District I State of New Mexico	Form C-144
1625 N. French Dr., Hobbs, NM 88240 Energy Minerals and Natural Resources	July 21, 2008
ation Division	For temporary pits, closed-loop sytems, and below-grade tanks, submit to the appropriate NMOCD District Office.
- REGISTERED - St. Francis Dr.	
. NM 87505	For permanent pits and exceptions submit to the Santa Fe
District IV	Environmental Bureau office and provide a copy to the appropriate NMOCD District Office
1220 S. St. Francis Dr., Santa Fe, NM 87505	
Pit, Closed-Loop System, Below-Grad	e lank, or
Proposed Alternative Method Permit or Closur	e Plan Application
Type of action: X Permit of a pit, closed-loop system, below-grade ta	ank, 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 permit	tted 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-loo	p system, below-grade tank or alternative request
Please be advised that approval of this request does not relieve the operator of liability should operations re	esult 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.
	00010// 14520
Operator: Burlington Resources Oil & Gas Company, LP	OGRID#: 14538
Address: PO Box 4289, Farmington, NM 87499	
Facility or well name: LAMBE 2C	
API Number: 3004530747 OCD Permit Number	
U/L or Qtr/Qtr: H Section: 20 Township: 31N Range: 1	0W County: San Juan
Center of Proposed Design: Latitude: 36.88435°N Longitude:	-107.89875°W NAD: X 1927 1983
Surface Owner: X Federal State Private Tribal Trust or Indian	Allotment
Pit: Subsection F or G of 19.15.17.11 NMAC Temporary: Drilling Workover Permanent Emergency Cavitation P&A Lined Unlined Liner type: Thickness mil LLDPE D String-Reinforced Liner Seams: Welded Factory Other Volume:	HDPE PVC Other
3 Closed-loop System: Subsection H of 19.15.17.11 NMAC Type of Operation: P&A Drilling a new well Workover or Drilling (Applies to notice of intent) Drying Pad Above Ground Steel Tanks Haul-off Bins Other Lined Unlined Liner type: Thickness mil LLDPE H Liner Seams: Welded Factory Other	activities which require prior approval of a permit or
4 X Below-grade tank: Subsection 1 of 19.15.17.11 NMAC Volume: 120 bbl Type of fluid: Produced Water Tank Construction material: Metal Secondary containment with leak detection X Visible sidewalls, liner, 6-inch lift and autor Visible sidewalls and liner Visible sidewalls only Other Liner Type: Thickness mil HDPE PVC X Other U	omatic overflow shut-off
5 Alternative Method: Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environ	nmental Bureau office for consideration of approval.

Encing: 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 of located within 1000 feet of a permanent residence, school, howsied).		have by
Four foot height, four strands of barbed wire evenly spaced between one and four feet	имницон от ст	(luren)
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)		
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:		
Please check a bar if one or more of the following is requested if not lowe blank.		
Administrative approval(s): Requests must be submitted to the appropriate division district of the Santa & Environmental Durant of the santa and the santa a	neidanation	100001
(Fencing/BGT Liner)	nsucration of	approvat.
Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.		
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Siling Criteria (regarding permitting): 19.15.17.10 NMAC Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau Office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying pads or above grade-tanks associated with a closed-loop system.		
Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	Yes	XNo
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map: Visual inspection (certification) of the proposed site	Yes	XNo
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.	Yes	XNo
(Applies to temporary, emergency, or cavitation pits and below-grade tanks)		
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image		
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)	XINA	
- Visual inspection (certification) of the proposed site; Aeriał photo; Satellite image		
Within 500 horizonal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.	Yes	XNo
- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site.		
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended Written confirmation or weiting the municipality. Written approach to be included to the section of the	Yes	XNo
Within 500 feet of a wetland. US Fish and Wildlife Wetland Identification map: Topographic map: Visual inspection (certification) of the proposed site	Yes	XNo
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD - Mining and Mineral Division	Yes	XNo
Within an unstable area.	Vec	NNO.
- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map		
Within a 100-year floodplain - FEMA map	Yes	XNo

