District I 1625 N. French Dr., Hobbs, NM 88240	State of New Mexico and Natural Resource partment	Form C-144 July 21, 2008 For temporary pits, closed-loop sytems, and below-grade tanks. submit to the appropriate NMOCD District Office.
District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505	Santa Fe, NM 87505	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-Gr	ade Tank, or
Propose	ed Alternative Method Permit or Close	sure Plan Application
Type of action:	X Permit of a pit, closed-loop system, below-grad	le tank, or proposed alternative method
	Closure of a pit, closed-loop system, below-gra	ide tank, or proposed alternative method
	Modification to an existing permit	
	Closure plan only submitted for an existing per below-grade tank, or proposed alternative meth	mitted or non-permitted pit, closed-loop system,
Instructions: Please submit one ap	plication (Form C-144) per individual pit, closed	loop system, below-grade tank or alternative request
Please be advised that approval of environment. Nor does approval relie	this request does not relieve the operator of liability should operation we the operator of its responsibility to comply with any other applica-	ons result in pollution of surface water, ground water or the able governmental authority's rules, regulations or ordinances.
Deperator: Burlington Resources Oil	& Gas Company, LP	OGRID#: 14538
Address: PO Box 4289, Farmington	n, NM 87499	
Facility or well name: SAN JUAN 2	8-4 UNIT 30M	······································
API Number: 30	003925945 OCD Permit Nur	nber:
U/L or Qtr/Qtr: 0 Sectio	n: <u>31</u> Township: <u>28N</u> Range:	4W County: Rio Arriba
Surface Owner: X Federal	State Private Tribal Trust or Ind	-107.28915°W NAD: X 1927 1983 dian Allotment
2 Pit: Subsection F or G of 19.15.17 Temporary: Drilling Work Permanent Emergency Ca Lined Unlined Line String-Reinforced Liner Seams: Welded Fac	.11 NMAC over avitation P&A er type: Thickness mil LLDPE ctory Other Volume:	HDPE PVC Other
3 Closed-loop System: Subsection: Type of Operation: P&A Image: Subsection: Drying Pad Above Groun: Above Groun: Lined Unlined Liner Liner Seams: Welded Face	on H of 19.15.17.11 NMAC Drilling a new well Workover or Drilling (Applies notice of intent) d Steel Tanks Haul-off Bins Other type: Thickness mil LLDPE ctory Other	s to activities which require prior approval of a permit or
4 X Below-grade tank: Subsection I Volume: 120 bb Tank Construction material:	of 19.15.17.11 NMAC I Type of fluid: Produced Water Metal tection X Visible sidewalls, liner, 6-inch lift and a Visible sidewalls only Other mil HDPE PVC X Other	automatic overflow shut-off Unspecified
⁵ <u>Alternative Method:</u>		
Submittal of an exception request is req	uired. Exceptions must be submitted to the Santa Fe Env	uronmental Bureau office for consideration of approval.
Form C-144	Oil Conservation Division	Page 1 of 5

5

0	
Fencing: Subsection D of 19.15.17 11 NMAC (Anolies to nermanent net commenced by	
Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, howing	d instant of the to
Four foot height, four strands of barbed wire evenly spaced between one and four feet	on, institution of church)
X Alternate. Please specify <u>4' hog wire fencing topped with two strands barbed wire.</u>	
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:	
Districtions and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.	
rease 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 (Fencing/BGT Liner)	consideration of approval.
Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.	
10	
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 puds or above grade-tanks associated with a closed-loop system.	
Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	Yes XNo
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	Yes XNo
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.	Yes XNo
(Applies to temporary, emergency, or cavitation pits and below-grade tanks)	
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application	
(Applied to permanent pits)	Yes No
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	XNA
Within 500 horizonal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.	Yes XNo
NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended Witten confirmation or writigentian from the mention by a bit of the section of the section of the section for the section for the section of the se	Yes XNo
 Within 500 feet of a wetland. US Fish and Wildlife Wetland Identification man: Topographic man. Visual income in the municipality 	Yes X No
 Within the area overlying a subsurface mine. Written confirmation or verification or map from the NM EMNRD. Minima and Minima an	Yes XNo
Within an unstable area.	
- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	Yes XNo
Within a 100-year floodplain - FEMA map	Yes XNo

