District I

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W. Grand Ave., Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

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

State of New Mexico Energy Minerals and Natural Resources

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

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

Form C-144

July 21, 2008

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

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

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

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

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

environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.										
Operator: Burlington Resources Oil & Gas Company, LP OGRID#: 14538										
Address: PO Box 4289, Farmington, NM 87499										
Facility or well name: NYE 10E										
API Number: OCD Permit Number:										
U/L or Qtr/Qtr: G Section: 12 Township: 30N Range: 11W County: San Juan										
Center of Proposed Design: Latitude: 36.82933°N Longitude: -107.93819°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 HDPE PVC Other String-Reinforced Liner Seams: Welded Factory Other Volume: bbl Dimensions L x W x D										
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 activities which require prior approval of a permit or notice of intent) Drying Pad Above Ground Steel Tanks Haul-off Bins Other Lined Unlined Liner type: Thickness mil LLDPE HDPE PVD Other Liner Seams: Welded Factory Other										
A										
Alternative Method: Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.										

6 Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pit, temporary pits, and below-grade tanks)		
	or research	08/2/08
Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, hospital, ins [Four foot height, four strands of barbed wire evenly spaced between one and four feet]	mmen er chi	in(li)
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" N 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:		i
Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.		
Please check a box if one or more of the following is requested, if not leave blank:		\$6 851
X Administrative approval(s): Requests must be submitted to the appropriate division district of the Santa Fe Environmental Bureau office for consecution (Fencing/BGT Liner)	ideration of a	pproval.
Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.		
10	Ţ	
Siting Criteria (regarding permitting): 19.15.17.10 NMAC Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable		
source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the		
appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Hureau 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, lakehed, sinkhole, or playa	Yes	XNo
lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site		
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial	Yes	XNo
application.		_
(Applies to temporary, emergency, or cavitation pits and below-grade tanks) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	∐ ^{NA}	
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.	Yes	No
(Applied to permanent pits)	XNA	_
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image		
Within 500 horizonal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.	Yes	XNo
- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site.		
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended	Yes	XNo
 Written confirmation or verification from the municipality; Written approval obtained from the municipality Within 500 feet of a wetland. 	Yes	XNo
- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site		_
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.	Yes	X No
- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map		_
Within a 100-year floodplain - FEMA map	Yes	XNo

Temporary Pits, Emergency Pits and Below-grade Tanks Pelistructions: Each of the following items must be attached to the appl.	ermit Application Attachn ication. Please indicate, by a	nent Checklist: Subsection B of 19,15,17,9 NMAC check mark in the box, that the documents are attached.
X Hydrogeologic Report (Below-grade Tanks) - based upon	the requirements of Paragra	aph (4) of Subsection B of 19.15,17.9 NMAC
Hydrogeologic Data (Temporary and Emergency Pits) - h		
X Siting Criteria Compliance Demonstrations - based upon	the appropriate requirement	s of 19,15,17,10 NMAC
Design Plan - based upon the appropriate requirements of		
X Operating and Maintenance Plan - based upon the approp		
X Closure Plan (Please complete Boxes 14 through 18, if ap 19.15.17.9 NMAC and 19.15.17.13 NMAC	opticable) - based upon the a	ppropriate requirements of Subsection C of
Previously Approved Design (attach copy of design)	API	or Permit
Clused-loop Systems Permit Application Attachment Check Instructions: Each of the following items must be attached to the appli Geologic and Hydrogeologic Data (only for on-site closure Siting Criteria Compliance Demonstrations (only for on-s Design Plan - based upon the appropriate requirements of	ication. Please indicate, by a c e) - based upon the requiren tite closure) - based upon the	heck mark in the box, that the documents are attached, nents of Paragraph (3) of Subsection B of 19,15,17,9
Operating and Maintenance Plan - based upon the approp	riate requirements of 19.15.	17.12 NMAC
Closure Plan (Please complete Boxes 14 through 18, if ap NMAC and 19.15.17.13 NMAC		
Previously Approved Design (attach copy of design)	API	
Previously Approved Operating and Maintenance Plan	API	
13		
Permanent Pits Permit Application Checklist: Subsection B		
Instructions: Each of the following items must be attached to the app		
Hydrogeologic Report - based upon the requirements of P. Siting Criteria Compliance Demonstrations - based upon to		
Climatological Factors Assessment	ne appropriate requirements	OF 19 15.17.10 NMAC
Certified Engineering Design Plans - based upon the appro	opriate requirements of 19.1	5.17.11 NMAC
Dike Protection and Structural Integrity Design: based upo	on the appropriate requireme	ents of 19.15.17.11 NMAC
Leak Detection Design - based upon the appropriate requir	rements of 19.15.17.11 NM	AC
Liner Specifications and Compatibility Assessment - based	d upon the appropriate requi	rements of 19.15.17,11 NMAC
Quality Control/Quality Assurance Construction and Insta		
Operating and Maintenance Plan - based upon the appropr		
Freeboard and Overtopping Prevention Plan - based upon Nuisance or Hazardous Odors, including H2S, Prevention	the appropriate requirement	s of 19.15.17.11 NMAC
Emergency Response Plan	E 1448	
Oil Field Waste Stream Characterization		
Monitoring and Inspection Plan		
Erosion Control Plan		
Closure Plan - based upon the appropriate requirements of	Subsection C of 19.15.17.9	NMAC and 19,15,17,13 NMAC
14		
Proposed Closure: 19.15.17.13 NMAC Instructions: Please complete the applicable boxes, Boxes 14 through	18, in regards to the propose.	d closure nian
Type: Drilling Workover Emergency Cavitation		Pit X Below-grade Tank Closed-loop System
Alternative		Fit A Below-grade Tank Closed-toop System
Proposed Closure Method: X Waste Excavation and Removal	(Below-Grade Tank)	
Waste Removal (Closed-loop syste		
On-site Closure Method (only for t	emporary pits and closed-loo	p systems)
☐ In-place Burial	On-site Trench	590 5.140.9
Alternative Closure Method (Exce	ptions must be submitted to t	he Santa Fe Environmental Bureau for consideration)
15		
Waste Excavation and Removal Closure Plan Checklist: (19.1)	5_17.13 NMAC) Instructions:	Each of the following items must be attached to the closure plan.
Please indicate, by a check mark in the box, that the documents are at X Protocols and Procedures - based upon the appropriate requ		MAG
X Confirmation Sampling Plan (if applicable) - based upon the		
Disposal Facility Name and Permit Number (for liquids, dr	illing fluids and drill curing	or Subsection For 19,13,17,13 NMAC
Soil Backfill and Cover Design Specifications - based upon	the appropriate requiremen	as of Subsection H of 19.15.17.13 NMAC
X Re-vegetation Plan - based upon the appropriate requirement		
X Site Reclamation Plan - based upon the appropriate require		