Instructions: Each of the fe	gency Pits and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC illowing items must be attached to the amplication. Please indicate, by a check in the land to the data to the application.
X Hydrogeologic Re	port (Below-grade Tanks) - based upon the requirements of Paragraph (d) of Subjection B of 10.15.17.0 NMAAC
Hydrogeologic Da	ta (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9
X Siting Criteria Co	mpliance Demonstrations - based upon the appropriate requirements of 19,15,17,10 NMAC
X Design Plan - base	ed upon the appropriate requirements of 19.15.17.11 NMAC
X Operating and Ma	intenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
X Closuré Plan (Plea 19.15.17.9 NMAC	ise complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of C and 19.15.17.13 NMAC
Previously Approved	Design (attach copy of design) AP1 or Permit
Closed-loop Systems Pe	rmit Application Attachment Checklist: Subsection B of 19:15.17.9 NMAC
Instructions: Each of the for Geologic and Hyd	llowing items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached, togeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9
Siting Criteria Cor	npliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC
Design Plan - base	d upon the appropriate requirements of 19.15.17.11 NMAC
Operating and Mai	intenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
Closure Plan (Plea NMAC and 19.15.	se complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 17.13 NMAC
Previously Approved [Design (attach.copy of design) API
Previously Approved (Operating and Maintenance Plan API
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	ng Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC 4 Structural Integrity Design: based upon the appropriate requirements of 19.15.17.11 NMAC sign - based upon the appropriate requirements of 19.15.17.11 NMAC and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC ality Assurance Construction and Installation Plan ntenance Plan - based upon the appropriate requirements of 19.15.17.11 NMAC topping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC topping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC topping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC topping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC topping Prevention Plan - based upon the appropriate requirements of 19.15.17.13 NMAC are Plan are Characterization pection Plan n d upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC <i>i</i> .17.13 NMAC
	ng Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC 1 Structural Integrity Design: based upon the appropriate requirements of 19.15.17.11 NMAC sign - based upon the appropriate requirements of 19.15.17.11 NMAC ality Assurance Construction and Installation Plan thenance Plan - based upon the appropriate requirements of 19.15.17.11 NMAC loss dupon the appropriate requirements of 19.15.17.12 NMAC topping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC loss Odors, including H2S, Prevention Plan se Plan eam Characterization pection Plan n a upon the appropriate requirements of 19.15.17.9 NMAC and 19.15.17.13 NMAC it requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC it requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC it requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC it requirements of Compared to the proposed closure plan. orkover Emergency Cavitation P&A Permanent Pit Selow-grade Tank Closed-loop System waste Removal (Closed-loop systems only) On-site Closure Method tonly for temporary pits and closed-loop systems) Closure Method tonly for

On Conservation Division.