F 11	
Temporary Pits, Emerge	ncy Pits and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19/15/17/9 NMAC
X Hydrogaologia Dag	wing items must be attached to the application. Please indicate, by a check mark in the box, that the doctionents are attached.
Ilvdrogeologic Data	(Temporate and Eastern Picture Picture and Picture Pic
X Siting Criteria Com	(Temporal yand emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19:15.17.9
X Design Plan bosad	mance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
X Operating and Main	upon the appropriate requirements of 19.15.17.11 NMAC
X Character and Math	tenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
19.15.17.9 NMAC a	^c complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of and 19,15,17,13 NMAC
Previously Approved De	sign (attach copy of design) API or Permit
Closed-loop Systems Pern	nit Application Attachment Checklist, Submain the Contract on the Contract
Instructions: Each of the foilor	wing items must be attached to the application. Please indicate, by a check mark in the box, that the documente are start to 2
Geologic and Hydrog	geologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9
Siting Criteria Comp	liance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15 17.10 NMAC
Design Plan - based u	apon the appropriate requirements of 19.15.17.11 NMAC
Operating and Mainte	enance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
Closure Plan (Please) NMAC and 19.15.17	complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9
Previously Approved Des	sign (attach copy of design)
Previously Approved Ope	erating and Maintenance Plan
11	
Permanent Pits Permit Ap	plication Checklist: Subjection R of 10.15.17.0 Mater
Instructions: Each of the follo	wing items must be attached to the annication. Please indicate here that the state of the
Hydrogeologic Report	1 - based upon the requirements of Paragraph (1) of Subcreting D of 10 16 17 0 hours and the documents are attached.
Siting Criteria Compli	ance Demonstrations - based upon the appropriate requirements of 10.15.17.9 NMAC
Climatological Factors	Assessment
Certified Engineering	Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
Dike Protection and St	tructural Integrity Design: based upon the appropriate requirements of 19.15.17 11 NMAC
Leak Detection Design	1 - based upon the appropriate requirements of 19.15.17.11 NMAC
Liner Specifications an	id Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
Quality Control/Quality	y Assurance Construction and Installation Plan
Effectionated and Overtor	nance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
Nuisance or Hazardous	s Odors, including H2S, Prevention Disc.
Emergency Response F	Plan
Oil Field Waste Stream	Characterization
Monitoring and Inspect	tion Plan
Erosion Control Plan	
Closure Plan - based up	ion the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC
4	
roposed Closure: 19.15.17.	13 NMAC
istructions: Please complete the	e applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.
Alternative	wer Emergency Cavitation P&A Permanent Pit XBelow-grade Tank Closed-loop System
oposed Closure Method:	Waste Excavation and Removal (Below-Grade Tank)
Ē	Waste Removal (Closed-loop systems only)
	On-site Closure Method (only for temporary pits and closed-loop systems)
_	In-place Burial On-site Trench
	Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)
5	
aste Excavation and Remov	val Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attracted to the
ense indicate, by a check mark	in the box, that the documents are attached.
IN Protocols and Procedures	s - based upon the appropriate requirements of 19.15.17.13 NMAC
X Confirmation Sampling F	Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
Disposal Facility Name a	and Permit Number (for liquids, drilling fluids and drill cuttings)
Do uncertain and Cover [Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
N Site Destantion Plan - base	cd upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
A She Reclamation Plan - h	ased upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