lo .		
Waste Removal Closure For Closed-loop Systems That Utilize Above Ground instructions: Please identify the facility or facilities for the disposal of liquids, drill are required.	Steel Tanks or <u>Haul-off Bins Only:</u> (19,15,17,13,D NMAC) ling fluids and drill cuttings. Use attachment if more than two	facilities
Disposal Facility Name:	Disposal Facility Permit #:	
1	Disposal Facility Permit #:	
Will any of the proposed closed-loop system operations and associated activ Yes (If yes, please provide the information No		
Required for impacted areas which will not be used for future service and operatio Soil Backfill and Cover Design Specification - based upon the appropriate Re-vegetation Plan - based upon the appropriate requirements of Sub-	priate requirements of Subsection H of 19.15.17,13 NMA section Lof 19.15.17.13 NMAC	oc.
Site Reclamation Plan - based upon the appropriate requirements of S	Subsection G of 19.15.17.13 NMAC	
17 <u>Siting Criteria (Regarding on-site closure methods only:</u> 19.15.17,10 NN Instructions: Each siting criteria requires a demonstration of compliance in the closure plus certain siting criteria may require administrative approval from the appropriate district off for consideration of approval. Justifications and/or demonstrations of equivalency are requ	n. Recommendations of acceptable source material are provided believe or may be considered an exception which must be submitted to the	ow. Requests regarding changes to Santa Fe Environmental Bureau office
Ground water is less than 50 feet below the bottom of the buried waste.		Yes No
 NM Office of the State Engineer - iWATERS database search; USGS: Data of 	obtained from nearby wells	□ N/A
Ground water is between 50 and 100 feet below the bottom of the buried wa - NM Office of the State Engineer - iWATERS database search; USGS; Data of		Yes No
	The state of the s	
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data of	btained from nearby wells	Yes No
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other sign (measured from the ordinary high-water mark).	ificant watercourse or lakehed, sinkhole, or playa lake	Yes No
- Topographic map; Visual inspection (certification) of the proposed site		
Within 300 (cet from a permanent residence, school, hospital, institution, or church - Visual inspection (certification) of the proposed site; Aerial photo; satellite image		Yes No
Within 500 horizontal feet of a private, domestic fresh water well or spring that less purposes, or within 1000 horizontal fee of any other fresh water well or spring, in ex - NM Office of the State Engineer - iWATERS database; Visual inspection (cert	istence at the time of the initial application.	Yes No
Within incorporated municipal boundaries or within a defined municipal fresh water pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval of	well field covered under a municipal ordinance adopted	Yes No
Within 500 feet of a wetland - US Fish and Wildlife Wetland Identification map; Topographic map; Visual in		Yes No
Within the area overlying a subsurface mine.		Yes No
 Written confirantion or verification or map from the NM EMNRD-Mining and Within an unstable area. 	i Mineral Division	□v □v.
- Engineering measures incorporated into the design; NM Bureau of Geology & Topographic map	Mineral Resources; USGS; NM Geological Society;	LITES LINO
Within a 100-year floodplain FEMA map		Yes No
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each by a check mark in the box, that the documents are attached.	h of the following items must bee attached to the closur	e plan. Please indicate,
Siting Criteria Compliance Demonstrations - based upon the appropria	ate requirements of 19.15.17.10 NMAC	
Proof of Surface Owner Notice - based upon the appropriate requirem		
Construction/Design Plan of Burial Trench (if applicable) based upon		
Construction/Design Plan of Temporary Pit (for in place burial of a dr		0.15,17,11 NMAC
Protocols and Procedures - based upon the appropriate requirements of	£19.15.17.13 NMAC	S202, 182
Confirmation Sampling Plan (if applicable) - based upon the appropria		
Waste Material Sampling Plan - based upon the appropriate requireme		
Disposal Facility Name and Permit Number (for liquids, drilling fluids		not be achieved)
Soil Cover Design - based upon the appropriate requirements of Subse		
Re-vegetation Plan - based upon the appropriate requirements of Subsolite Reclamation Plan - based upon the appropriate requirements of Subsolite Reclamation Plan - based upon the appropriate requirements of Subsolite Rec		

70				
Operator Application	Certification:			
	nformation submitted with this application is true, a	ccurate and complete to the	best of my knowledge and belief.	
Name (Print):	Crystal l'afoya	Title:	Regulatory Technician	
Signature:	Chintal Labores	Date	12/22/2008	
e mail address:	on sta vioya (2 conocontril)	Telephone:	505-326-9837	
C main address.		тетерионе.	505-520-4837	
20			207	
OCD Approval:	Permit Application (including closure plan)	Closure Plan (only)	OCD Conditions (see attachment)	
OCD Representative	Signature:		Approval Date:	
Title:		(MI) D.		•
-		OCD Perm	it Number:	<u> </u>
31				
Closure Report (requ	ired within 60 days of closure completion): s	subsection K of 19 15 17 13 NMAC	DOMESTIC STATE OF THE STATE OF	
report is required to be s	re required to origin an approved closure plan prio abmitted to the division within 60 days of the count	r to implementing any closu- ction of the closure activities	re activities and submitting the closure report. The closure . Please do not complete this section of the form until an	
approved closure plan ha	is been obtained and the closure activities have been	r completed.	The same was transported from the state of the state of	
		Closure	Completion Date:	
22				
Closure Method:				
Waste Excavation	and Removal On-site Closure Method	Alternative Closure I	Method Waste Removal (Closed-loop systems only)	
If different from a	ipproved plan, please explain,			
22				
23: Closure Report Regardi	ng Waste Removal Closure For Closed-loop Syste	ome Thut Hillian Above Co.	und Conf Toule on Hard all Dive Color	
Instructions: Please iden	tify the facility or facilities for where the liquids, d	rilling fluids and drill cuttin	gs were disposed. Use attachment if more than two facilities	
were utilized.			, and the same of	
Disposal Facility Nam		Disposal Facility I		
Disposal Facility Nam		_ Disposal Facility I	Permit Number:	
	system operations and associated activities performe		be used for future service and opeartions?	
	demonstrate complitane to the items below)	∐No		
	areas which will not be used for future service and (Photo Documentation)	operations:		
	nd Cover Installation			
	olication Rates and Seeding Technique			
24				
	uchment Checklist: Instructions: Each of the fo	llowing items must be attack	hed to the closure report. Please indicate, by a check mark in	
the box, that the docur	ments are attached.		•	
	Notice (surface owner and division)			
=	otice (required for on-site closure)			
	site closures and temporary pits)			
=	mpling Analytical Results (if applicable)			
	ampling Analytical Results (if applicable)			
	Name and Permit Number			
	and Cover Installation			
=	optication Rates and Seeding Technique			
500	(Photo Documentation)			
On-site Closure I	ocation: Latitude:	Longitude:	NAD [1927 [1983	
				_
s Operator Closure Cert	ification	· · · · · · · · · · · · · · · · · · ·		
		Per manuscript for days	d complete to the best of my knowledge and belief. I also certif	
ie closure complies with a	ornation that that the ments sammet with this costs all applicable closure requirements and conditions s	re report is ture, accurate an pecified in the approved clas	a complete to the best of my knowledge and belief. Talso certif ure plan.	y that
lame (Print):			· · · ·	
		Title;		
ignature:		Date:		
-mail address:		Telephone:		