16 Waste Removal Closure For Closed-loop Systems That Utilize Abov Instructions: Please identify the facility or facilities for the disposal of Is are required.	e Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.D NMAC quids, dritting fluids and drift cuttings. Use attachment if more than tw) 9 facilities
Disposal Facility Name:	Disposal Facility Permit #:	
Disposal Facility Name:	Disposal Facility Permit #:	
Will any of the proposed closed-loop system operations and assoc	iated activities occur on or in areas that will not be used for future	e service and operations?
Required for impacted areas which will not be used for future service a Soil Backfill and Cover Design Specification - based upon Re-vegetation Plan - based upon the appropriate requireme Site Reclamation Plan - based upon the appropriate require	id operations: the appropriate requirements of Subsection H of 19.15.17.13 NM nts of Subsection I of 19.15.17.13 NMAC ments of Subsection G of 19.15.17.13 NMAC	AC
17 <u>Siting Criteria (Regarding on-site closure methods only:</u> 19.15 Instructions: Each siting criteria requires a demonstration of compliance in the certain sating criteria may require administrative approval from the appropriate for consideration of approval. Justifications and/or demonstrations of equivale	5.17.10 NMAC closure-plan. Recommendations of acceptable source material are provided by district office or may be considered an exception which must be submitted to t may are required. Please refer to 19.15.17.10 NMAC for guidance.	elow, Requests regarding changes to he Santa Fe Environmental Bureau office
Ground water is less than 50 feet below the bottom of the buried w - NM Office of the State Engineer - iWATERS database search: US	aste. GS: Data obtained from nearby wells	Yes No
Ground water is between 50 and 100 feet below the bottom of the	buried waste	Yes No
- NM Office of the State Engineer - iWATERS database search; US6	GS: Data obtained from nearby wells	
Ground water is more than 100 feet below the bottom of the buried	l waste.	
- NM Office of the State Engineer - iWATERS database search: US0	3S; Data obtained from nearby wells	
Within 300 feet of a continuously flowing watercourse, or 200 feet of any (measured from the ordinary high-water mark).	other significant watercourse or lakebed, sinkhole, or playa lake	Yes No
Topographic map: Visual inspection (certification) of the proposed	site	
 Within 300 feet from a permanent residence, school, hospital, institution. Visual inspection (certification) of the proposed site; Aerial photo; s 	or church in existence at the time of initial application. atellite image	Yes No
Within 500 horizontal feet of a private, domestic fresh water well or sprin purposes, or within 1000 horizontal fee of any other fresh water well or sp NM Office of the State Engineer - iWATERS database; Visual inspe	g that less than five households use for domestic or stock watering pring, in existence at the time of the initial application. ction (certification) of the proposed site	
Within incorporated municipal boundaries or within a defined municipal pursuant to NMSA 1978, Section 3-27-3, as amended.	resh water well field covered under a municipal ordinance adopted	Yes No
Within 500 feet of a wetland US Fish and Wildlife Wetland Identification map: Topographic mar	approval obtained from the municipality	Yes No
Within the area overlying a subsurface mine. • Written confiramtion or verification or map from the NM EMNRD-N	Aning and Mineral Division	Yes No
Within an unstable area. • Engineering measures incorporated into the design; NM Bureau of G	eology & Mineral Resources; USGS: NM Geological Society;	Yes No
i opograpnic map Within a 100-year floodplain. - FEMA map		Yes No
18 D <u>n-Site Closure Plan Checklist:</u> (19.15.17.13 NMAC) Instruction by a check mark in the box, that the documents are attached.	ons: Each of the following items must bee attached to the closur	re plan. Please indicate,
Siting Criteria Compliance Demonstrations - based upon the	appropriate requirements of 19.15.17.10 NMAC	
Proof of Surface Owner Notice - based upon the appropriate	requirements of Subsection F of 19.15.17.13 NMAC	
Construction/Design Plan of Burial Trench (if applicable) ba	sed upon the appropriate requirements of 19.15.17.11 NMAC	
Construction/Design Plan of Temporary Pit (for in place buri	al of a drying pad) - based upon the appropriate requirements of 1	9.15.17.11 NMAC
Protocols and Procedures - based upon the appropriate requir	ements of 19.15.17.13 NMAC	
Confirmation Sampling Plan (if applicable) - based upon the	appropriate requirements of Subsection F of 19.15.17.13 NMAC	
waste Material Sampling Plan - based upon the appropriate r	equirements of Subsection F of 19.15.17.13 NMAC	
Disposal Facility Name and Permit Number (for liquids, drill	ing fluids and drill cuttings or in case on-site closure standards car	mot be achieved)

Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
 Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC

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

Name (Print):	Crustal Tation	1011-0	
Signature:	Crystar railya	hille:	Regulatory Technician
e-mail address:		Date:	12/22/2008
0		·····	
CD Approval:	Permit Application (including closure	plan) 🗌 Closure Plan (onl	y) OCD Conditions (see attachment)
OCD Representative	Signature:		Approval Date:
ïtle:		OCD Pe	mit Number:
laure Papert (recu	ined within 60 down of alarman and		
istructions: Operators a	re required to obtain an approved closure	etion): Subsection K of 19.15.17.13 NM plan prior to implementing any cli	AC psure activities and submitting the closure report. The closure
port is required to be st oproved closure plan ha	ubmitted to the division within 60 days of the second second to the classic provides to the second sec	he completion of the closure activity have been completed.	ies. Please do not complete this section of the form until an
,			re Completion Doto:
			are completion pate:
losure Method:			
Waste Excavation	and Removal On-site Closure	Method Alternative Closu	re Method Waste Removal (Closed-loop systems only)
If different from a	pproved plan, please explain.		
osure Report Regardi	ng Waste Removal Closure For Closed-I	oop Systems That Utilize Above (Ground Steel Tanks or Haul-off Bins Only:
structions: Please iden re utilized.	tify the facility or facilities for where the	liquids, drilling fluids and drill cu	tings were disposed. Use attachment if more than two facilities
Disposal Facility Nam	e:	Disposal Facili	ty Permit Number:
Disposal Facility Nam	e:	Disposal Facili	v Permit Number:
Were the closed-loop s	system operations and associated activities	performed on or in areas that will a	not be used for future service and opeartions?
Yes (if yes, please	demonstrate complilane to the items before	w) No	
Required for impacted	areas which will not be used for future set	rvice and operations:	
Site Reclamation (
	(Photo Documentation)		
Soil Backfilling ar	(Photo Documentation) nd Cover Installation		
Soil Backfilling ar	Photo Documentation) nd Cover Installation plication Rates and Seeding Technique		
Soil Backfilling ar	(Photo Documentation) ad Cover Installation olication Rates and Seeding Technique		
Soil Backfilling ar Re-vegetation App Closure Report Atta the box, that the docur	(Photo Documentation) ad Cover Installation Dilication Rates and Seeding Technique achment Checklist: Instructions: Each ments are attached.	of the following items must be at	ached to the closure report. Please indicate, by a check mark in
Soil Backfilling ar Re-vegetation App Closure Report Atta the box, that the docur Proof of Closure	Photo Documentation) ad Cover Installation Dilication Rates and Seeding Technique achment Checklist: Instructions: Each ments are attached. Notice (surface owner and division)	of the following items must be at	ached to the closure report. Please indicate, by a check mark in
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New Mexico Office of the State Engineer

	Township: 31N	Range: 10W	Sections:		
NA	D27 X:	Y:	Zone:	Search R	adius:
County:	Bas	in:		Number:	Suffix:
Owner Name:	(First)	(Last)		○ Non-Dom	estic ODomestic All
POD /	Surface Data Repo	rt Avg	Depth to Water	Report	Water Column Report

WATER COLUMN REPORT 08/20/2008

	(q	uarter	s are	ə 1=	NW	2=	NE :	3=SW 4=	SE)						
	(q	uarter	s are	e bi	gge	st	to	smalle	st)		Depth	Depth	Water	(in	feet)
POD	Number	Tws	Rng	Sec	g	Ð	P	Zone	x	Y	Well	Water	Column		
SJ (0498	31N	10W	04	1	2					26	8	18		
SJ (3062 CLW263578	31N	10W	04	1	2	2				47	40	7		
SJ (03062	31N	10W	04	1	2	2				55	46	9		
SJ (02844	31N	10W	04	1	2	4				37	21	16		
SJ (00573	31N	10W	04	1	4					37	12	25		
SJ (00595	31N	10W	04	1	4	2				90	12	78		
SJ (0595 S	31N	10W	04	1	4	2				· 70	10	60		
SJ (00175	31N	10W	04	2						28	13	15		
SJ (01563	31N	10W	04	2	1					44	28	16		
SJ (02089	31N	10W	04	2	1	1				55	40	15		
SJ (03033	31N	10W	04	2	1	1				52	30	22		
SJ (03034	31N	10W	04	2	1	2 .	,			45	23	22		
SJ (01564	31N	10W	04	2	2					34	10	24		
SJ (00128	31N	10W	04	2	2					70	21	49		
SJ (02044	31N	10W	05	1	3					22	12	10		
SJ (01370	31N	10W	05	1	3	2				48	28	20		
SJ (01967 X	31N	10W	05	1	3	2				25	10	15		
SJ (02843	31N	10W	05	1	3	2				25	10	15		
SJ (02044 X	31N	10W	05	1	3	4				28	14	14		
SJ (02083	31N	10W	05	2	2	1				23	10	13		
SJ (02069	31N	10W	05	2	2	1				22	9	13		
SJ (03013	31N	10W	05	2	2	3				19	7	12		
SJ (03109	31N	10W	05	2	2	3				21	2	19		
SJ	03004	31N	10W	05	2	2	4				18	6	12		
SJ	02945	31N	10W	05	2	2	4				17	5	.12		
SJ	03368	31N	10W	05	2	2	4				19	6	13		
SJ	03549	31N	10W	05	2	4	4				42	35	7		
SJ	02884	31N	10W	05	2	4	4				75				
SJ	00304	31N	10W	05	3	4					18	5	13		
SJ	02399	31N	10W	05	3	4	1				40	14	26		
SJ	02944	31N	10W	05	3	4	2				100				
SJ	03112	31N	10W	05	3	4	2				45	33	12		

