1625 N French Dr , Hobbs, NM 88240

District II

1301 W Grand Ave., Artesia, NM 88210

District III

State of New Mexico Energy Minerals and Natural Resources

Department Oil Conservation Division 1220 South St. Francis Dr. July 21, 2008

Form C-144

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

1000 Rio Brazos Rd , Aztec, NM 87410	Santa Fe, NM 87505	For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the
District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505		appropriate NMOCD District Office
1 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Closed-Loop System, Below-Gra	<u> </u>
Proposed A	lternative Method Permit or Cl	osure Plan Application
Type of action: Pern	nit of a pit, closed-loop system, below-grade	e tank, or proposed alternative method
Clos	ure of a pit, closed-loop system, below-grad	le tank, or proposed alternative method
Mod	ification to an existing permit	
	ure plan only submitted for an existing perm w-grade tank, or proposed alternative metho	nitted or non-permitted pit, closed-loop system, od
Instructions: Please submit one application	n (Form C-144) per individual pit, closed-l	loop system, below-grade tank or alternative request
		ns result in pollution of surface water, ground water or the ble governmental authority's rules, regulations or ordinances
1	and of he responsionity to comply war any other applica	Se governmenta autority vittes, regulators, or ordinarees
Operator: Burlington Resources Oil & Gas O		OGRID#: <u>14538</u>
Address: PO Box 4289, Farmington, NM 8	7499	
Facility or well name: Mitchell 1S		
API Number: 30-045-343	· · · · · · · · · · · · · · · · · · ·	
U/L or Qtr/Qtr: M(SWSW) Section: 5		12W County: San Juan
Center of Proposed Design: Latitude:  Surface Owner: X Federal S	36.92377' N Longitude:	108.12568' W NAD: 1927 X 1983
Surface Owner. A rectain 5	Tivate Tribat Trust of Inc	nan Anounch
X Pit: Subsection F or G of 19.15.17.11 NMA  Temporary X Drilling Workover  Permanent Emergency X Cavitation  X Lined Unlined Liner type.  X String-Reinforced  Liner Seams X Welded X Factory	P&A Thickness 20 mil X LLDPE	
Enter Scanis A Wented A Tactory	Volume: 44	100 bbl Dimensions L 65' x W 45' x D 10'
Closed-loop System: Subsection H of It Type of Operation: P&A Drilling  Drying Pad Above Ground Steel T Lined Unlined Liner type: Liner Seams: Welded Factory	a new well Workover or Drilling (Applies notice of intent)	to activities which require prior approval of a permit or  HDPE PVD Other  RECEIVED
4 Below-grade tank: Subsection I of 19.15.  Volume bbl T Tank Construction material.	17.11 NMAC Type of fluid:	HDPE PVD Other RECEIVED
Secondary containment with leak detection	Visible sidewalls, liner, 6-inch lift and a ible sidewalls only Other  HDPE PVC Other	utomatic overflow shut-off
5 Alternative Method:		
Submittal of an exception request is required. Exc	entions must be submitted to the Santa Fe Envir	conmental Bureau office for consideration of approval

8 .						
Fencing: Subsection D of 19.15.17.11 NMAC (Applies to permanent pit, temporary pits, and below-grade tanks)						
Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)						
Four foot height, four strands of barbed wire evenly spaced between one and four feet						
X Alternate. Please specify 4' hogwire fence with a single strand of barbed wire on top.						
7		_				
Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)						
Screen Netting Other						
Monthly inspections (If netting or screening is not physically feasible)						
8						
Signs: Subsection C of 19 15.17.11 NMAC						
12" X 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers						
X Signed in compliance with 19.15.3.103 NMAC						
9						
Administrative Approvals and Exceptions:						
Justifications and/or demonstrations of equivalency are required Please refer to 19.15.17 NMAC for guidance.						
Please check a box if one or more of the following is requested, if not leave blank:						
Administrative approval(s): Requests must be submitted to the appropriate division district of the Santa Fe Environmental Bureau office for consi	deration of ap	proval				
Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.						
10						
Siting Criteria (regarding permitting): 19.15.17.10 NMAC						
Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable	ı					
source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the						
appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau Office for						
consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying pads or above grade-tanks associated with a closed-loop system.						
Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.	Yes	XNo				
- NM Office of the State Engineer - 1WATERS database search; USGS; Data obtained from nearby wells						
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other watercourse, lakebed, sinkhole, or playa						
lake (measured from the ordinary high-water mark).	İ					
- Topographic map; Visual inspection (certification) of the proposed site	İ					
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial	Yes	X No				
application.	<del></del>	_				
(Applies to temporary, emergency, or cavitation pits and below-grade tanks)	∏NA					
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image						
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.	∏Yes	□No				
(Applied to permanent pits)	XNA					
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	<b>A.</b> 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.					
		₩.				
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	Yes	X No				
adopted pursuant to NMSA 1978, Section 3-27-3, as amended						
- Written confirmation or verification from the municipality; Written approval obtained from the municipality	<u></u>					
Within 500 feet of a wetland.	Yes	X No				
- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site		C.				
Within the area overlying a subsurface mine.	∐Yes	X No				
- Written confirmation or verification or map from the NM EMNRD - Mining and Mineral Division	<u></u>	(G)				
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	Yes	X No				
- FEMA map		LINO				