-to		
Waste Removal Closure For Closed-loop Systems That Utilize ,	Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.D. NMA	C)
are required.	l of liquids, drifling fluids and drill cuttings. Use attachment if more than t	two facilities
Disposal Facility Name:	Disposal Facility Permit #	
Disposal Facility Name:	Disposal Facility Permit #:	
Will any of the proposed closed-loop system operations and a Yes (If yes, please provide the information	ssociated activities occur on or in areas that will not be used for futu No	re service and operations?
Required for impacted areas which will not be used for future servi	- ice and operations:	
Soil Backfill and Cover Design Specification - based u	ipon the appropriate requirements of Subsection H of 19.15.17.13 NI	МАС
Site Reclamation Plan - based upon the appropriate requi	rements of Subsection 1 of 19.15.17.13 NMAC	
	urrements of Subsection(G of 19.15.17.13 NMAC	
17 <u>Siting Criteria (Regarding on-site closure methods only:</u> Instructions: Each siting criteria requires a demonstration of compliance r certain situig criteria may require administrative approval from the appro-	19.15.17.10 NMAC in the closure plan. Recommendations of acceptable source material are provided	below. Requests regarding changes to
for consideration of approval. Justifications and/or demonstrations of equ	while district office of may be considered an exception which must be submitted to ivalency are required. Please refer to 19.15,17,10 NMAC for guidance.	the Santa Fe Environmental Bureau office
Ground water is less than 50 feet below the bottom of the buri	ed waste	
 NM Office of the State Engineer - iWATERS database search 	: USGS: Data obtained from nearby wells	
Ground water is between 50 and 100 feet below the bottom of	the buried warts	
- NM Office of the State Engineer - iWATERS database search:	USGS: Data obtained from nearby wells	Yes No
Ground water is more than 100 fast below the bare of the	Source on the optimized from nearby wells	N/A
NM Office of the State Envineer, WATERS database county	iried waste.	Yes No
Within 200 Control of the state	USUS: Data obtained from nearby wells	N/A
(measured from the ordinary high-water mark).	f any other significant watercourse or lakebed, sinkhole, or playa lake	Yes No
Within 200 for for	sed site	
 Visual inspection (certification) of the proposed site; Aerial pho 	ion, or church in existence at the time of initial application, to: satellite image	Yes No
Within 500 horizontal feet of a private, domestic fresh water well or s purposes, or within 1000 horizontal fee of any other fresh water well o - NM Office of the State Engineer - iWATERS database: Visual in	pring that less than five households use for domestic or stock watering or spring, in existence at the time of the initial application.	Yes No
Within incorporated municipal boundaries or within a defined municip pursuant to NMSA 1978, Section 3-27-3, as amended. Written confirmation or verification from the municipality. Weither	pal fresh water well field covered under a municipal ordinance adopted	Yes No
Within 500 feet of a wetland	ten approval obtained from the municipality	
- US Fish and Wildlife Wetland Identification map: Topographic	map: Visual inspection (certification) of the proposed site	Yes No
Within the area overlying a subsurface mine.	i man ter montroll of the proposed site	
Written confiramtion or verification or map from the NM EMNR	D-Mining and Mineral Division	Yes No
Within an unstable area.		Yes No
Topographic map	of Geology & Mineral Resources: USGS; NM Geological Society:	
Within a 100-year floodplain. - FEMA map		Yes No
18		
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instru-	ctions: Each of the following items must bee attached to the closur	e plan. Please indicate.
Siting Criteria Compliance Demonstrations based uner		
Proof of Surface Owner Notice - based upon the appropriate	ne appropriate requirements of 19.15.17.10 NMAC	
Construction/Design Plan of Burial Trench (if applicable)	based upon the constraints of Subsection F of 19.15.17.13 NMAC	
Construction/Design Plan of Temporary Pit (for in place b	used upon the appropriate requirements of 19.15.17.11 NMAC	
Protocols and Procedures - based upon the appropriate ren	wirements of 19.15.17.13 NMAC	9.15.17.11 NMAC
Confirmation Sampling Plan (if applicable) - based upon the	the appropriate requirements of Subsection F of 10.15.17.13 Mixed on	
Waste Material Sampling Plan - based upon the appropriat	e requirements of Subsection F of 10.15.17.13 NMAC	
Disposal Facility Name and Permit Number (for liquids de	illing fluids and drill cuttings or in account	
Soil Cover Design - based upon the appropriate requirement	nts of Subsection H of 19,15,17,13 NMAC	not be achieved)
Re-vegetation Plan - based upon the appropriate requireme	nts of Subsection I of 19.15.17.13 NMAC	
[] Site Reclamation Plan - based upon the appropriate require	ments of Subsection C of 10 15 17 12 March C	

Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

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19			
Operator Applicat	tion Certification:		
I hereby certify that the	ne information submitted with this application is true, ac	courate and complete to the b	best of my knowledge and belief.
Name (Print):	Crystal Fafoya	Title:	Regulatory Technician
Signature:	- Constal Taloua	Date:	12/22/2008
e-mail address:	crystal tatova 🕸 conocophilips.com	Telephone:	505-326-9837
20			
OCD Approval:	Permit Application (including closure plan)	Closure Plan (only)	OCD Conditions (see attachment)
OCD Representati	ve Signature:		America D. A
			Approval Date:
Title:		OCD Permi	t Number:
21			
Closure Report (re	quired within 60 days of closure completion).	5	
Instructions: Operator	is are required to obtain an approved closure plan prior	r to implementing any closur	c activities and submitting the closure report. The closure
report is required to b approved closure plan	e submitted to the division within 60 days of the complete has been obtained and the alarma and its sector.	tion of the closure activities.	Please do not complete this section of the form until an
approved cosure plan	has been obtained and the closure activities have been	completed.	
		Closure	Completion Date:
22			
Closure Method:			
Waste Excavat	ion and Removal On-site Closure Method	Alternative Closure M	lethod Waste Removal (Closed-loop systems only)
If different from	m approved plan, please explain.		
23			
Closure Report Regain	rding Waste Removal Closure For Closed-loop Syster	ns That Utilize Above Grou	and Steel Tanks or Haul-off Bins Only:
were utilized.	entify the facility or facilities for where the liquids, dri	lling fluids and drill cutting	s were disposed. Use attachment if more than two facilities
Disposal Facility Na	ame:	Disposal Engility D	in Ni
Disposal Facility Na	ame:	Disposal Facility P	
Were the closed-loo	p system operations and associated activities performed	on or in areas that will not 1	mit Number:
Yes (If yes, plea	ase demonstrate complilane to the items below)	No	of used for thrure service and opeantions?
Required for impact	ed areas which will not be used for future service and o	perations:	
Site Reclamatio	on (Photo Documentation)		
Soil Backfilling	and Cover Installation		
Re-vegelation A	application Rates and Seeding Technique		
24 Cloguro Bonort A			
the box, that the doc	<u>Ilachment Checklist:</u> Instructions: Each of the following the following the set of the following the set of the following the set of the set o	owing items must be attache	ed to the closure report. Please indicate, by a check mark in
Proof of Closu	re Notice (surface owner and division)		
Proof of Deed	Notice (required for on-site closure)		
Plot Plan (for c	on-site closures and temporary pits)		
Confirmation S	Sampling Analytical Results (if applicable)		
Waste Materia	Sampling Analytical Results (if applicable)		
Disposal Facili	ty Name and Permit Number		
Soil Backfilling	g and Cover Installation		
Re-vegetation /	Application Rates and Seeding Technique		
Site Reclamation	on (Photo Documentation)		
On-site Closure	Location: Latitude:	Longitude:	NAD 1927 1983
25			
Operator Closure Ce	rtification:		
I hereby certify that the i	nformation and attachments submitted with this closure	report is ture, accurate and	complete to the best of my knowledge and belief. I also certify that
me crosure complies with	van applicable closure requirements and conditions spe	cified in the approved closu	re plan.
Name (Print):		Title:	
Simature			
		Date:	
e-mail address:		Telephone	

Page	1	of	1
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		New	Mexico O POD Rep	ffice of the of the orthogonal sector of the o	he State En I Download	i <i>gineer</i> Is				
Te	ownship: 28	N Ran	ge: 04W	Sectio	ns:					
NAD	27 X:	Y	:	Zone	:	Sear	ch Radiu	s:		
County:		Basin:			Nu	umber:		Suffix:		-
Owner Name: ((First)		(Last)	-		⊂ Non-l	Domestic	⊂ Dom	estic @	All
POD / Su	rface Data R	eport	Av	g Depth to	Water Repo	ort	Wat	er Column	Report	
		Clea	r Form	iWATE	ERS Menu	Help				
			<u></u>							
			WATER	COLUMN	REPORT 0	8/20/20	008			
	(quarter	s are 1:	=NW 2=NE	3=SW 4=	SE)					
	(quarter	s are b	iggest to	smalle	st)		Depth	Depth	Water	(in
POD Number	Tws	Rng Se	e d d d	Zone	x	Y	Well	Water	Column	
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50 02385	2 0 N	04W 20	1 I I				TOO	00	15	

Towr	nship: 28N Range	e: 05W Section	s:	1	
NAD27	X: Y:	Zone:	Sear	ch Radius:	
County:	Basin:		Number:	Suffix:	
Owner Name: (Fir	st)	(Last)	C Non-	Domestic C Domestic	e All
POD / Surfac	e Data Report	Avg Depth to	Water Report	Water Column Repo	ort
	Clear	Form iWATEF	RS Menu Help	1	