New Mexico Office of the State Engineer POD Reports and Downloads

Township: 30N Range	e: 10W Sections:
NAD27 X: Y:	Zone: Search Radius:
County: Basin:	Number: Suffix:
Owner Name: (First)	(Last) C Non-Domestic C Domestic C All
POD / Surface Data Report	Avg Depth to Water Report Water Column Report
Clear	Form iWATERS Menu Help

WATER COLUMN REPORT 08/21/2008

								=SW 4=SE)							
	(quarter	s are	e bi	gg	est	t t	0	smallest)			Depth	Depth	Water	(in	feet)
POD Number	Tws	Rng	Sec	q	P	P		Zone	x	Y	Well	Water	Column	•	
SJ 00050	30N	10W	02	1	3	2					520	306	214		
SJ 03460	30N	10W	02	1	3	2					520	500	20		
SJ 03230	30N	10W	03	1	2	1					120	70	50		
SJ 03113	30N	10W	05	4	1	4					42	30	12		
SJ 00589	30N	10W	80	1	1	1					175	150	25		
SJ 00774	30N	10W	80	1	2	1					195	160	35		
SJ 02316	30N	10W	08	1	3						210	98	112		
SJ 02102	30N	10W	08	1	3	4					190	90	100		
SJ 01527	30N	10W	80	2	2						120	60	60		
SJ 01193	30N	10W	80	2	2						100	70	30		
SJ 02808	30N	10W	80	2	3	4					165	105	60		
SJ 01102	30N	10W	80	2	4						200	159	41		
SJ 02998	30N	10W	08	3	3	1					260	117	143		
SJ 02772	30N	10W	80	4	2	2					200	160	40		
SJ 00523	30N	10W	08	4	4						160	120	40		
SJ 01362	30N	10W	20	1	3	3					238	190	48		
SJ 03442	30N	10W	20	1	4	1					200	1.50	40		
SJ 02782	30N	10W	20	1	4	4					250				
SJ 02797	30N	10W	20	2	4	1					70				
SJ 00024	30N	10W	23	2	4	2					305				
SJ 00051	30N	10W	23	2	4	2					305				
SJ 00197	30N	10W	23	4	2						975	500	475		
SJ 00010	30N	10W		2							292	300	4/3		
SJ 01116	30N	10W		_	1						105	45	60		
SJ 01059	30N	10W		1		4					115	75	40		
SJ 01182	30N	10W		1	_	3					235				
			3.2	_	_	9					433	125	110		

Record Count: 26

New Mexico Office of the State Engineer POD Reports and Downloads

Township: 30N Range: 11W Sections:
NAD27 X: Y: Zone: Search Radius:
County: Basin: Number: Suffix:
Owner Name: (First) (Last) C Non-Domestic C Domestic 6 All
POD / Surface Data Report Avg Depth to Water Report Water Column Report
Clear Form iWATERS Menu Help

WATER COLUMN REPORT 08/21/2008

	quarter													
POD Number	quarte: Tws		e bi Sec				small Zone	-		Y	Depth Well	Depth	Water	(in
RG 50669	30N	11W		4	4	Q.	Zone	х		I	360	Water 310	Column 50	
SJ 02765	3 ON	11W	-	1	3						54	20	34	
SJ 00975	3 ON	11W			3						60	20	40	
SJ 01217	30N	11W		1	_						60	30	30	
SJ 02837	30N	11W		3		1					150	30	30	
SJ 01437	30N	11W		1	-	-					40	28	12	
SJ 03121	30N	11W		1	2	4					36	12	24	
SJ 02049	3 ON	11W		1		-					26	8	18	
SJ 01339	3 ON	11W		1		1					40	15	25	
SJ 02814	30N	11W		1		2					31	8	23	
SJ 00350	30N	11W		1	3	2					46	12	34	
SJ 01441	30N	11W		1	3	2					48	20	28	
SJ 02835	3 ON	11W	03	1		2					26	= 8	18	
SJ 01387	3 ON	11W	03	1	4						40	18	22	
SJ 03698 POD1	30N	11W	03	1	4	1					40	5	35	
SJ 02785	30N	11W	03	1	4	2					31	5	26	
SJ 01313	3 ON	11W	03	2							70	58	12	
SJ 01805	30N	11W	03	2							35	20	15	
SJ 01807	3 ON	11W	03	2	1						50	30	20	
SJ 01202	3 ON	11W	03	2	1	2					35	8	27	
SJ 02781	30N	11W	03	2	1	2					48	23	25	
SJ 03758 POD1	30N	11W	03	2	1	2		268158	21274	73	49	21	28	
SJ 03765 POD1	30N	11W	03	2	1	2		268163	21276	05	43	20	23	
SJ 03756 POD1	30N	11W	03	2	1	2		268179	21278	70	41	20	21	
SJ 02786	30N	11W	03	2	3	1					51	24	27	
SJ 01901	30N	11W	03	2	3	2					60	26	34	
SJ 00698	30N	11W	03	2	3	3					44	14	30	
SJ 01261	30N	11W	03	2	3	4						20		
SJ 02930	30N	11W	03	2	4	4					81	64	17	
SJ 02798	30N	11W	03	2	4	4					80	61	19	
SJ 00402	30N	11W	03	3							32	18	14	
SJ 01734	30N	11W	03	3	2						33	5	28	