Temporary Pits, Emergency Pits and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.							
Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19 15.17.9 NMAC							
X Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15 17.9							
X Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19 15.17 10 NMAC							
X Design Plan - based upon the appropriate requirements of 19 15 17.11 NMAC							
X Operating and Maintenance Plan - based upon the appropriate requirements of 19.15 17.12 NMAC							
X Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of							
19.15.17 9 NMAC and 19.15 17.13 NMAC							
Previously Approved Design (attach copy of design)  API							
Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC  Instructions: Each of the following items must be attached to the application Please indicate, by a check mark in the box, that the documents are attached.  Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9  Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC							
Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC							
Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC							
Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9  NMAC and 19 15.17 13 NMAC							
Previously Approved Design (attach copy of design)  API							
Previously Approved Operating and Maintenance Plan API							
13							
Permanent Pits Permit Application Checklist: Subsection B of 19.15 17.9 NMAC  Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.							
Hydrogeologic Report - based upon the requirements of Paragraph (I) of Subsection B of 19.15 17.9 NMAC							
Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19 15 17.10 NMAC  Climatological Factors Assessment							
Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC							
Dike Protection and Structural Integrity Design based upon the appropriate requirements of 19.15.17.11 NMAC							
Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC							
Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19 15.17 11 NMAC							
Quality Control/Quality Assurance Construction and Installation Plan							
Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC							
Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC							
Nuisance of Hazardous Odors, including H2S, Prevention Plan							
Emergency Response Plan							
☐ Oil Field Waste Stream Characterization ☐ Monitoring and Inspection Plan							
Erosion Control Plan							
Closure Plan - based upon the appropriate requirements of Subsection C of 19.15 17.9 NMAC and 19.15.17.13 NMAC							
14							
Proposed Closure: 19.15.17.13 NMAC							
Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.							
Type: X Drilling Workover Emergency X Cavitation P&A Permanent Pit Below-grade Tank Closed-loop System							
Alternative     Proposed Closure Method   Waste Excavation and Removal							
Waste Excavation and removal  Waste Removal (Closed-loop systems only)							
X On-site Closure Method (only for temporary pits and closed-loop systems)							
X In-place Burial On-site Trench							
Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)							
15							
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must be attached to the closure plan.  Please indicate, by a check mark in the box, that the documents are attached.							
Protocols and Procedures - based upon the appropriate requirements 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							
Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)							
Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC							
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							

Form C-144 Oil Conservation Division Page 3 of 5

16	IT I W I PED O I (10 15 17 12 DADAG)						
Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Stee Instructions: Please identify the facility or facilities for the disposal of liquids, drilling		cilities					
are required.							
	Disposal Facility Permit #:						
Disposal Facility Name	Disposal Facility Permit #						
Will any of the proposed closed-loop system operations and associated activities occur on or in areas that will not be used for future service and operations?  Yes (If yes, please provide the information No							
Required for impacted areas which will not be used for future service and operations:  Soil Backfill and Cover Design Specification - based upon the appropriate Re-vegetation Plan - based upon the appropriate requirements of Subsection Plan - based upon the appropriate require	tion I of 19.15.17.13 NMAC						
Site Reclamation Plan - based upon the appropraite requirements of Sub	section G of 19.15 17.13 NMAC						
Siting Criteria (Regarding on-site closure methods only: 19.15 17.10 NMAC Instructions Each siting criteria requires a demonstration of compliance in the closure plan Recetain siting criteria may require administrative approval from the appropriate district office of for consideration of approval Justifications and/or demonstrations of equivalency are required.	tecommendations of acceptable source material are provided belov or may be considered an exception which must be submitted to the S		mental Bureau office				
Ground water is less than 50 feet below the bottom of the buried waste		Yes	X No				
- NM Office of the State Engineer - iWATERS database search, USGS. Data obta	ined from nearby wells	∐N/A					
Ground water is between 50 and 100 feet below the bottom of the buried waste		XYes	No				
- NM Office of the State Engineer - tWATERS database search; USGS; Data obtain	ned from nearby wells	□N/A					
Ground water is more than 100 feet below the bottom of the buried waste.		Yes	X No				
- NM Office of the State Engineer - (WATERS database search; USGS; Data obtain	ned from nearby wells	□ N/A	_				
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other signific (measured from the ordinary high-water mark).	Yes	X No					
- Topographic map; Visual inspection (certification) of the proposed site	·						
Within 300 feet from a permanent residence, school, hospital, institution, or church in e - Visual inspection (certification) of the proposed site, Aerial photo, satellite image	Yes	X No					
		Yes	XNo				
Within 500 horizontal feet of a private, domestic fresh water well or spring that less that purposes, or within 1000 horizontal fee of any other fresh water well or spring, in existed - NM Office of the State Engineer - iWATERS database; Visual inspection (certification)	ence at the time of the initial application.						
Within incorporated municipal boundaries or within a defined municipal fresh water we pursuant to NMSA 1978, Section 3-27-3, as amended.  - Written confirmation or verification from the municipality; Written approval obta		Yes	XNo				
Within 500 feet of a wetland	med from the mannespanty	Yes	XNo				
- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspo	ection (certification) of the proposed site						
Within the area overlying a subsurface mine.		Yes	XNo				
- Written confiramtion or verification or map from the NM EMNRD-Mining and M	Ineral Division	г.	Ter.				
Within an unstable area.  - Engineering measures incorporated into the design; NM Bureau of Geology & Mi	neral Resources; USGS; NM Geological Society;	Yes	X No				
Topographic map		П.,					
Within a 100-year floodplain FEMA map		∐Yes	X No				
18							
On-Site Closure Plan Checklist: (19 15 17.13 NMAC) Instructions: Each by a check mark in the box, that the documents are attached.	of the following items must bee attached to the closure	e plan. Please	indicate,				
X Siting Criteria Compliance Demonstrations - based upon the appropriate	-						
Toof 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) based upon the	e appropriate requirements of 19.15.17.11 NMAC						
Construction/Design Plan of Temporary Pit (for in place burial of a dryii		9.15.17 11 NM	IAC				
X Protocols and Procedures - based upon the appropriate requirements of	,						
Confirmation Sampling Plan (if applicable) - based upon the appropriate	•						
X Waste Material Sampling Plan - based upon the appropriate requirement							
X Disposal Faculty Name and Permit Number (for liquids, drilling fluids a		not be achieve	ed)				
X Soil Cover Design - based upon the appropriate requirements of Subsect							
X   Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC							