WATER COLUMN REPORT 08/20/2008

	(quarter (quarter	s are s are	e 1=: e bi:	NW : gge:	2=NE st to	3=SW 4=9 smalles	SE) st)		Depth	Depth	Water	(in
POD Number	Tws	Rng	Sec	g (a a	Zone	x	Y	Well	Water	Column	
SJ 01893	28N	05W	18	4					390	290	100	
SJ 00047	28N	05W	28						465	265	200	
SJ 00036	28N	05W	28	3					303	243	60	

New Mexico Office of the State Engineer

New Mexico Office of the State Engineer POD Reports and Downloads
Township: 27N Range: 05W Sections:
NAD27 X: Y: Zone: Search Radius:
County: Basin: Number: Suffix:
Owner Name: (First) (Last) CNon-Domestic CDomestic @ All
POD / Surface Data Report Avg Depth to Water Report Water Column Report
Clear Form iWATERS Menu Help
WATER COLUMN REPORT 08/20/2008

	(quarter (quarter	s are s are	e 1=1 e big	WW 999	2: est	=NE t to	3=SW 4=SE smallest)		Depth	Depth	Water	(in
POD Number	TWB	Rng	Sec	g	đ	P	Zone	х	Y	Well	Water	Column	
RG 81026	27N	05W	27	4	4	3				460	186	274	
SJ 00199	27N	05W	03	2	1					1840			
SJ 00046	27N	05W	04	4	4					506	260	246	

		New	Mexico () POD Rej	<i>Office of th</i> ports and	e State En Download	gineer s				
То	wnship: 27	N Rang	e: 04W	Section	s: [
NAD2	27 X:	Y:		Zone:	<u>v</u> .	Searc	ch Radius			
County:	· F	Basin:			- Nu	mber:		Suffix:		
Owner Name: ()	First)		(Last)		∩ Non-I	Domestic	C Dome	estic 6	All
POD / Sur	face Data R	eport	A	vg Depth to	Water Repo	ort	Wate	er Column	Report	
		Clea	Form	iWATE	RS Menu	Help				
			WATE	r column	REPORT 0	8/20/20	008			
	(quarter	s are 1=	NW 2=NE	3=SW 4=S	SE) st)		Depth	Depth	Water	(in
POD Number	Tws	Rng Sec	q q q	Zone	x	Y	Well	Water	Column	
SJ 00048	27N	04W 01	4 2 2				15			
SJ 01049 SJ 01205	27N	04W 34	4 4 4				3054	750	2304	





AERIAL MAP SAN JUAN 28-4 UNIT 30M



Aerial flown locally Sedgewick in 2005.

	1000FT

300FT

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1.6.000
1.0.000

NAD_1983_SP_ NM West_FIPS_3003 8/08

Mines, Mills and Quarries Web Map

SAN JUAN 28-4 UNIT 30M

Unit Letter: O, Section: 31, Town: 028N, Range: 004W



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SAN JUAN 28-4 UNIT 30M

Site Specific Hydrogeology

A visual site inspection confirming the information contained herein was performed on the well 'SAN JUAN 28-4 UNIT 30M', which is located at 36.61094 degree, North latitude and 107.28915 degree, West longitude. This location is located on the Vigas Canyon 7.5' USGS topographic quadrangle. This location is in section 31 of Township 28 North Range 4 West of the Public Land Survey System (New Mexico Principal Meridian). This location is located in Rio Arriba County, New Mexico. The nearest town is Dulce, located 27.5 miles to the northeast. The nearest large town (population greater than 10,000) is Farmington, located 51.6 miles to the west (National Atlas). The nearest highway is US Highway 64, located 6.8 miles to the north. The location is on National Forest land and is 3,241 feet from the edge of the parcel as notated in the BLM land status layer updated January 2008. This location is in the Blanco Canyon. New Mexico, Sub-basin. This location is located 2194 meters or 7196 feet above sea level and receives 14.5 inches of rain each year. The vegetation at this location is classified as Colorado Plateau Pinon-Juniper Woodland as per the Southwest Regional Gap Analysis Program.