SJ 00762	_ 30N	11W 03	3 2				47	22	25
SJ 01440	_ 30N	11W 03	3 2 3				41	21	20
SJ 01020	_ 30N	11W 03	3 3				27	5	22
SJ 03242	_ 30N	11W 03	3 3 1				23	9	14
SJ 03732 POD1	_ 30N	11W 03	3 3 1				38	9	29
SJ 03239	_ 30N	11W 03	3 3 3				33	12	21
SJ 01238	_ 30N	11W 03	4 1				95	38	57
SJ 02245 SJ 01043	_ 30N	11W 03	4 1 3				66	₩ 30	36
SJ 01043	30N	11W 03 11W 03	4 1 4				50		
SJ 02563	30N	11W 03	42421				52	22	30
SJ 02824	30N	11W 03	421				96	60	36
SJ 03153	30N	11W 03	4 2 1				70	50	20
SJ 03454	30N	11W 03	4 2 4				80 100	60	20
SJ 03291	30N	11W 03	4 3 2			100	38	10	20
SJ 00366	30N	11W 03	4 4 4				33	18 18	20
SJ 01364	30N	11W 04	2				115	86	15 29
8J 03076	30N	11W 04	2 2 3				44	10	34
SJ 02903	30N	11W 04	2 3 2				49	31	18
SJ 03039	30N	11W 04	4 1 2				53	40	13
SJ 01450	30N	11W 04	4 3				45	20	25
SJ 02941	30N	11W 04	4 3 2				58	37	21
SJ 01367	30N	11W 04	4 4 1				48	20	28
SJ 03407	30N	11W 04	4 4 4	W	453700	2124100	30	5	25
SJ 03267	30N	11W 05	2 1 3				83	60	23
<u>8J 03245</u>	30N	11W 06	4 4 4				80	65	15
SJ 02194	30N	11W 07					59	22	37
SJ 02140	30N	11W 07	1 1 1				70	60	10
SJ 00689	30N	11W 07	1 4 3				78	65	13
SJ 00690	30N	11W 07	1 4 3				60		
SJ 00882	30N	11W 07	1 4 3				60	50	10
SJ 00889	30N	11W 07	1 4 3				55		
SJ 00806	30N	11W 07	1 4 3				38	20	18
SJ 00739	30N 30N	11W 07	1 4 3				70	58	12
SJ 00389 SJ 00688	30N	11W 07 11W 07	1 4 3				53	50	4.0
SJ 00358	30N	11W 07	1 4 3				70	58	12
SJ 00397	30N	11W 07	1 4 3				61	38	23
SJ 00415	30N	11W 07	1 4 3				56 53	35 40	21
SJ 00387	30N	11W 07	1 4 3				23	40	13
SJ 00748	30N	11W 07	1 4 3				60	41	19
SJ 03271	30N	11W 07	2 3 2				00	4.7	1.9
SJ 01475	30N	11W 07	2 3 3				49	27	22
SJ 03465	30N	11W 07	2 3 4				80		-
SJ 00259	30N	11W 07	2 4				25	12	13
SJ 01492	30N	11W 07	3				60	22	38
SJ 03794 POD1	30N	11W 07	3 1 3		266272	2119520	44	27	17
SJ 01172	30N	11W 07	3 2				50	30	20
SJ 01310	30N	11W 07	3 3				80	50	30
SJ 01484	30N	11W 07	3 3				61	10	51
SJ 03630	30N	11W 07	3 3 3				68	24	44
SJ 01425	30N	11W 07	3 4				55	25	30
SJ 01468	30N	11W 07	3 4				60	25	35
SJ 02006	30N	11W 07	3 4 2				50	24	26
SJ 03484	30N	11W 07	3 4 3				75		
SJ 02005	30N	11W 07	3 4 4				55	20	35
SJ 02715	30N	11W 07	3 4 4				68	20	48
SJ 00135	30N	11W 07	4 1				180	23	157
SJ 00769	30N	11W 07	4 1				50	14	36

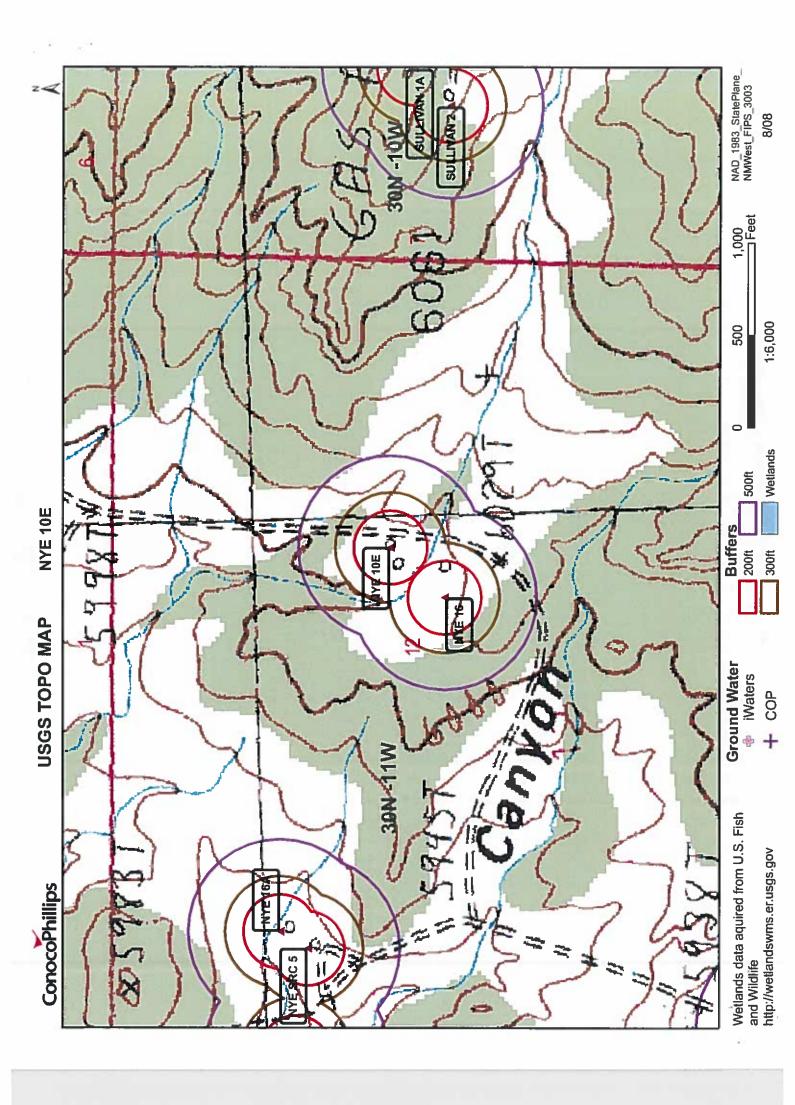
SJ 01406	_ 30N					45	12	33
SJ 02936	_ 30N	11W 07				38	30	8
SJ 00679	_ 30N	11W 07	4 1 3			48	22	26
SJ 00620	_ 30N	11W 07	4 1 3			52	35	17
SJ 00329	_ 30N	11W 07	4 1 3			63	20	43
SJ 00162	_ 30N	11W 07	4 1 3			58	23	35
SJ 02906	_ 30N	11W 07	4 1 4			45	24	21
SJ 00893	_30N	11W 07	4 2			80	40	40
SJ 01667	_ 30N	11W 07	4 3			41	21	20
SJ 01404	30N	11W 07	4 3			40	15	25
SJ 00919	30N	11W 07	4 3 2			35	12	23
SJ 00604	30N	11W 07	4 3 2			38	22	16
SJ 00601	30N	11W 07	4 3 2			40	22	18
SJ 00918	30N	11W 07	4 3 2			35	14	21
SJ 00920	30N	11W 07	4 3 2			35	12	
SJ 01567	30N	11W 07	4 4 2			35	14	23
SJ 00183	30N	11W 08	1 1				300	21
SJ 03154	30N	11W 08	1 1 4			40	300	60
SJ 03431	30N	11W 08	1 4			50		
SJ 00332	30N	11W 08	2 2			50 52	2.4	10
SJ 01451	30N	11W 08	2 2			5 <i>2</i> 64	34	18
SJ 01968	30N	11W 08	2 2				34	30
8J 01999	30N	11W 08	2 2			40	25	15
SJ 01814	30N	11W 08	2 2			61	45	16
SJ 03398	30N	11W 08	2 2 1			52	10	42
SJ 03210	30N	11W 08	2 2 2			80	20	60
SJ 03098	30N	11W 08	2 2 2			60	30	30
SJ 03381	30N	11W 08	2 2 2			63	23	40
SJ 03240	30N	11W 08	2 2 2			50		
SJ 00220	30N	11W 08				50		
SJ 03639	30N	11W 08				60	36	24
SJ 01115	30N	11W 08				60	24	36
8J 03653	30N	11W 08				35	26	9
SJ 03646	30N	11W 08				62	26	36
SJ 00228	30N	11W 08				51	24	37
SJ 03202	30N	11W 08				57	38	29
SJ 03030	30N	11W 08				45		
8J 03305	30N	11W 08	2 4 2			56	40	16
SJ 03378	30N	11W 08	2 4 2			50		
SJ 02331			2 4 2			50		
8J 03303	30N	11W 08	2 4 2			53	35	18
8J 02293	30N	11W 08	2 4 2			55	30	25
SJ 00249	30N	11W 08	2 4 2			50	35	15
SJ 01368		11W 08	2 4 2			16	30	16
	30N	11W 08	3 2			59	39	20
SJ 03089	30N	11W 08	3 2 4			18	36	12
SJ 03480	30N	11W 08	3 2 4			0		
SJ 03199	30N	11W 08	3 4 1			10	20	20
SJ 02413	30N	11W 08	3 4 1			10	31	9
SJ 02915	30N	11W 08	3 4 1			15		
SJ 03367	30N	11W 08	3 4 4			.9	5	24
SJ 01570	30N	11W 08	4 1			9	37	22
SJ 00925	30N	11W 08	4 1 2			2	20	12
SJ 03642	30N	11W 08	4 1 2		5	8	32	26
SJ 01520	30N	11W 08	4 1 2		5	8	18	40
SJ 03313	30N	11W 08	4 1 4		5		20	38
SJ 02485	30N	11W 08	4 1 4		4		30	19
SJ 02261	30N	11W 08	4 3 2					
SJ 03419	301	11W 08	4 4 2		A	1	9	32
SJ 02241	30N	11W 09	1				27	12