Form C-144 Oil Conservation Division Page 4 of 5

Name (Print):	Crystal Tafoya	Title	Regulatory Technician
Signature:	Comptal Talon	Date:	10/3/08
e-mail address	crystal.tafoya@conocophillips g/m	Telephone:	505-326-9837
		•	
0 OCD Approval:	Permit Application (including closure plan)	Closure Plan (only	OCD Conditions (see attachment)
OCD Representative	Signature: Transfor 08	mell	Approval Date: //- 4-08
itle:	Signature: Branglon De	OCD Per	mit Number:
	nired within 60 days of closure completion):		AC Six activities and submitting the closure report. The closure
eport is required to be :	submitted to the division within 60 days of the compl	etion of the closure activit	nes.` Please do not complete this section of the form until an
pprovea ciosure pian n	as been obtained and the closure activities have bee		re Completion Date:
		Ciosu	ic Compiction Date.
2 Locure Method			
Closure Method:  Waste Excavation	on and Removal On-site Closure Method	Alternative Closur	re Method Waste Removal (Closed-loop systems only)
	approved plan, please explain		Traste Removal (Closed-100p systems only)
	approved plan, please explain		
3 Iosure Renort Recard	ling Waste Removal Closure For Closed-loop Syst	ems That Utilize Above (	Cround Steel Tanks or Haul-off Rins Only
			ttings were disposed. Use attachment if more than two facilities
Disposal Facility Nar	me·	Dısposal Facili	ty Permit Number:
Disposal Facility Nat		_	ty Permit Number:
_	system operations and associated activities perform se demonstrate complilane to the items below)	ed on or in areas that will in No	not be used for future service and opeartions?
	•	_	
	ed areas which will not be used for future service and n (Photo Documentation)	operations:	
=	and Cover Installation		
Re-vegetation A	pplication Rates and Seeding Technique		
4			
		following items must be at	tached to the closure report. Please indicate, by a check mark in
the box, that the doc			
	re Notice (surface owner and division)  Notice (required for on-site closure)		
=	on-site closures and temporary pits)		
=	Sampling Analytical Results (if applicable)		
=	Sampling Analytical Results (if applicable)		
	ty Name and Permit Number		
<b>∺</b> '	g and Cover Installation		
=	Application Rates and Seeding Technique		
	on (Photo Documentation)		
On-site Closure	· ·	Longitude:	NAD   1927   1983
5			
 Operator Closure Ce	ertification:		
hereby certify that the			te and complete to the best of my knowledge and belief I also certify that closure plan.
lame (Print):		Title:	
ignature:	***************************************	Date:	
-mail address:		Telephone:	

# New Mexico Office of the State Engineer POD Reports and Downloads

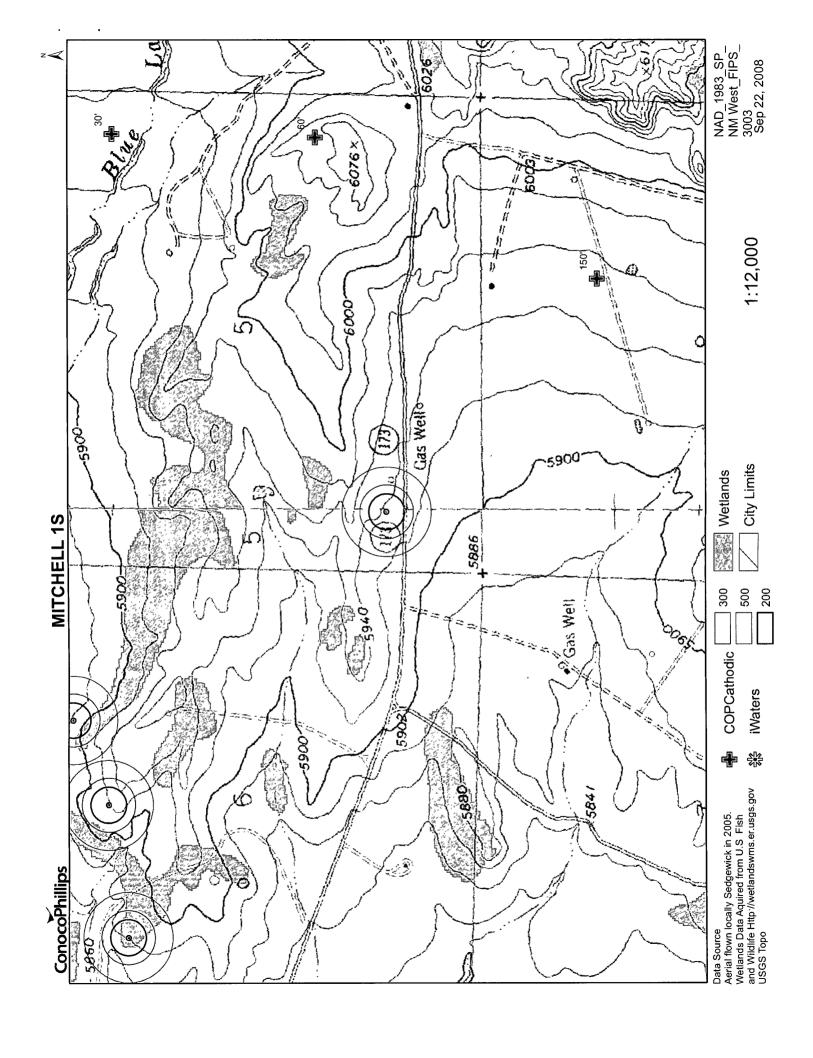
Towr	nship: 31N	Range: 12W	Sections: 4,	5,6,7,8,9		-	
NAD27	X:	, Y:,	Zone:		Search Radius:		
County:		Basin:	,		Number:	Suffix	<b>K</b> :
Owner Name: (	First)	, (L	ast) <b>⊚</b> All	t t	⊙ Non-Domesti	e O Dome	estic
	POD / Su	rface Data Repo	rt Av ter Column Repo		o Water Report	wa wa	
	(	Clear Form	iWATERS M	enu	Help		
American de <sub>Marie</sub> n y grant en en en en en en en en en en en en en		W	ATER COLUMN I	REPORT 1	10/03/2008		
	· <del>-</del>		=NE 3=SW 4=SI	-		_ ,-	
POD Number SJ 02904	(quarter Tws 31N	Rng Sec q q 12W 08 4 4	· <del>-</del>	x	Depth Y Well 325	Water 142	Wate Colum