31N	10W 05	3 4 3		35	10	25
31N	10W 05	4 3		35	16	19
31N	10W 05	4 3		6	3	3
31N	10W 05	4 3		39	11	28
31N	10W 05	4 4 2		61	30	31
31N	10W 05	4 4 3		58	28	30
31N	10W 05	4 4 3		65	15	50
31N	10W 06	2		103	83	20
31N	10W 06	2 3		93	33	60
31N	10W 06	2 4 3		100	60	40
31N	10W 07	2 2		41	23	18
31N	10W 07	2 2 3		48	31	17
31N	10W 07	2 2 3		50		
31N	10W 07	3 3 1		400		
31N	10W 07	4		45	29	16
31N	10W 07	4 3 2	269793 2149984	41	24	17
31N	10W 08			40	23	17
31N	10W 08	1 2		35	29	6
31N	10W 08	1 3 4		19	6	13
31N	10W 08	3 1 1		21	6	15
31N	10W 10	2		455		
31N	10W 15	3		550		
31N	10W 17	3 4		158	97	61
31N	10W 18	1 1		295	125	170
31N	10W 18	1 3		18	8	10
31N	10W 18	1 3 1		34	23	11
31N	10W 18	1 3 2		21	11	10
31N	10W 18	1 3 3		32	20	12
31N	10W 18	14		30	5	25
31N	10W 18	14		35	5	30
31N	10W 18	1 4 3		19	5	14
31N	10W 18	1 4 3		20	6	14
31N	10W 18	214	0.00570 01.00065	30	4	26
31N	10W 18	2 1 4	269778 2148065	. 10 . 01	1	10
31N	10W 18	232		42	20	20
JIN	101 10	232		4.5	20	23
31N	101 10	242		21	6	15
31N	101/10	31		26	15	11
31N	100 18	3 1 '		2.0	7	15
31N	101/18	311		24	8	16
31N	10W 18	3 1 2		10	8	2
31N	10W 18	3 1 4		30	22	8
31N	10W 18	3 2 1		16	8	8
31N	10W 18	3 2 2		16	10	б
31N	10W 18	3 2 3		20	6	14
31N	10W 18	3 2 3		25	10	15
31N	10W 18	3 2 3		10	6	4
31N	10W 18	3 2 3		20	6	14
31N	10W 18	3 3		65	25	40
31N	10W 18	3 3 3		58	46	12
5 81 31N	10W 19	1		70	45	25
31N	10W 19	1 1 1		60	47	•13
31N	10W 19	1 1 1		58	40	18
31N	10W 19	1 1 1		57	43	14
31N	10W 19	1 1 1		53	33	20
31N	10W 19	1 1 1		70		
31N	10W 19	1 1 2		69	56	13
31N	10W 19	1 1 3		65	45	20
	31N 3	31N 10W 05 31N 10W 06 31N 10W 06 31N 10W 07 31N 10W 08 31N 10W 08 31N 10W 08 31N 10W 18 31N 10W 18 31N 10W 18 31N 10W 18 31N 10W 18 <t< th=""><th>31N 10W 05 3 4 3 31N 10W 05 4 3 31N 10W 05 4 3 31N 10W 05 4 4 2 31N 10W 05 4 4 3 31N 10W 05 4 4 3 31N 10W 06 2 3 3 31N 10W 06 2 3 3 31N 10W 07 2 2 3 31N 10W 07 2 2 3 31N 10W 07 2 2 3 31N 10W 07 4 3 2 31N 10W 08 1 2 3 31N 10W 08 1 3 4 31N 10W 18 1 3 3 31N 10W 18 1 3 3 31N 10W</th><th>31N 10W 05 3 31N 10W 05 4 3 31N 10W 05 4 3 31N 10W 05 4 4 2 31N 10W 05 4 4 3 31N 10W 05 4 4 3 31N 10W 05 4 4 3 31N 10W 05 2 4 3 31N 10W 06 2 3 3 31N 10W 07 2 2 3 31N 10W 07 2 2 3 31N 10W 07 3 2 269793 2149984 31N 10W 07 3 2 269793 2149984 31N 10W 08 1 2 2 3 31N 10W 18 1 3 3 3 3 4 3 3 3 3 3 3<!--</th--><th>31N 10W 05 3 4 3 35 31N 10W 05 4 3 35 31N 10W 05 4 3 39 31N 10W 05 4 4 3 39 31N 10W 05 4 4 3 65 31N 10W 05 4 4 3 65 31N 10W 06 2 3 93 31N 10W 06 2 3 100 31N 10W 07 2 2 41 31N 10W 07 2 3 400 31N 10W 07 4 3 2 269793 2149984 41 31N 10W 08 1 3 4 19 31 11 21 31N 10W 8 1 3 1 12 35 31N 10W 18 1 3 3 32 21</th><th>31N 10W 05 3 4 3 35 16 31N 10W 05 4 3 35 16 31N 10W 05 4 3 39 11 31N 10W 05 4 2 61 30 31N 10W 05 4 4 3 65 15 31N 10W 06 2 33 33 33 33 33 33 31N 10W 06 2 3 33</th></th></t<>	31N 10W 05 3 4 3 31N 10W 05 4 3 31N 10W 05 4 3 31N 10W 05 4 4 2 31N 10W 05 4 4 3 31N 10W 05 4 4 3 31N 10W 06 2 3 3 31N 10W 06 2 3 3 31N 10W 07 2 2 3 31N 10W 07 2 2 3 31N 10W 07 2 2 3 31N 10W 07 4 3 2 31N 10W 08 1 2 3 31N 10W 08 1 3 4 31N 10W 18 1 3 3 31N 10W 18 1 3 3 31N 10W	31N 10W 05 3 31N 10W 05 4 3 31N 10W 05 4 3 31N 10W 05 4 4 2 31N 10W 05 4 4 3 31N 10W 05 4 4 3 31N 10W 05 4 4 3 31N 10W 05 2 4 3 31N 10W 06 2 3 3 31N 10W 07 2 2 3 31N 10W 07 2 2 3 31N 10W 07 3 2 269793 2149984 31N 10W 07 3 2 269793 2149984 31N 10W 08 1 2 2 3 31N 10W 18 1 3 3 3 3 4 3 3 3 3 3 3 </th <th>31N 10W 05 3 4 3 35 31N 10W 05 4 3 35 31N 10W 05 4 3 39 31N 10W 05 4 4 3 39 31N 10W 05 4 4 3 65 31N 10W 05 4 4 3 65 31N 10W 06 2 3 93 31N 10W 06 2 3 100 31N 10W 07 2 2 41 31N 10W 07 2 3 400 31N 10W 07 4 3 2 269793 2149984 41 31N 10W 08 1 3 4 19 31 11 21 31N 10W 8 1 3 1 12 35 31N 10W 18 1 3 3 32 21</th> <th>31N 10W 05 3 4 3 35 16 31N 10W 05 4 3 35 16 31N 10W 05 4 3 39 11 31N 10W 05 4 2 61 30 31N 10W 05 4 4 3 65 15 31N 10W 06 2 33 33 33 33 33 33 31N 10W 06 2 3 33</th>	31N 10W 05 3 4 3 35 31N 10W 05 4 3 35 31N 10W 05 4 3 39 31N 10W 05 4 4 3 39 31N 10W 05 4 4 3 65 31N 10W 05 4 4 3 65 31N 10W 06 2 3 93 31N 10W 06 2 3 100 31N 10W 07 2 2 41 31N 10W 07 2 3 400 31N 10W 07 4 3 2 269793 2149984 41 31N 10W 08 1 3 4 19 31 11 21 31N 10W 8 1 3 1 12 35 31N 10W 18 1 3 3 32 21	31N 10W 05 3 4 3 35 16 31N 10W 05 4 3 35 16 31N 10W 05 4 3 39 11 31N 10W 05 4 2 61 30 31N 10W 05 4 4 3 65 15 31N 10W 06 2 33 33 33 33 33 33 31N 10W 06 2 3 33

