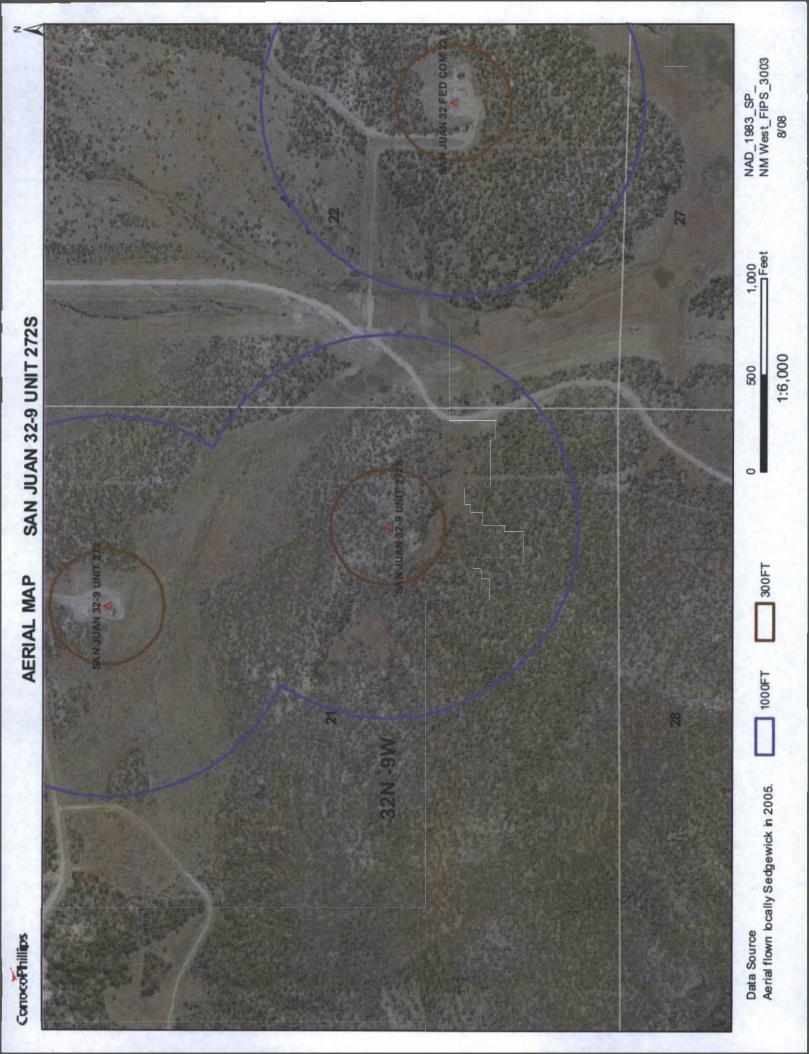
32N 09W 22 3 3 3

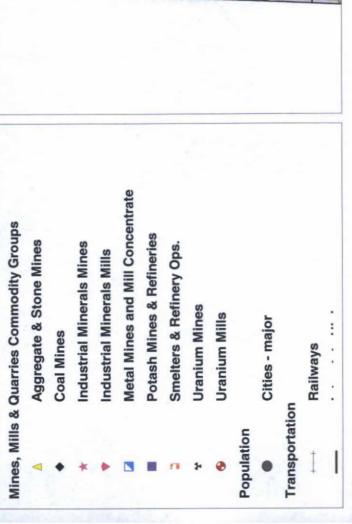
Record Count: 1

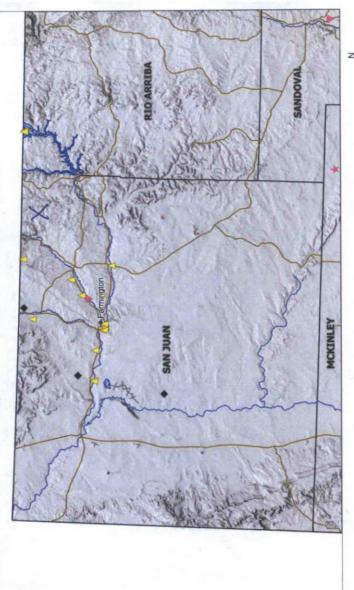
POD Number

SJ 03131

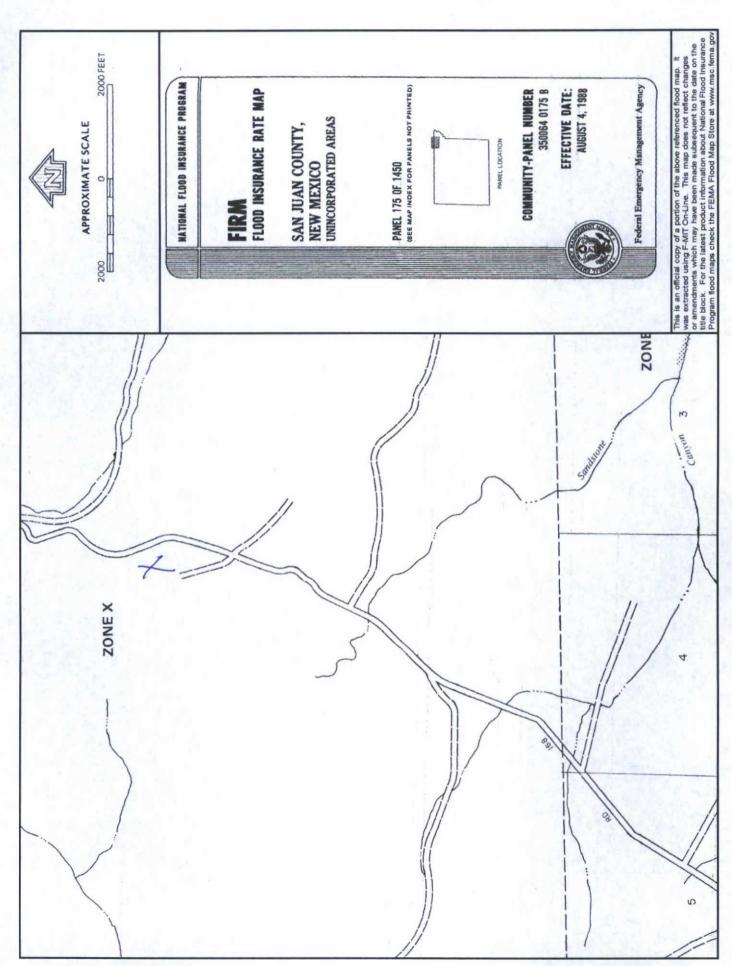












SAN JUAN 32-9 UNIT 272S

Site Specific Hydrogeology

A visual site inspection confirming the information contained herein was performed on the well 'SAN JUAN 32-9 UNIT 272S', which is located at 36.96616 degrees North latitude and 107.77755 degrees West longitude. This location is located on the Mount Nebo 7.5' USGS topographic quadrangle. This location is in section 21 of Township 32 North Range 9 West of the Public Land Survey System (New Mexico Principal Meridian). This location is located in San Juan County, New Mexico. The nearest town is Cedar Hill, located 6.4 miles to the west. The nearest large town (population greater than 10,000) is Durango, located 22.0 miles to the north (National Atlas). The nearest highway is US Highway 550, located 5.5 miles to the west. The location is on BLM land and is 473 feet from the edge of the parcel as notated in the BLM land status layer updated January 2008. This location is in the Upper San Juan. Colorado. New Mexico, Subbasin. This location is located 2060 meters or 6756 feet above sea level and receives 16.5 inches of rain each year. The vegetation at this location is classified as Colorado Plateau Pinion-Juniper Woodland as per the Southwest Regional Gap Analysis Program.