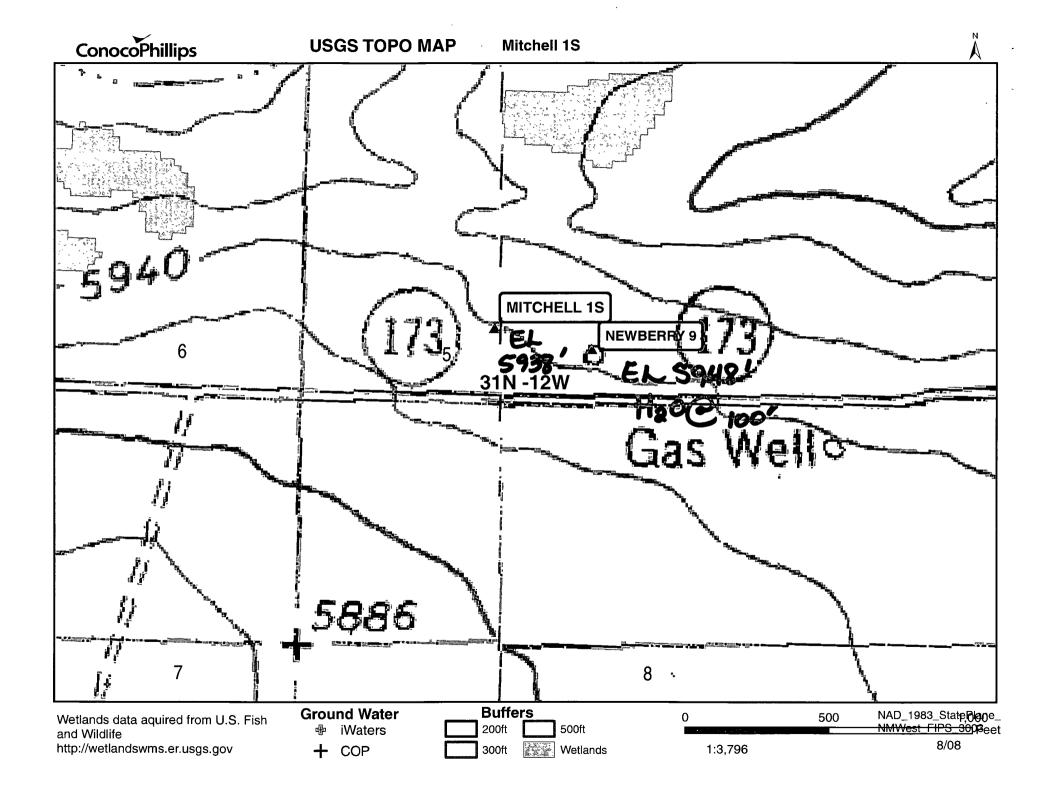
Record Count: 1

# New Mexico Office of the State Engineer POD Reports and Downloads

Township:	32N Range: 12W	Sections: 31,	32,33		
NAD27 X:	; <b>Y:</b> ;	Zone:	a s	Search Radius:	THE CALL
County:	Basin:			Number:	Suffix:
Owner Name: (First)	' (L	ast)	C	) Non-Domestic	ODomestic
POI	D / Surface Data Repor	t Avg		Water Report	)
	Clear Form	iWATERS Me		lelp	
	W	ATER COLUMN R	EPORT 10	/03/2008	
	arters are 1=NW 2 arters are bigges	t to smallest	-	Depth	Depth Wate

No Records found, try again





### 30-045-11021

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

(Submit 3 copies to OCD Aztec Office)

Operator MERIDIAN OIL INC.	Location: Unit M Sec. 5 Twp31 Rng 12
Name of Well/Wells or Pipeline Service	ced NEWBERRY #9
-	cps 1955w
Elevation 5948' Completion Date 6/2/88	Total Depth 340'Land Type*_ N/A
Casing, Sizes, Types & Depths	N/A .
If Casing is cemented, show amounts &	types usedN/A
If Cement or Bentonite Plugs have been N/A	en placed, show depths & amounts used
Depths & thickness of water zones wit Fresh, Clear, Salty, Sulphur, Etc.	th description of water when possible:
Depths gas encountered: N/A	
Type & amount of coke breeze used:	N/A
Depths anodes placed: 300', 290', 280', 2	260', 250', 240', 215', 205', 180', 170'
Depths vent pipes placed: 330'	
Vent pipe perforations: 240'	WELFIAE W
Remarks: gb #1	MAYSIL 19901
	OIL CON.
	VDIST. 5

If any of the above data is unavailable, please indicate so. Copies of all logs, including Drillers Log, Water Analyses & Well Bore Schematics should be submitted when available. Unplugged abandoned wells are to be included.

<sup>\*</sup>Land Type may be shown: F-Federal; I-Indian; S-State; P-Fee. If Federal or Indian, add Lease Number.