SJ	03086	31N	10W	19	1	1	3	
SJ	03486	31N	1.0W	19	1	1	3	
SJ	01428	31N	1.0W	19	1	3		
SJ	01349	31N	10W	19	1	3	3	
SJ	03285	31N	10W	19	3	1	1	
SJ	02084	31N	10W	25	4	4	2	
SJ	00967	31N	10W	27	4	3		
SJ	00990	31N	10W	27	4	3		
SJ	01483	31N	10W	27	4	4	1	
SJ	02960	31N	10W	27	4	4	2	
SJ	03178	31N	10W	27	4	4	2	
SJ	03539	31N	10W	27	4	4	3	
SJ	00163	31N	10W	28	1	4	1	
SJ	00163 EXPL	31N	10W	28	1	4	3	
SJ	03459	31N	10W	32	3	3	2	
SJ	00981	31N	1.0W	34	2	1		
SJ	01480	31N	10W	34	2	1		
SJ	03624	31N	10W	34	2	1	2	
SJ	03387	31N	10W	34	2	2	1	
SJ	03728 POD1	31N	1.0W	35	1	3	3	
SJ	03545	31N	10W	35	1	4	3	
SJ	03544	31N	10W	35	1	4	4	
SJ	03571	31N	10W	35	1	4	4	
SJ	03576	31N	10W	35	2	3	3	
<u>SJ</u>	03570	31N	10W	35	2	4	4	
SJ	03554	31N	10W	35	4	2	1	