The estimated depth to ground water at this point is 627 feet. This estimation is based on the data published on the New Mexico Engineer's iWaters Database website and water depth data from ConocoPhillips' Cathodic wells. Groundwater data available from the NM State Engineer's iWaters Database for wells near the proposed site are attached. The nearest stream is 279 feet to the southwest and is classified by the USGS as an intermittent stream. The nearest perrenial stream is 773 feet to the east. The nearest water body is 764 feet to the east. It is classified by the USGS as an intermittent lake and is 0.9 acres in size. The nearest spring is 5,142 feet to the south. All stream, river, water body and spring information was determined as per the USGS Hydrographic Dataset (High Resolution), downloaded 3/2008. The nearest water well is 1,177 feet to the southeast. There is no wetland data available for this area. The slope at this location is 2 degrees to the southeast as calculated from USGS 30M National Elevation Dataset. This information is also discerned from the aerial and topographic map included. The surface geology at this location is SAN JOSE FORMATION--Siltstone, shale, and sandstone with a Sandstone dominated formations of all ages substrate. The soil at this location is 'Travessilla-Weska-Rock outcrop complex, moderately steep' and is well drained and not hydric with severe erosion potential as taken from the NRCS SSURGO map unit, downloaded January 2008. The nearest underground mine is 6.4 miles to the west as indicated on the Mines, Mills and Quarries Map of New Mexico provided.