The estimated depth to ground water at this point is 427 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 401 feet to the south and is classified by the USGS as an intermittent stream. The nearest perennial stream is 4,270 feet to the south. The nearest water body is 2,217 feet to the south. It is classified by the USGS as an intermittent lake and is 0.3 acres in size. The nearest spring is 3,147 feet to the east. 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 3,219 feet to the southeast. The nearest wetland is a 0.3 acre Freshwater Forested/Shrub Wetland located 10,664 feet to the southeast. The slope at this location is 16 degree, to the east 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 age's substrate. There is no SSURGO soil data available for this location. The nearest underground mine is 15.5 miles to the north as indicated on the Mines; Mills and Quarries Map of New Mexico provided.

Regional Hydrogeological context:

The San Jose Fermation of Eodene 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 overhas 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 aguifers. 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 hvestock and domestic use. The San Jose Formation is a very suitable unit for recnarge from precipitation because soils that form on the unit are sandy and highly permeable and therefore readily adsorp 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 lend 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:

- 1. 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.
- 2. 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
- 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.
- 6. The BR below-grade tank system shall have a properly constructed foundation consisting of a level base free of rocks, debris, sharp edges or irregularities to prevent punctures, cracks or indentations of the liner or tank bottom 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.
- 11. The general specification for design and construction are attached in the BR document.



PROPERTIES TEST METHOD J30BB J36BE J45BE Min. Roll Typical Roll Min. Roll Typical Roll Min. Roll Typical Roll Averages Averages Averages Averages Averages Averages Appearance Black/Black Black/Black Black/Black Thickness ASTM D 5199 27 mił 30 mil 32 mil 36 mil 40 mil 45 mil Weight Lbs Per MSF 126 lbs 140 lbs ASTM D 5261 151 lbs (oz/yd^2) 168 lbs 189 lbs 210 lbs (18.14)(20.16)(21.74)(24.19)(27.21)(30.24)Construction **Extrusion laminated with encapsulated tri-directional scrim reinforcement Ply Adhesion **ASTM D 413** 16 lbs 20 lbs 19 lbs 24 lbs 25 lbs 31 lbs 1" Tensile Strength 88 lbf MD 110 lbf MD **ASTM D 7003** 90 lbf MD 113 lbf MD 110 lbf MD 138 lbf MD 63 lbf DD 79 lbf DD 70 lbf DD 87 lbf DD 84 lbf DD 105 lbf DD 1" Tensile Elongation @ 550 MD 750 MD ASTM D 7003 550 MD Break % (Film Break) 750 MD 550 MD 750 MD 550 DD 750 DD 550 DD 750 DD 550 DD 750 DD 1" Tensile Elongation @ 20 MD 33 MD Peak % (Scrim Break) **ASTM D 7003** 20 MD 30 MD 20 MD 36 MD 20 DD 33 DD 20 DD 31DD 20 DD 36 DD Tongue Tear Strength 75 lbf MD 97 lbf MD 75 lbf MD ASTM D 5884 104 lbf MD 100 lbf MD 117 lbf MD 75 lbf DD 90 lbf DD 75 lbf DD 92 lbf DD 100 lbf DD 118 lbf DD Grab Tensile 180 lbf MD 218 lbf MD ASTM D 7004 180 lbf MD 222 lbf MD 220 lbf MD 180 lbf DD 257 lbf MD 210 lbf DD 180 lbf DD 223 lbf DD 220 lbf DD 258 lbf DD Trapezoid Tear 120 lbf MD ASTM D 4533 146 lbf MD 130 lbf MD 189 lbf MD 160 lbf MD 193 lbf MD 120 lbf DD 141 lbf DD 130 lbf DD 172 lbf DD 160 lbf DD 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 180° F 180° F 180° F 180° F 180° F Minimum Use Temperature

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.

-70° F

-70° F

*Dimensional Stability Maximum Value

-70° F

**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

NOTE: IRAVEN INDUSTRIES MAKES NO WARRANTIES AS TO THE FITNESS FOR A SPECIFIC USE OR MERCHANTABILITY OF PRODUCTS REFERRED TO, no quarantee of satisfactory results from resance upon contained information or recommendations and also aims ail laberty for resulting lass or damage



PLANT LOCATION

-70° F

Sioux Falls, South Dakota

SALES OFFICE

-70° F

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

-70° F



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.

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

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, at its 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 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 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.

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.

General Plan:

- 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 below-grade 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 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:

- 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 o 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 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 50 mg/kg; the TPH division approves, does not exceed 100 mg/kg; and the chloride concentration, as determined by 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, nonwaste 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
 - 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