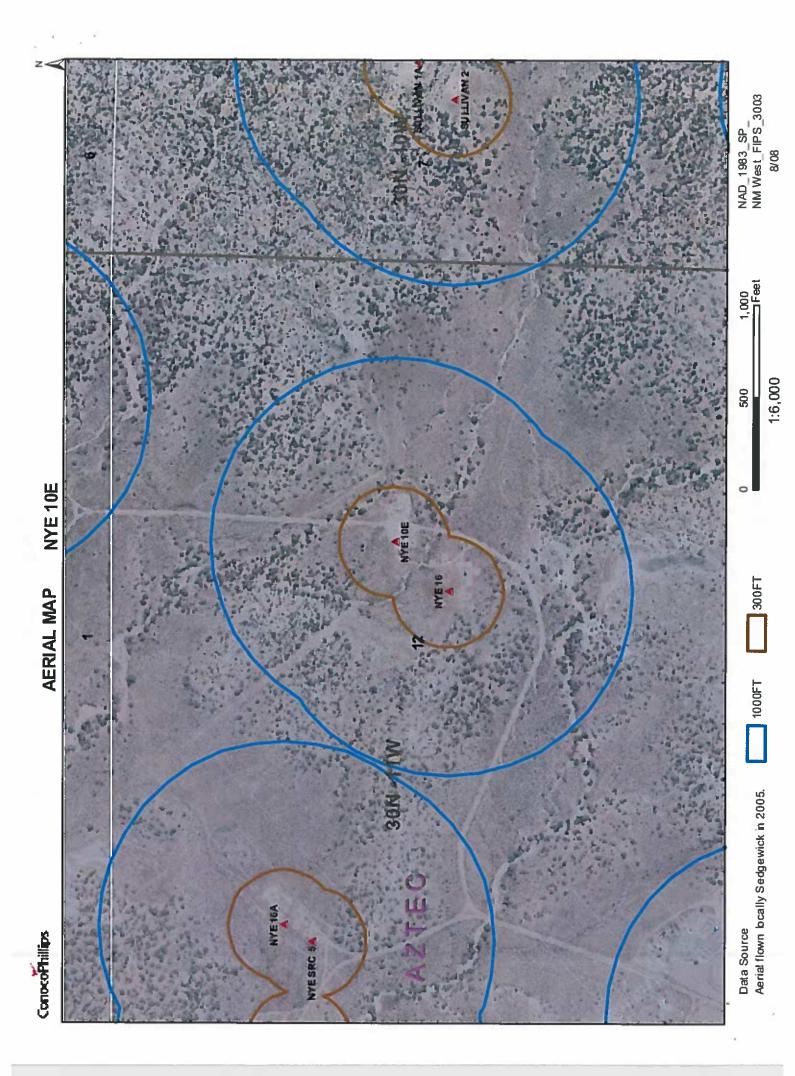
SJ 01560	30N	11W 09	1 1	1	36	26	10
SJ 01585	30N	11W 09	1 1		40	28	12
SJ 03499	30N	11W 09	1 1		53	12	41
SJ 02236	30N	11W 09	1 1		35	17	18
SJ 03304	30N	11W 09	1 1		55	30	25
SJ 03209	30N	11W 09	1 1		49	32	17
SJ 03726 POD1	30N	11W 09	1 1		47	30	17
SJ 03342	30N	11W 09	1 1		50	31	19
SJ 03225	30N	11W 09	1 1		50	31	10
SJ 03229	30N	11W 09	1 1		50		
SJ 00924	30N	11W 09	1 2		46	16	30
SJ 00438	30N	11W 09	1 2		29	19	10
SJ 01169	30N	11W 09	1 3		56	33	23
SJ 01574	30N	11W 09	1 3		46	27	19
SJ 02237	30N	11W 09		1	 48	28	20
SJ 03019	30N	11W 09	1 3		50	30	20
SJ 02493	30N	11W 09	1 3		49	26	23
SJ 03724 POD1	30N	11W 09	1 3	1	47	36	11
SJ 03031	30N	11W 09	1 3	1	55	35	20
SJ 01465	30N	11W 09	1 3	2	47		
SJ 02336	30N	11W 09	1 3	2	46	11	35
SJ 03482	30N	11W 09	1 3	2	50		
SJ 03423	30N	11W 09	1 3	3	50	20	30
SJ 00750	30N	11W 09	1 4		26	6	20
SJ 02975	30N	11W 09	2 1	4	37	12	25
SJ 03268	30N	11W 09	2 2	2	61	10	51
SJ 00364	30N	11W 09	2 3	2	50	20	30
SJ 03128	30N	11W 09	2 3		50		
SJ 00364 CLW263561	3 ON	11W 09	2 3	2	33	11	22
<u>8J 01955</u>	3 ON	11W 09	2 4		40	11	29
SJ 02528	30N	11W 09	2 4		60	28	32
8J 02290	30N	11W 09	2 4	2	45	15	30
SJ 00347	3 ON	11W 09	4		36	19	17
SJ 01436	3 0 N	11W 09	4 1		210	50	160
SJ 03471	30N	11W 09	4 1		20	5	15
SJ 03223	30N	11W 09	4 2		59	25	34
SJ 03263	30N	11W 09	4 2		63	35	28
SJ 03374	30N	11W 09	4 3		44	29	15
SJ 02796	30N	11W 09	4 3		100	63	3.0
SJ 03214	30N	11W 09		2	93	63	30
SJ 03213	30N	11W 09 11W 10		2	100	3.7	2.0
SJ 02176	30N	11W 10	1 3		57 55	37	20
SJ 03356 SJ 03258	30N	11W 10	1 3	_	55 55	30	25
SJ 03444	30N	11W 10	1 3		60	10	45
SJ 03248	30N	11W 10	1 3		90	30	60
SJ 03354	30N	11W 10	1 3		80	30 30	60
SJ 00348	30N	11W 10	1 3	-	72	24	50 48
SJ 03032	30N	11W 10		1	80	30	50
SJ_02819	30N	11W 10	2 3		140	40	100
SJ 03282	30N	11W 10	2 3		70	30	40
SJ 03281	30N	11W 10	2 3		62	32	30
SJ 03572	30N	11W 10	3 1		70	32	50
SJ 03218	30N	11W 10		3	50	30	20
SJ 01720	30N	11W 13	_ •	-	225	90	135
SJ 03745 POD1	30N	11W 13	1 1	2	325	150	175
SJ 01693	30N	11W 13	1 3		225	89	136
SJ 01672	30N	11W 13	1 3		180	80	100
SJ 01294	30N	11W 13	1 3		92	52	40
				-			10