# HUMBER OF COP - F RECEIVED LISTRIBUTION BANTA FF FILE U S G 3 LAND OFFICE TRANSPORTER GA 3 PRORATION OFFICE OPERATOR

## NEW MEXICO OIL CONSERVATION COMMISSION Santa Fe. New Mexico

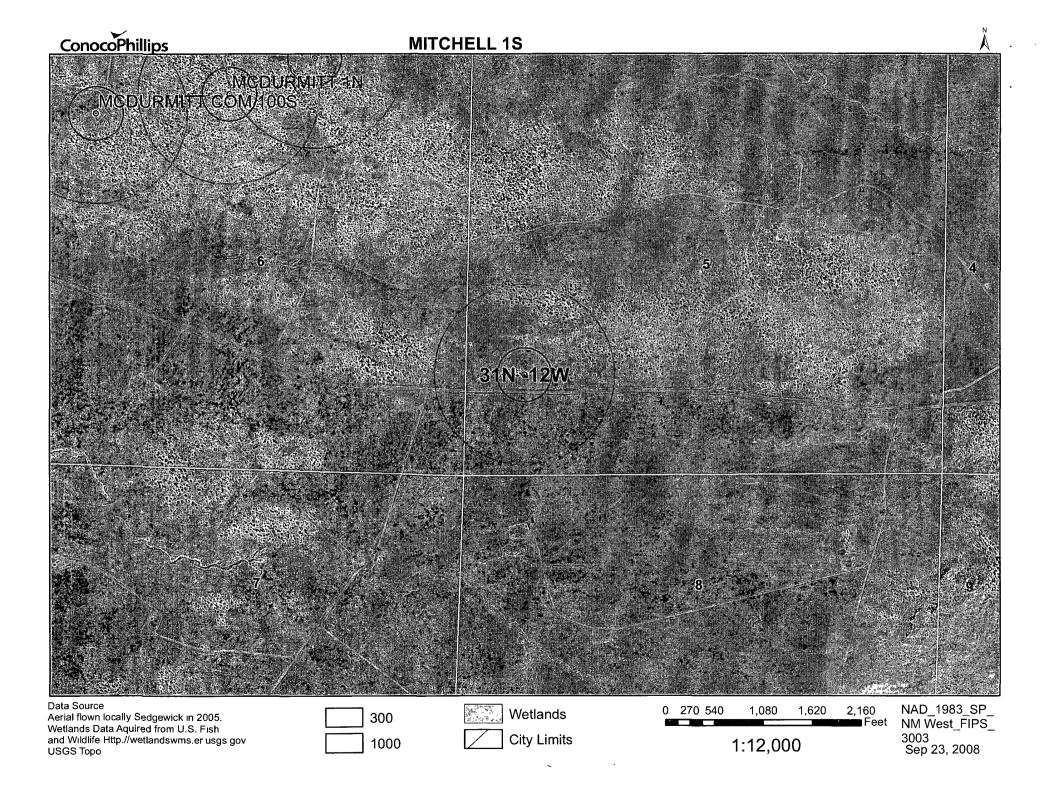
(Form C-104) Revised 7/1/57

## REQUEST FOR (OIL) - (GAS) ALLOWAPLE

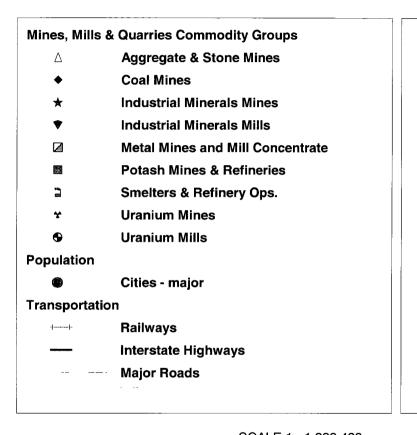
New Well

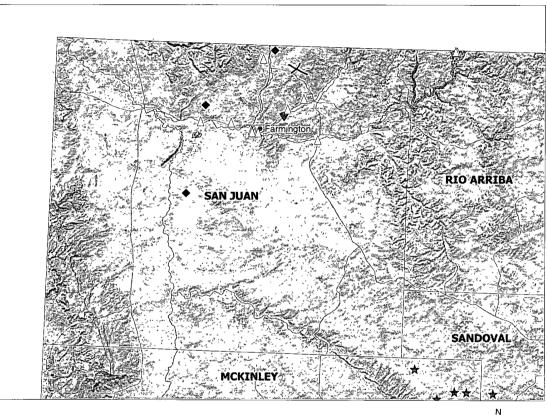
This form shall be submitted by the operator before an initial allowable will be assigned to any completed Oil or Gas well. Form C-104 is to be submitted in QUADRUPLICATE to the same District Office to which Form C-101 was sent. The allowable will be assigned effective 7.00 A.M. on date of completion or recompletion, provided this form is filed during calendar month of completion or recompletion. The completion date shall be that date in the case of an oil well when new oil is delivered into the stock tanks. Gas must be reported on 15.025 psia at 60° Fahrenheit.

	o Natu	ral G	as Compa	ING AN ALLOWABLE FOR A WELL KNOWN AS:  pany Newberry , well No 9 , in SW 1/4 SW
M ('	Company	or Oper	ator) 5	T. 31-N , R 12-W , NMPM., Blanco Mesa Verde
	Letter	, Sec		T. JEW, R. LEW, NMPM., Sales volume
m Ju				8-21-60
				Elevation 5948 Total Depth 4846 +010 4812
Pie	ease indi	icate loc	auon:	Top Oil/Gas Pay 4640' (Perf) Name of Frod. Form. Mesa Verde
D	C	В	A	PRODUCING INTERVAL - 4640-4648;4654-4668;4690-4698;
1			İ	
E	F	G	H	Perforations 4702-4720;4725-4731;4736-4748
~		<b>.</b>	*	Open Hole None Cassing Shoe 4846 Tubing 4749
				OIL WELL TEST -
L	K	J	I	Natural Prod. Test:bbls.oil,bbls water inhrs,min. S
	ľ			
M +	-N	0	P	Test After Acid or Fracture Treatment (after recovery of volume of oil equal to volum Choke
X		•	-	load oil used): bbls.oil, btls water in hrs, min. Size
				GAS WELL TEST -
.050	<b>S</b> , 990			Natural Prod. Test: WCF/Day; Hours flowed Choke Size
ning .C	FootA ta gaing at		ting Recor	
		cet	7A?	Test After Acid or Fracture Treatment: 7071 MCF/Day; Hours flowed
		1		Choke Size 3/4" Method of Testing: Calculated A.O.F.
.0 3/	4"	120	125	Office Size of . Nethod Cl Testing.
7 5/	/Am 1	1569	570	Ac.d or Fracture Treatment (Give amounts of materials used, such as acid, water, oil, sand): 56,700 gal water & 50,000 # sand
1 2/	<del>-   -  </del>	100g	210	
5 1/	ייבי	31.8	75	Casing Press. 1017 Tubing Press. 1020 Date first new oil run to tanks
	_			Cil Transporter El Paso Natural Gas Products Co.
2"	4	1749		
	<del></del>			, out of 120
	· · · · · · · · · · · · · · · · · · ·			OIL CON. CO
narks:				DIST. 3
narks:	·· ······			· · · · · · · · · · · · · · · · · · ·
	reby cer	tify that		ormation given above is true and complete to the best of my knowledge.
			the info	ormation given above is true and complete to the best of my knowledge.  El Paso Natural Gas Company
I he			the info	ormation given above is true and complete to the best of my knowledge.  El Paso Natural Gas Company  (Company or Operator)
I he	IJAN	318	the info	ormation given above is true and complete to the best of my knowledge.  El Paso Natural Gas Company  (Company or Operator)  Original Signed By: D.H. Oheim
I her	IJAN	319 ONSERV	the info	ormation given above is true and complete to the best of my knowledge.  El Paso Natural Gas Company  (Company or Operator)  Original Signed By: D.H. Oheim  (Signature)
I her	IJAN	319 ONSERV	the info	ormation given above is true and complete to the best of my knowledge.  El Paso Natural Gas Company  (Company or Operator)  Original Signed By: D.H. Oheim



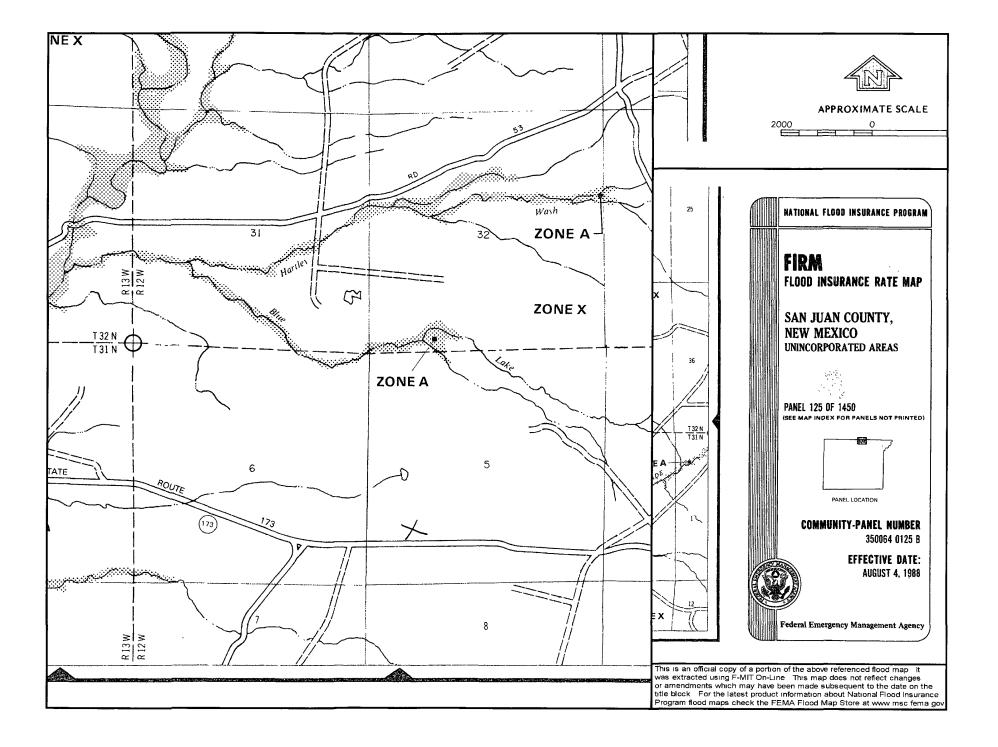
## Mitchell 1S Mines, Mills and Quarries Web Map











#### Hydrogeological Report for Mitchell 1S

#### **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 commformably 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.

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

The Mitchell 1S is not located in an unstable area. The location is not over a mine and is not on the side of a hill as indicated on the Mines, Mills and Quarries Map and Topographic Map. The location of the excavated pit material will not be located within 300' of any continuously flowing watercourse or 200' from any other watercourse as indicated on the Topographic Map. The location is not within a 100-year floodplain area as indicated on the FEMA Map. The Cathodic well data from the Newberry 9 has an elevation of 5948' and groundwater depth of 100'. The subject well has an elevation of 5938' which is slightly less than the Newberry 9, therefore the groundwater depth is greater than 80'. There are no iWATERS data points located in the area as indicated on the TOPO Map. The Cathodic data provided the indication of groundwater depth and the Nacimiento formation will create a stable area for this new location.