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.

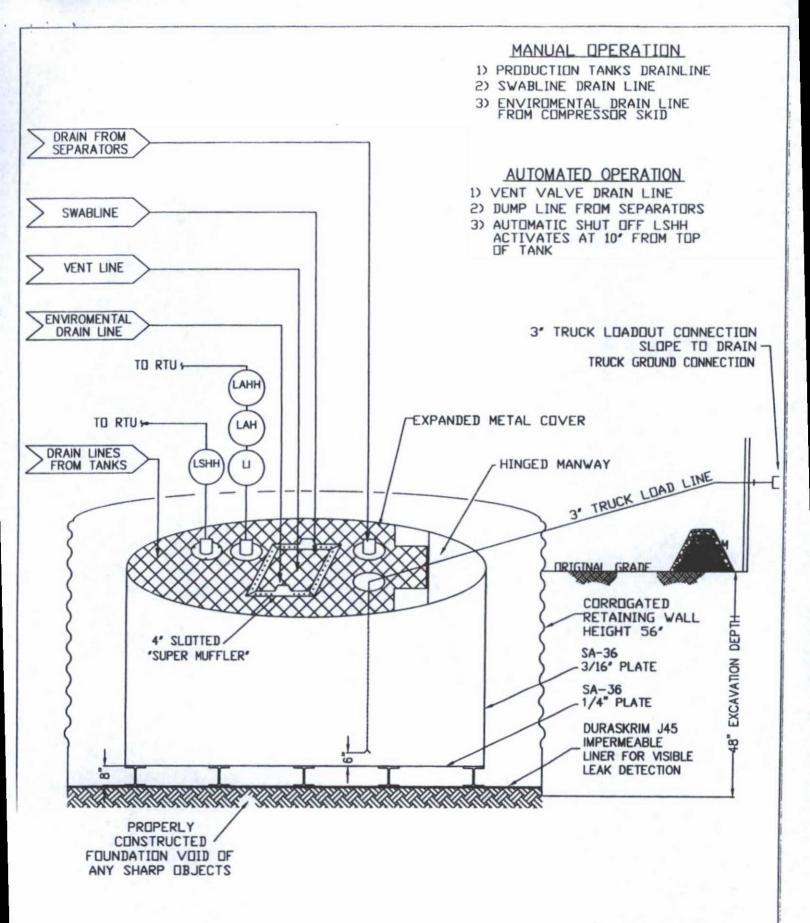
Burlington Resources Oil & Gas Company, LP San Juan Basin Below Grade Tank Design and Construction

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

General Plan:

- 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.
- 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 Raven 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 Raven 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.
- The general specification for design and construction are attached in the BR document.



ConocoPhillips

San Juan Business Unit

PRODUCED WATER PIT TANK
OPEN TOP GRAVITY FLOW TANK
INTERNALLY COATED WITH
12-14 MILS AMERON AMERCOAT 385

DURA-SKRIM®

J30, J36 a J45

PROPERTIES	TEST METHOD	J30BB		J3688		J45BB		
		Min. Roll Averages	Typical Roll Averages	Min. Roll Averages	Typical Roll Averages	Min. Roll Averages	Typical Ro Averages	
Appearance		Black	k/Black	Black	/Black	Black	/Black	
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 encapsula	ted tri-direction	al scrim reinford	scrim reinforcement	
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 ME 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 @ Peak % (Scrim 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 Tear 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 MC 118 lbf DC	
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	<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 disciaims all liability for resulting loss or damage.

PLANT LOCATION

Sioux Falls, South Dakota

SALES OFFICE

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

RAVEN

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 OBLIGATION 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.

OCD Aztec District III Conoco Phillips/Burlington Checklist Below Grade Tank Registration

19.15.17.9 Permit application ✓ Signed C-144 (Page 5 of C-144) ✓ Site Specific Hydrogeology
19.15.17.10 Siting requirements New Mexico Office of State Engineer attachment USGS TOPO map Aerial Map Mines, Mills and Quarries Web Map FIRM map (flood insurance rate map from Federal Emergency Management Agency)
19.15.17.11 Design Plan Contents Below Grade Tank Design and Construction Plan.
19.15.17.12 Operating and Maintenance Plan Below Grade Tank Operating and Maintenance Plan
19.15.17.13 Closure Plan Below Grade Tank Closure Plan
Requirements: Missing operation + Maintenance and Clasuse Plans
Registration Date: 2/29/2016