SJ 02773	30N	11W 16	1 1				46	25	21
SJ 00410	30N	11W 16	1 2				61	45	16
SJ 03010	30N	11W 16	1 3				80	40	40
SJ 03257	30N	11W 16	1 3	_			80	40	40
SJ 02923	30N	11W 16	1 3	_			75	40	35
SJ 03265	30N	11W 16	1 3				90	70	20
SJ 03310	30N	11W 16	1 3				55	20	35
SJ 01082	30N	11W 16		1			80	34	46
SJ 01722	30N	11W 17	1				20	8	12
SJ 01528	30N	11W 17	1 1	-			26	10	16
SJ 03373	30N	11W 17		3			50	35	15
SJ 01948	30N	11W 17	1 2	_			21	3	18
SJ 02817	30N	11W 17	1 2		266267	0116415	15	_	
SJ_01722 POD2	30N	11W 17	1 2	4	266967	2116417	17	3	14
SJ 01899	30N	11W 17	1 3	2	266011	011515	27	7	20
SJ 03771 POD1	30N	11W 17	1 3	3	266811	211517	20	6	14
SJ 03750 POD1	30N	11W 17	1 3	3	266811	211517	20	6	14
SJ 03319	30N	11W 17	1 3	4			55	31	24
SJ 03266	30N	11W 17	1 4	3			30	10	20
SJ 03436	30N	11W 17	1 4	3			20	2.0	
SJ 00745	30N	11W 17	2				54	30	24
8J 00665	30N	11W 17	2 1	4			28	14	14
SJ 01342	30N	11W 17 11W 17	2 1 2 3	1			26	5	21
SJ 00166	30N	11W 17					48	11	37
SJ 01057 SJ 01060	30N	11W 17	2 3 2 3				63	28	35
SJ 03241	30N	11W 17	2 3 2 3	3			58	23	35
SJ 03269	30N	11W 17	2 3	4			75	20	55
SJ 01200	30N	11W 17	2 4	4			80	10	70
	30N	11W 17	2 4	2			50	20	30
SJ 03219 SJ 00159	30N	11W 17	3 1	4			68	38	30
SJ 03276	30N	11W 17	3 1	4			35 60	8	27
SJ 01296	30N	11W 17	3 2	4			50	20 10	40
SJ_03249	30N	11W 17	3 2	2			55 55	12	40 43
SJ 01810	30N	11W 17	3 4	_			29	9	20
SJ 00411	30N	11W 17	4 1				60	25	35
SJ 00234	30N	11W 17	4 1				54	23	31
SJ 01847	30N	11W 17	4 1				30	6	24
SJ 00457	30N	11W 17	4 1	2			52	18	34
SJ 00650	30N	11W 17		3			49	18	31
SJ 02018	30N	11W 17	4 2				100	40	60
SJ 00136	3 ON	11W 17	4 2				69	35	34
SJ 03718 POD1	3 ON	11W 17	4 2	2			68	41	27
SJ 03261	30N	11W 17	4 2				88	50	38
SJ 03215	3 ON	11W 18		3			52	9	43
SJ 01316	30N	11W 18		3			46	12	34
SJ 03152	30N	11W 18	1 1	3			52	22	30
SJ 02805	30N	11W 18	1 2	1			60		
SJ 03463	30N	11W 18	1 2	1			70	20	50
SJ 02996	30N	11W 18	1 2	1			50	25	25
SJ 00932	3 0 N	11W 18	1 2	4			32	15	17
SJ 01738	30N	11W 18	1 3				33	6	27
SJ 01733	30N	11W 18	1 3				29	9	20
SJ 01786	30N	11W 18	1 3				35	10	25
SJ 01401	30N	11W 18	1 3				44	12	32
SJ 03526	30N	11W 18	1 3	1			40		
SJ 03176	30N	11W 18	1 4	1			48	20	28
SJ 03177	30N	11W 18	1 4	2			37	15	22
SJ 03344	3 ON	11W 18	1 4	2			100	8	92

SJ 03801 POD1	30N	11W 1	18	2	2		266702	2116449	21	6	15
SJ 03800 POD1	30N	11W 1	L8	2	2		266718	2116651	21	6	15
SJ 01639	30N	11W 1	18	2	2	2			40	18	22
SJ 02098	30N	11W 1	18	2	4				21	7	14
SJ 02109	30N	11W 1	L 8	2	4				19	4	15
SJ 02123	30N	11W 1	L 8	2	4				22	8	14
SJ 03290	30N	11W 1	18	2	4	4			40	10	30
SJ 02045	30N	11W 1	.8	4					480	200	280
SJ 03322	30N	11W 1	.8	4	4	1			40	10	30
SJ 03320	30N	11W 1	.8	4	4	3			80		
SJ 03321	30N	11W 1	.8	4	4	3			80		
SJ 02193	30N	11W 1	9							105	
<u>SJ 03403</u>	30N	11W 1				2			400		
SJ 00638	30N	11W 1	.9	2	1				130	70	60
SJ 01073	30N	11W 1	.9	2	1				100	38	62
SJ 03615	30N	11W 1		2	1	1			105	35	70
SJ 03434	30N	11W 1		2	1	4			140		
SJ 03088	30N	11W 1		2	1	4			120	80	40
SJ 01636	30N	11W 1	.9	2	2				70	25	45
SJ 02862	30N	11W 1	-	2 :	2	3			20		
SJ 00284	3 0 N	11W 1		2 4	4				200	35	165
SJ_03645	30N	11W 1		3	1	1			60	20	40
SJ 03533	30N	11W 1				3			20		
SJ 01621	30N	11W 1			2				40	38	2
SJ 02692	30N	11W 1		3 :		2			52	12	40
SJ 02968	30N	11W 1				2			75	5	70
SJ 02812	30N	11W 1		3 2	2	2			50		
SJ 01123	30N	11W 1		4 :	1				40	15	25
SJ 03437	30N	11W 1		4 :		2			30		
SJ 03315	30N	11W 1		4 :	1	2			60	54	6
SJ 00284 CLW222415	30N	11W 1		_	4				200	35	165
SJ 03224	30N	11W 3		1 :		4			80	30	50
SJ 03077	30N	11W 3				1			75	70	5
SJ 03668	30N	11W 3				2			380	280	100
SJ 03251	30N	11W 3	2	3 4	1	4			150	77	73