#### Tafoya, Crystal

From:

Tafova, Crystal

Sent:

Thursday, July 10, 2008 8:16 AM

To: Subject:

'mark\_kelly@nm.blm.gov' OCD Pit Closure Notification

The following temporary pits will be closed on-site. The new OCD Pit Rule 17 requires the surface owner be notified. Please feel free to contact me at any time if you have any questions. Thank you!

Allison Unit 2B

Allison Unit 40N

Angel Peak B 27E

Ballard 11F

Cain 725S

Canyon Largo Unit 250N

Canyon Largo Unit 279E

Canyon Largo Unit 288E

Canyon largo Unit 297E

Canyon Largo Unit 465E

Carson SRC 4E

Day B 4P

Day B 5A

East 17S

**EPNG A 1B** 

**EPNG B 1M** 

Federal A 1E

Filan 5M

Filan 5N

Fogelson 4 100

Fogelson 4 100S

Grambling C 202S

Hagood 19

Hamner 9S

Hardie 4P

Hare 295

Heaton Com 100

Helms Federal 1G

Howell 12

Huerfanito Unit 103F

**Huerfanito Unit 29S** 

Huerfanito Unit 39S

**Huerfanito Unit 47S** 

Huerfanito Unit 50E

Huerfanito Unit 75E

Huerfanito Unit 83E

Huerfanito Unit 87E

Huerfanito Unit 90E

Huerfanito Unit 90M

**Huerfanito Unit 98S** 

Huerfano Unit 108F

Huerfano Unit 282E

Huerfano unit 305

Huerfano unit 307

Huerfano Unit 554 Johnston Federal 24S

1

King 3

Lackey A Com 100S

Lambe 1C

Lambe 7S

Lively 8M

Lloyd A 100

Lloyd A 100S

Martin 100

McCord B 1F

McDurmitt Com 100S

McManus 13R

Mitchell 1S\_

Morris A 14

Newberry B 1N

Newsom B 503

Newsom B 8N

Pierce A 210S

Roelofs 1N

San Juan 27-4 Unit 132G

San Juan 27-4 Unit 132M

San Juan 27-4 Unit 139N

San Juan 27-4 Unit 140B

San Juan 27-4 Unit 141M

San Juan 27-4 Unit 147Y

San Juan 27-4 Unit 153B

San Juan 27-4 Unit 22M

San Juan 27-4 Unit 38P

San Juan 27-4 Unit 41N

San Juan 27-4 Unit 42N

San Juan 27-4 Unit 569N

San Juan 27-4 Unit 59N

San Juan 27-4 Unit 60M

San Juan 27-5 Unit 113F

San Juan 27-5 Unit 59N

San Juan 27-5 Unit 84N

San Juan 27-5 unit 901

San Juan 27-5 Unit 902

San Juan 27-5 Unit 903

San Juan 27-5 Unit 904

San Juan 27-5 Unit 905

San Juan 27-5 Unit 906

San Juan 27-5 Unit 907

San Juan 27-5 Unit 908

San Juan 27-5 Unit 909

San Juan 27-5 Unit 910

San Juan 27-5 Unit 912

San Juan 27-5 Unit 913

San Juan 27-5 Unit 914

San Juan 27-5 Unit 915

San Juan 27-5 Unit POW 916

San Juan 28-4 Unit 27M

San Juan 28-5 Unit 54F

San Juan 28-5 Unit 62E

San Juan 28-5 Unit 63M

San Juan 28-5 Unit 76N San Juan 28-5 Unit 77N

San Juan 28-6 Unit 113N

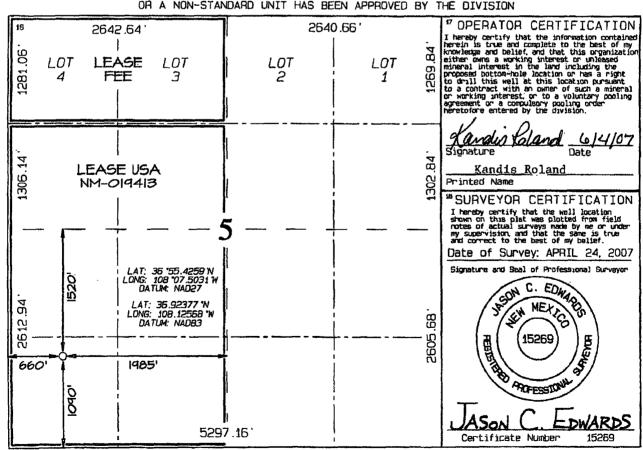
'API Number

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

Pool Name

30-045-	342	51		529	BASIN FRUITLAND COAL				
'Property 26634			*Property Name MITCHELL						Well Number 15
'0GRID 1 1453			*Operator Name BURLINGTON RESOURCES OIL & GAS COMPANY, LP						Elevation 5938
<u> </u>	<sup>10</sup> Surface Location								
VL or lot no.	Section	Township	Range	Lat Ion	Feet from the	North/South line	Fest from the	East/West line	County
М	5	31N	12W		1090	SOUTH	660	WEST	SAN JUAN
			Bottom	Hole L	ocation I	f Different	From Surf	асе	
Ut or lot no.	Section	Township	Range	Let Idn	Feet from the	North/South, lune	Feet from the	East/Mast line	County
te Dedicated Acres		3.36 Acr	'es - W	1/2	U Joint or Infill	<sup>14</sup> Consolidation Code	<sup>25</sup> Order No.		

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



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

In accordance with Rule 19.15.17.12 NMAC the following information describes the closure requirements of temporary pits on Burlington Resources Oil & Gas Company, LP (BR) locations. This is BR's standard procedure for all temporary pits. A separate plan will be submitted for any temporary pit which does not conform to this plan.

All closure activities will include proper documentation and be available for review upon request and will be submitted to OCD within 60 days of closure of pit closure. Closure report will be filed on C-144 and incorporate the following:

- Details on Capping and Covering, where applicable.
- Plot Plan (Pit Diagram)
- Inspection Reports
- Sampling Results
- C-105
- Copy of Deed Notice will be filed with County Clerk

#### **General Plan:**

- All free standing liquids will be removed at the start of the pit closure process from the pit and disposed of in a division—approved facility or recycle, reuse or reclaim the liquids in a manner that the appropriate division district office approves. The facilities to be used will be Basin Disposal (Permit #NM-01-005) and Envirotech Land Farm (Permit #NM-01-011)
- 2. The preferred method of closure for all temporary pits will be on-site burial, assuming that all the criteria listed in sub-section (B) of 19.15.17.13 are met.
- 3. The surface owner shall be notified of BR's closing of the temporary pit prior to closure as per the approved closure plan via certified mail, return receipt requested.
- 4. Within 6 months of the Rig Off status occurring BR will ensure that temporary pits are closed, re-contoured, and reseeded.
- 5. Notice of Closure will be given prior to the Aztec Division office between 72 hours and one week via email, or verbally. The notification of closure will include the following:
  - i. Operator's name
  - ii. Location by Unit Letter, Section, Township, and Range. Well name and API number.
- 6. Liner of temporary pit shall be removed above "mud level" after stabilization. Removal of liner will consist of manually or mechanically cutting liner at mud level and removing all remaining liner. Care will be taken to remove "All" of the liner i.e., edges of liner entrenched or buried. All excessive liner will be disposed of at the San Juan County Landfill located on CR 3100.
- 7. Pit contents shall be mixed with non-waste containing, earthen material in order to achieve the solidification process. The solidification process will be accomplished using a combination of natural drying and mechanically mixing. Pit contents will be mixed with non-waste, earthen material to a consistency that is deemed a safe and stable. The mixing ratio shall not exceed 3 parts clean soil to 1 part pit contents.
- 8. A five point composite sample will be taken of the pit using sampling tools and all samples tested per Subsection B of 19.15.17.13(B)(1)(b). In the event that the criteria are not met, all contents will be handled per Subparagraph (a) of Paragraph (1) of Subsection B of 19.15.17.13 i.e., Dig and haul.

Tests Method	Limit (mg/Kg)
EPA SW-846 8021B or 8260B	0.2
EPA SW-846 8021B or 8260B	50
EPA SW-846 418.1	2500
EPA SW-846 8015M	500
EPA 300.1	1000/500
	EPA SW-846 8021B or 8260B EPA SW-846 8021B or 8260B EPA SW-846 418.1 EPA SW-846 8015M

9. A five point composite sample will be taken from the cavitation pit pursuant to 19.15.17.13(B)(1)(b)(i) in order to assure there has not been any type of release.

Components	Tests Method	Limit (mg/Kg)
Benzene	EPA SW-846 8021B or 8260B	0.2
BTEX	EPA SW-846 8021B or 8260B	50
TPH	EPA SW-846 418.1	2500
GRO/DRO	EPA SW-846 8015M	500
Chlorides	EPA 300.1	500

- 10. Upon completion of solidification and testing standards being passed, the pit area will be backfilled with compacted, non-waste containing, earthen material. A minimum of four feet of cover shall be achieved and the cover shall include one foot of suitable material to establish vegetation at the site, or the background thickness of topsoil, whichever is greater. If standard testing fails BR will dig and haul all contents pursuant to 19.15.17.13.i.a. After doing such, confirmation sampling will be conducted to ensure a release has not occurred.
- 11. During the stabilization process if the liner is ripped by equipment the Aztec OCD office will be notified within 48 hours and the liner will be repaired if possible. If the liner can not be repaired then all contents will be excavated and removed.
- 12. Dig and Haul Material will be transported to the Envirotech Land Farm located 16 miles south of Bloomfield on Angel Peak Road, CR 7175. Permit # NM010011
- 13. 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.
- 14. Notification will be sent to OCD when the reclaimed area is seeded.
- 15. 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 or Forest Service stipulated seed mixes will used on federal lands. Vegetative cover will equal 70% of the native perennial vegetative cover (un-impacted) consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintain that cover through two successive growing seasons. Repeat seeding or planting will be continued until successful vegetative growth occurs.

Туре	Variety or Cultivator	PLS/A
Western wheatgrass	Arriba	3.0
Indian ricegrass	Paloma or Rimrock	3.0
Slender wheatgrass	San Luis	2.0
Crested wheatgrass	Hy-crest	3.0
Bottlebrush Squirreltail	Unknown	2.0
Four-wing Saltbrush	Delar	.25

Species shall be planted in pounds of pure live seed per acre: Present Pure Live Seed (PLS) = Purity X Germination/100

Two lots of seed can be compared on the basis of PLS as follows:

Source No. One (poor quality)

Purity

50 percent

Germination

40 percent

Percent PLS

20 percent

Source No. two (better quality)

Purity

80 percent

Germination

63 percent

Percent PLS

50 percent

5 lb. bulk seed required to make 2 lb. bulk seed required to make

1 lb. PLS 1 lb. PLS

16. The temporary pit will be located with a steel marker, no less than four inches in diameter, cemented in a hole three feet deep in the center of the onsite burial upon the abandonment of all the wells on the pad. The marker will be flush with the ground to allow access of the active well pad and for safety concerns. The marker will include a threaded collar to be used for future abandonment. The top of the marker will contain a welded steel 12" square plate that indicates the onsite burial of the temporary pit. The plate will be easily removable and a four foot tall riser will be threaded into the top of the collar marker and welded around the base with the operator's information at the time of all wells on the pad are abandoned. The operator's information will include the following: Operator Name, Lease Name, Well Name and number, Unit Number, Section, Township, Range and an indicator that the marker is an onsite burial location.