61	44	17
65	45	20
65	45	20
78	67	11
40		
315		
130	90	40
162	110	52
195	150	45
200	150	50
2:35	150	85
205	124	81
1538		
1538		
185	175	10
164	118	46
245	125	120
165	65	100
250	200	50
365	230	135
455	317	138
325	220	105
250		
450	137	313
250		
454	317	137

Record Count: 117





Mines, Mills and Quarries Web Map

LAMBE 2C Unit Letter: H, Section: 20, Town: 031N, Range: 010W







LAMBE 2C

Site Specific Hydrogeology

A visual site inspection confirming the information contained herein was performed on the well 'LAMBE 2C', which is located at 36.88435 degrees North latitude and 107.89875 degrees West longitude. This location is located on the Cedar Hill 7.5' USGS topographic quadrangle. This location is in section 20 of Township 31 North Range 10 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 3.9 miles to the north. The nearest large town (population greater than 10,000) is Farmington, located 19.9 miles to the southwest (National Atlas). The nearest highway is US Highway 550, located 1.5 miles to the northwest. The location is on BLM land and is 2,287 feet from the edge of the parcel as notated in the BLM land status layer updated January 2008. This location is in the Animas. Colorado, New Mexico, Sub-basin. This location is located 1853 meters or 6077 feet above sea level and receives 12.5 inches of rain each year. The vegetation at this location is classified as Inter-Mountain Basins Big Sagebrush Shrubland as per the Southwest Regional Gap Analysis Program.

The estimated depth to ground water at this point is 113 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 597 feet to the south and is classified by the USGS as an intermittent stream. The nearest perennial stream is 3,327 feet to the north. The nearest water body is 3,307 feet to the north. It is classified by the USGS as an intermittent lake and is 0.4 acres in size. The nearest spring is 12,916 feet to the northeast. 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 2,367 feet to the southeast. The nearest wetland is a 8.8 acre Ravine located 4.295 feet to the north. The slope at this location is 2 degrees to the southwest 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 NACIMIENTO FORMATION--Shale and sandstone with a Shale dominated formations of all ages substrate. The soil at this location is 'Doak-Avalon association, gently sloping' and is well drained and not hydric with slight erosion potential as taken from the NRCS SSURGO map unit, downloaded January 2008. The nearest underground mine is 5.5 miles to the north as indicated on the Mines, Mills and Quarries Map of New Mexico provided.

Regional Geological context:

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

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

Strata of the Nacimiento Formation were deposited in lakebeds in the central basin area with lesser deposition in stream channels (Brimhall, 1973, p. 201). In general, the Nacimiento consists of drab, interbedded black and gray shale with discontinuous, white, medium- to very coarse grained arkosic sandstone (Stone e al., 1983, p.30). Stone et al. indicated that the formation may contain more sandstone than commonly reported because some investigators assume the slope-forming strata in the unit area shales, whereas in many places the strata actually are poorly consolidated sandstones.

Total thickness of the Nacimiento Formation ranges from about 500 to 1,300 feet. The unit generally thickens from the basin margins toward the basin center (Steven et al., 1974). The sandstone deposits within the Nacimiento Formation are much thinner than the total thickness of the formation because their environment of deposition was localized stream channels (Brimhall, 1973, p. 201). The thickness of the combined San Jose, Animas, and Nacimiento Formations ranges from 500 to more than 3.500 feet.

Hydraulic Properties:

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

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

References:

Baltz, E.H., 1967, Stratigraphy and regional tectonic implications of part of Upper Cretaceous rocks, east-central San Juan Basin, New Mexico: USGS Professional Paper 552, 101 p.

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

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

Fassett, J.E., and Hinds, J.S., 1971, Geology and fuel resources of the Fruitland Formation and Kirtland Shale of the San Juan Basin, New Mexico and Colorado: USGS Professional Paper 676, 76 p. Levings, G.W., Craigg, S.d., Dam, W.L., Kernodle, J.M., and Thorn, C.R., 1990, Hydrogeology of the San

Jose, Nacimiento, and Animas Formations in the San Juan structural basin, New Mexico, Colorado, Arizona, and Utah: USGS Hydrologic Investigations Atlas HA-720-A, 2 sheets.

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

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

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

General Plan:

- 1. BR will design and construct a 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 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.
- 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		30BB	te state J	368 8		4580
		Min. Roll Averages	Typical Roll Averages	Min. Roll Averages	Typical Rol	Min. Roll	Typical Rol
Appearance		Bla	ck/Black	Blac	k/Black	Averages	Averages
Thickness	ASTM D 5199	27 mil	20 mil			Blac	k/Black
Weight Lbs Per MSF (oz/yd²)	ASTM D 5261	126 lbs (18,14)	140 lbs (20.16)	32 mil	36 mil 168 lbs	40 mil 189 lbs	45 mil 210 lbs
Construction	+		(20.10)	(21.74)	(24.19)	(27.21)	(30.24)
Ply Adhesion		Ext	rusion laminate	d with encapsul	ated tri-directio	nal scrim reinfo	rcement
	ASTM D 413	16 lbs	20 lbs	19 lbs	24 lbs	25 lbs	31 lbs
1ª 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
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	750 MD
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	750 DD 36 MD
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 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
Dimensional Stability	ASTM D 1204	<1	<0.5	<1	-0.5		
Puncture Resistance	ASTM D 4833	50 lbf	GAIL		<0.5	<1	<0.5
Maximum Use Temperature		1000 0	04 101	65 lbf	83 lbf	80 lbf	99 lbf
		180° F					
Virumum Use l'emperature		70% 5	700 0				

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 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

RAVEN INDUSTRIES

PLANT LOCATION

-70° F

Sioux Falls, South Dakota

SALES OFFICE

-70° F

-70° F

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

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 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, at its 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 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 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:

- 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 19.15.17.11 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 concentration, as determined by EPA method 418.1 or other EPA method that the division approves, does not exceed 50 mg/kg; the TPH concentration 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 0
 - Photo documentation of the site reclamation
 - **Confirmation Sampling Results**
 - Proof of closure notice