Record Count: 303

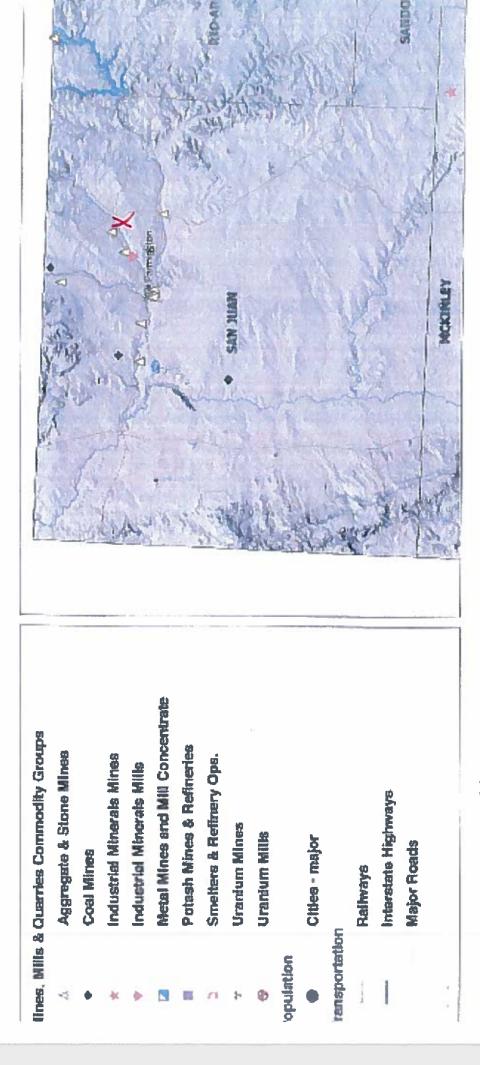




Mines, Mills and Quarries Web Map

NYE 10E

Unit Letter: G, Section: 12, Town: 030N, Range: 011W



SCALE 1: 1,180,383



KATIONAL FLOOD INSURANCE PROGRAM PANEL 350 OF 1450 ORE MAY INDEX FOR FAMELS NOT PRINTED! **FIRM** FLOOD INSURANCE RATE MAP COMMUNITY-PAMEL NUMBER 350064 0350 B EFFECTIVE DATE: AUGUST 4, 1988 SAN JUAN COUNTY,
NEW MEXICO
UNINCORPORATED AREAS APPROXIMATE SCALE PAMEL LOCATION ZONEA (INDEFINITE WATER COURSE) 2/ N/E 10E

NYE 10E

Site Specific Hydrogeology

A visual site inspection confirming the information contained herein was performed on the well 'NYE 10E', which is located at 36.82933 degree, North latitude and 107.93819 degree, West longitude. This location is located on the Aztec 7.5' USGS topographic quadrangle. This location is in section 12 of Township 30 North Range 11 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 Aztec, located 3.1 miles to the west. The nearest large town (population greater than 10,000) is Farmington, located 16.2 miles to the west (National Atlas). The nearest highway is State Highway 173, located 0.6 miles to the south. The location is on BLM land and is 1,633 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 1837 meters or 6025 feet above sea level and receives 12.5 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 100 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 271 feet to the southwest and is classified by the USGS as an intermittent stream. The nearest perennial stream is 2,888 feet to the northwest. The nearest water body is 2,881 feet to the northwest. It is classified by the USGS as an intermittent lake and is 0.2 acres in size. The nearest spring is 23,769 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 5,007 feet to the southwest. The nearest wetland is a 15.4 acre Ravine located 9,267 feet to the northwest. The slope at this location is 2 degree, to the west 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 'Stumble-Fruitland association, gently sloping' and is somewhat excessively drained and not hydric with slight erosion potential as taken from the NRCS SSURGO map unit, downloaded January 2008. The nearest underground mine is 9.6 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.

I have the a broad band in the the

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:

SAME SAME

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.

may restrict downward vertical

Im Da Juan Hasin, New Mexico in

Bacia, New Mexicolarid

Te and Paper 676, 76 p.7.

fines and Mineral Resources.

The second formation and Kirdand

New Mexico, Colorado Alizona,

183. Hydrogeology and water

or soo Planeau Four Corners

agranted fine material is highly crodible.

cae Cretacenne rocks, east-

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.

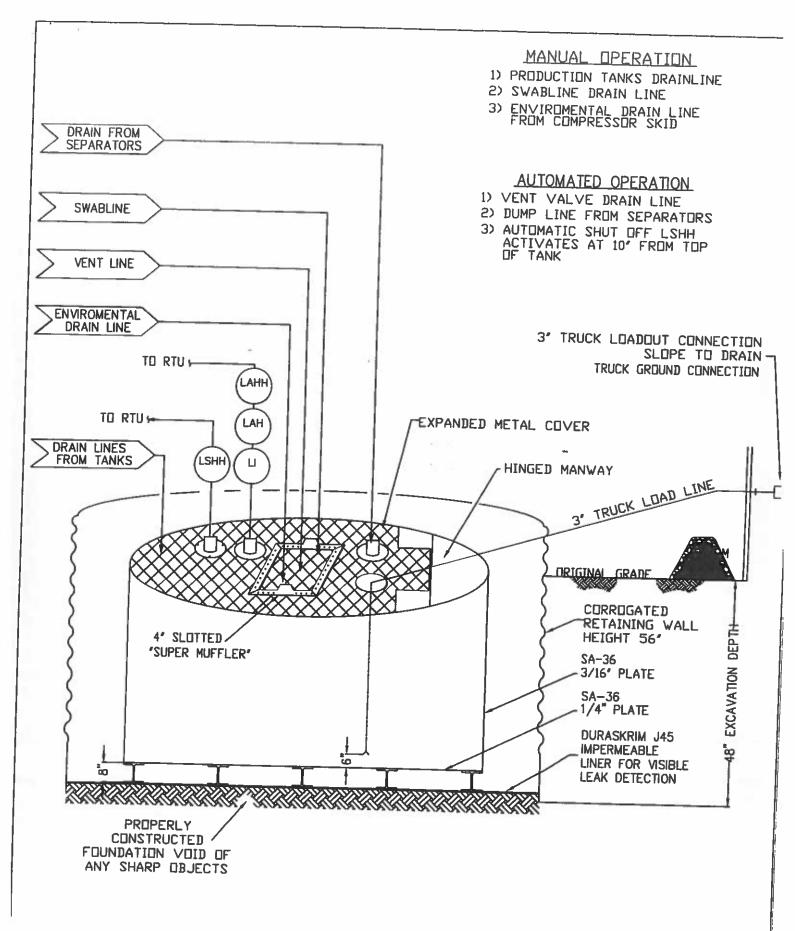
Burlington Resources Oil & Gas Company, LP San Juan Basin Below Grade Tank Design and Construction

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:

- 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 personnel are not onsite.
- 4. BR will construct a screened, expanded metal covering, on the top of the BGT.
- 5. BR shall ensure that a below-grade tank is constructed of materials resistant to the below-grade tank's particular contents and resistant to damage from sunlight as shown on design drawing and specification sheet.
- The BR below-grade tank system shall have a properly constructed foundation
 consisting of a level base free of rocks, debris, sharp edges or irregularities to
 prevent punctures, cracks or indentations of the liner or tank bottom as shown on
 design drawing.
- 7. BR shall operate and install the below-grade tank to prevent the collection of surface water run-on. BR has built in shut off devices that do not allow a 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.
- The general specification for design and construction are attached in the BR document.



ConocoPhillips

San Juan Business Unit

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

DURA-SKRIM®

J30, J36 & J45

PROPERTIES	TEST METHOD	J	30BB	J:	6BB	J45BB		
		Min. Roll Averages	Typical Roll Averages	Min. Roll Averages	Typical Roll Averages	Min. Roll Averages	Typical Ro Averages	
Appearance	Blac	ck/Black	Blac	k/Black	Black/Black			
Thickness	ASTM D 5199	27 mil	30 mil	32 mil	36 mil	40 mil	45 mil	
Weight Lbs Per MSF (oz/yd²)	ASTM D 5261	126 lbs (18.14)	140 lbs (20.16)	151 lbs (21.74)	168 lbs (24.19)	189 lbs (27.21)	210 lbs	
Construction		"Ext	rusion laminate	(32) is	and the second second		(30.24)	
Ply Adhesion	ASTM D 413	16 lbs	20 lbs	19 lbs				
THE RESERVE OF THE PARTY OF THE	9			19 lbs	24 lbs	25 lbs	31 lbs	
1" Tensile Strength	ASTM D 7003	88 lbf MD 63 lbf DD	110 lbf MD 79 lbf DD	90 lbf MD 70 lbf DD	113 lbf MD 87 lbf DD	110 lbf MD 84 lbf DD	138 lbf MD 105 lbf DD	
1" Tensile Elongation @ Break. % (Film Break)	ASTM D 7003	550 MD 550 DD	750 MD 750 DD	550 MD 550 DD	750 MD 750 DD	550 MD 550 DD	750 MD 750 DD	
1" Tensile Elongation @ Peak % (Scrim Break)	ASTM D 7003	20 MD 20 DD	33 MD 33 DD	20 MD 20 DD	30 MD 31DD	20 MD 20 DD	36 MD 36 DD	
Tongue Tear Strength	ASTM D 5884	75 lbf MD 75 lbf DD	97 lbf MD 90 lbf DD	75 lbf MD 75 lbf DD	104 lbf MD 92 lbf DD	100 lbf MD 100 lbf DD	117 lbf MD 118 lbf DD	
Grab Tensile	ASTM D 7004	180 lbf MD 180 lbf DD	218 lbf MD 210 lbf DD	180 lbf MD 180 lbf DD	222 lbf MD 223 lbf DD	220 lbf MD 220 lbf DD	257 lbf MD 258 lbf DD	
Trapezoid Tear	ASTM D 4533	120 lbf MD 120 lbf DD	146 lbf MD 141 lbf DD	130 lbf MD 130 lbf DD	189 lbf MD 172 lbf DD	160 lbf MD 160 lbf DD	193 lbf MD 191 lbf DD	
* Dimensional Stability	ASTM D 1204	<1	<0.5	<1	<0.5	<1		
Puncture Resistance	ASTM D 4833	50 lbf	64 lbf	65 lbf			<0.5	
Maximum Use Temperature		180° F			83 lbf	80 lbf	99 lbf	
Minimum Use Temperature			180° F					
D = Machine Direction		-70° F	-70" F	-70° F	-70° F	-70° F	-70° F	

MD = Machine Direction DD = Diagonal Directions



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

*Dimensional Stability Maximum Value

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

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

PLANT LOCATION

Sioux Falls, South Dakota

SALES OFFICE

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

08/06

RAVEN

RAVEN INDUSTRIES INC. EXPOSED GEOMEMBRANE LIMITED WARRANTY

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

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

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

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

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:

- 1. BR shall close a below-grade tank within the time periods provided in Subsection A of 19.15.17.13 NMAC. This will include a) below-grade tanks that do not meet the requirements of Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC or is not included in Paragraph (5) of Subsection I of 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 50 mg/kg; the TPH concentration, as determined by EPA method 418.1 or other EPA method that the division approves, does not exceed 100 mg/kg; and the chloride concentration, as determined by EPA method 300.1 or other EPA method that the division approves, does not exceed 250 mg/kg, or the background concentration, whichever is greater. BR shall notify the division of its results on form C-141.
- 6. If BR or the division determines that a release has occurred, then BR shall comply with 19.15.3.116 NMAC and 19.15.1.19 NMAC, as appropriate.

- 7. If the sampling program demonstrates that a release has not occurred or that any release does not exceed the concentrations specified in Paragraph (4) of Subsection E of 19.15.17.13 NMAC, then BR shall backfill the excavation with compacted, non-waste containing, earthen material; construct a division-prescribed soil cover; recontour and re-vegetate the site.
- 8. Notice of Closure will be given prior to closure to the Aztec Division office between 72 hours and one week via email or verbally. The notification of closure will include the following:
 - i. Operator's name
 - Location by Unit Letter, Section, Township, and Range. Well name and API number.
- 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

Burlington Resources /Conoco Phillips BGT REGISTRATION

✓ Signed C-144 (Page 5 of C-144)
✓ Site Specific Hydrogeology
19.15.17.10 NMAC SITTING REQUIREMENTS
 ✓ New Mexico Office of State Engineer attachment ✓ USGS TOPO map ✓ Aerial Map ✓ Mines, Mills and Quarries Map ✓ FIRM map (flood insurance rate map from Federal Emergency Agency)
19.15.17.11 NMAC DESIGN PLAN CONTENTS
✓ Below Grade Tank Design and Construction Plan
19.15.17.12 NMAC OPERATING AND MAINTENCE PLAN
▼ Below Grade Tank Operating and Maintenance Plan
19.15.17.13 NMAC CLOSURE PLAN
▼ Below Grade Tank Closure Plan
REGISTRATION DATE:
08/04/2015
NOTES: