District 1

1625 N French Dr , Hobbs, NM 88240

No. and a 4 H

District II

1301 W. Grand Ave , Artesia, NM 88210

District III

1000 Rio Brazos Rd, Aztec, NM 87410

District IV

State of New Mexico Energy Minerals and Natural Resources

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

 $\label{eq:July21,2008} \mbox{ July 21, 2008}$ For temporary pits, closed-loop sytems, and below-grade

Form C-144

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

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

220 S St Francis Dr , Santa Fe, NM 87505	appropriate NivoCD District Office
2001	Pit, Closed-Loop System, Below-Grade Tank, or
Pro	posed Alternative Method Permit or Closure Plan Application
Type of action:	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
	X 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
	of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the clieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances
Operator: Burlington Resources O	il & Gas Company, LP OGRID#: 14538
Address: PO Box 4289, Farmingt	on, NM 87499
Facility or well name: San Juan 27	-4 Unit 60M
API Number:	30-039-30344 OCD Permit Number:
J/L or Qtr/Qtr: B(NWNE) Sect	ion: 21 Township: 27N Range: 4W County: Rio Arriba
Center of Proposed Design: Latitude	
Surface Owner: X Federal	State Private Tribal Trust or Indian Allotment
X String-Reinforced	Factory Other Volume. 4400 bbl Dimensions L 65' x W 45' x D 10'
Type of Operation: P&A Drying Pad Above Gro Lined Unlined Lin	etion H of 19.15.17.11 NMAC Drilling a new well
Below-grade tank: Subsection Volume: Tank Construction material:	PECEIVED I Tof 19.15.17.11 NMAC Ibbl
Secondary containment with leak of Visible sidewalls and liner Liner Type: Thickness	PECEIVED DEC 2008 DEC 2008
5 Alternative Method:	

Submittal of an exception request is required Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

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, inst. Four foot height, four strands of barbed wire evenly spaced between one and four feet Alternate Please specify 4' hogwire fence with a single strand of barbed wire on top. 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)	untion or chur	ch)
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		
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 consumption of approval Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval	ideration of ap	proval.
Siting Criteria (regarding permitting): 19.15.17.10 NMAC Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau Office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying pads or above grade-tanks associated with a closed-loop system.		
Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - 1WATERS database search; USGS; Data obtained from nearby wells	Yes	No
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	Yes	□No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.	Yes	No
(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. (Applied to permanent pits) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐Yes ☐NA	No
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	No
- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site.		_
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended - Written confirmation or verification from the municipality; Written approval obtained from the municipality	Yes	∐No
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	Yes	□No
Within the area overlying a subsurface mine Written confirmation or verification or map from the NM EMNRD - Mining and Mineral Division	Yes	□No
 Within an unstable area. Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map 	Yes	No
Within a 100-year floodplain	Yes	□No

Form C-144 Oil Conservation Division Page 2 of 5

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
Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9
Situng Criteria Compliance Demonstrations - 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 or Permit
12
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 or 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
Cosure Figure - based upon the appropriate requirements of Subsection Cost 17.13.17 7 WWW.C and 17.13.17.13 WWW.C
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 Cavitation P&A Permanent Pit Below-grade Tank Closed-loop System
Alternative
Proposed Closure Method: 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					
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		acılıtıes			
are required.	mas and arm changes. Ose and chinesia y more man two ju	icinics			
Disposal Facility Name.	Disposal Facility Permit #:				
	Disposal Facility Permit #				
Will any of the proposed closed-loop system operations and associated activities Yes (If yes, please provide the information No		ervice and operations?			
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 Subsec	•				
Site Reclamation Plan - based upon the appropriate requirements of Sub	section G of 19.15 17 13 NMAC				
17 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 R certain sting criteria may require administrative approval from the appropriate district office of for consideration of approval. Justifications and/or demonstrations of equivalency are required. Ground water is less than 50 feet below the bettern of the busing weets.	ecommendations of acceptable source material are provided below or may be considered an exception which must be submitted to the				
Ground water is less than 50 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS: Data obta	ned from nearby wells	N/A			
- 14M Office of the State Engineer - 1WATERS database scaler, 0505. Data obta	med from hearby wens	□N/A _			
Ground water is between 50 and 100 feet below the bottom of the buried waste		Yes X No			
- NM Office of the State Engineer - IWATERS 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.		X Yes No			
- NM Office of the State Engineer - 1WATERS database search; USGS; Data obtain	ned from nearby wells	N/A			
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other signific (measured from the ordinary high-water mark)	ant watercourse or lakebed, sinkhole, or playa lake	Yes X No			
- Topographic map; Visual inspection (certification) of the proposed site					
Within 300 feet from a permanent residence, school, hospital, institution, or church in c - Visual inspection (certification) of the proposed site; Aerial photo; satellite image	existence at the time of initial application.	Yes X No			
		Yes X No			
Within 500 horizontal feet of a private, domestic fresh water well or spring that less that purposes, or within 1000 horizontal fee of any other fresh water well or spring, in exists - NM Office of the State Engineer - iWATERS database; Visual inspection (certific	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.		Yes X No			
 Written confirmation or verification from the municipality; Written approval obta Within 500 feet of a wetland 	med from the municipality	Yes X No			
- US Fish and Wildlife Wetland Identification map; Topographic map; Visual insp	ection (certification) of the proposed site	Lites A No			
Within the area overlying a subsurface mine.	` • • • • • • • • • • • • • • • • • • •	Yes X No			
- Written confiramtion or verification or map from the NM EMNRD-Mining and M	Ineral Division				
Within an unstable area.		Yes X No			
 Engineering measures incorporated into the design, NM Bureau of Geology & Mi Topographic map 	neral Resources; USGS; NM Geological Society;				
Within a 100-year floodplain FEMA map		Yes XNo			
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 closur	e plan. Please indicate,			
X Siting Criteria Compliance Demonstrations - based upon the appropriate	requirements of 19.15.17.10 NMAC				
X Proof of Surface Owner Notice - based upon the appropriate requirement	ts of Subsection F of 19.15.17.13 NMAC				
Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC					
Construction/Design Plan of Temporary Pit (for in place burial of a dryin	ng pad) - based upon the appropriate requirements of 1	9.15.17.11 NMAC			
X 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				
X Waste Material Sampling Plan - based upon the appropriate requirement	s of Subsection F of 19.15.17.13 NMAC				
X Disposal Facility Name and Permit Number (for liquids, drilling fluids a	nd drill cuttings or in case on-site closure standards can	nnot be achieved)			
Soil Cover Design - based upon the appropriate requirements of Subsect	ion H of 19.15.17 13 NMAC				
X Re-vegetation Plan - based upon the appropriate requirements of Subsec					
X Site Reclamation Plan - based upon the appropriate requirements of Sub	section G of 19 15 17 13 NMAC	l			

19				
Operator Application Cert				
· ·	ation submitted with this application is true,			
Name (Print):	Crystal Tafoya	Title	Regulatory Technician	_
Signature	Congetel agay	Date:	11/26/08	_
e-mail address:	crystal tafova@conocophillipscom/	Telephone [.]	/ 505/326-9837	*******
20 OCD Approval: Perm	ait Application (including closure plan)	Closure Plan (only)	OCD Conditions (see attachment)	
OCD Representative Signa	nture: Brandon D	puell	Approval Date: 12-3	3-08
Title: EAU	ins/spec	OCD Pern	nit Number:	
21				
	within 60 days of closure completion)		: are activities and submitting the closure report	t The closure
			s. Please do not complete this section of the f	
approved closure plan has bee	n obtained and the closure activities have be	een completed.	-	
		Closure	e Completion Date:	
22				
Closure Method:				
Waste Excavation and	Removal On-site Closure Metho	od Alternative Closure	Method Waste Removal (Closed-loop	systems only)
If different from appro-	ved plan, please explain.			
23				
	aste Removal Closure For Closed-loop Sy	stems That Utilize Above G	ound Steel Tanks or Haul-off Bins Only:	
	ne facility or facilities for where the liquids	, drilling fluids and drill cutti	ngs were disposed. Use attachment if more to	han two facilities
were utilized,		Dumanal Facility	Dawnet Number	
Disposal Facility Name:			Permit Number: Permit Number:	
Disposal Facility Name: Were the closed-loop system	n operations and associated activities perfor		of be used for future service and opeartions?	-
_	constrate compliane to the items below)	No	or be used for ratale service and openitions	
-	s which will not be used for future service a	_		
Site Reclamation (Phot	· · · · · · · · · · · · · · · · · · ·			
Soil Backfilling and Co	over Installation			
Re-vegetation Applicat	ion Rates and Seeding Technique			
24				
Closure Report Attachi the box, that the document		e following items must be atte	iched to the closure report. Please indicate, l	y a check mark in
l	ice (surface owner and division)			
	e (required for on-site closure)		•	
	closures and temporary pits)			
Confirmation Sampli	ing Analytical Results (if applicable)			
	oling Analytical Results (if applicable)			
=	me and Permit Number			
Soil Backfilling and				
	eation Rates and Seeding Technique			
Site Reclamation (Ph	oto Documentation)			
On-site Closure Loca	tion: Latitude	Longitude:	NAD	1983
25				
Operator Closure Certific				
	ation and attachments submitted with this c pplicable closure requirements and condition		and complete to the best of my knowledge and	t belief. I also certify that
me crossive compiles with all a	рунсаме симите тецитетения ини сопани		wane puna	
Name (Print):		Title	City and Cit	
Signature:		Date [.]		
				<u> </u>
e-mail address:		Telephone:	1.00	

New Mexico Office of the State Engineer POD Reports and Downloads

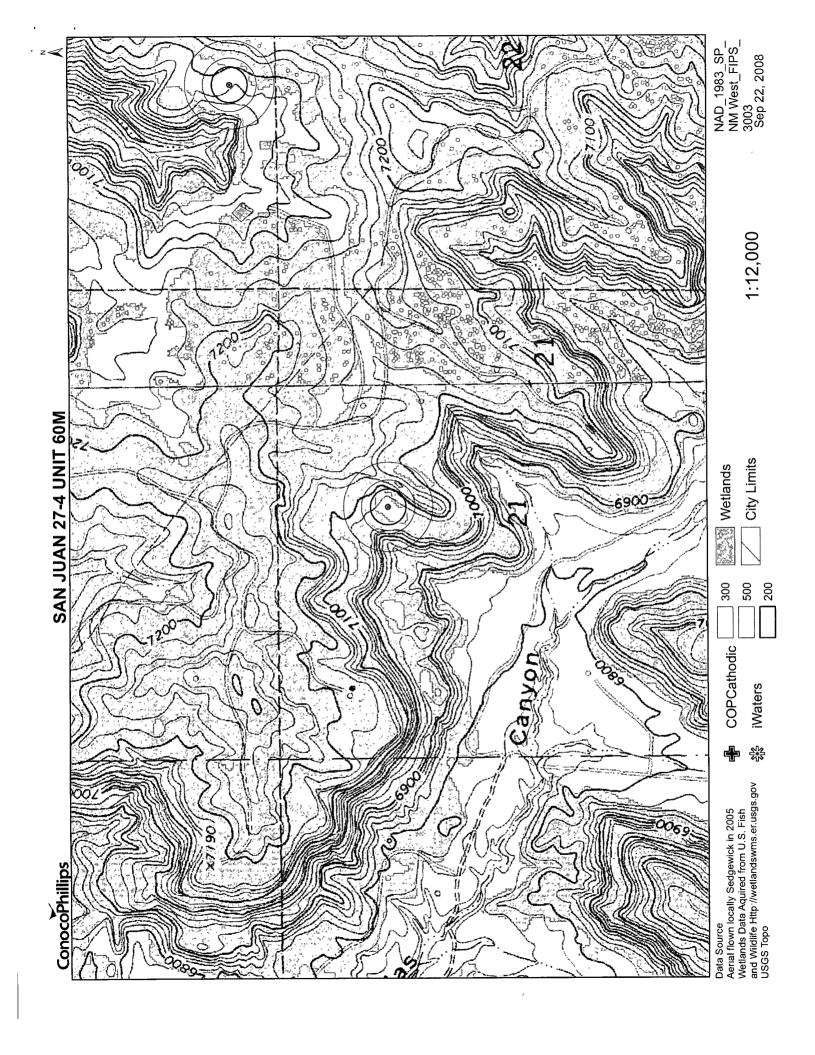
Township: 27N Range: 04W Sections:
NAD27 X: Zone: Search Radius:
County: Basin: Number: Suffix:
Owner Name: (First) (Last) O Non-Domestic O Domestic O All
POD / Surface Data Report Avg Depth to Water Report Water Column Report
Clear Form iWATERS Menu Help

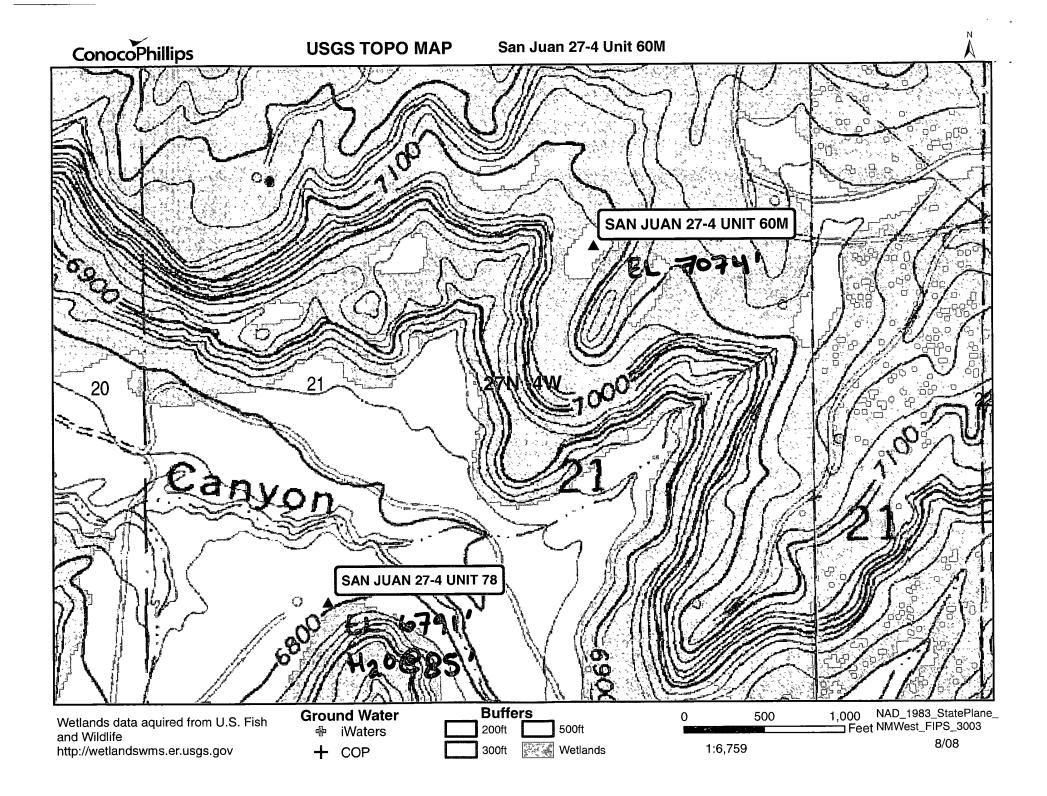
WATER COLUMN REPORT 11/18/2008

(quarters are 1=NW 2=NE 3=SW 4=SE)

	(quarter	s are	e big	ge	st to	smallest)			Depth	Depth	Water	(in feet)
POD Number	Tws	Rng	Sec	đ d	a a	Zone	x	Y	Well	Water	Column	
SJ 00048	27N	04W	01						143			
SJ 01049	27N	04W	18	4 2	2 2				15			
SJ 01205	27N	04W	34	4	4 4				3054	750	2304	

Record Count: 3





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

Operator Meridian Oil Co. Location: Unit K Sec. 21 Twp 27Rng 04
Name of Well/Wells or Pipeline Serviced
SAN JUAN 27-4 UNITS #145, #78, + #56
Elevation 6800 Completion Date 11-4-92 Total Depth 423 Land Type F
Casing Strings, Sizes, Types & Depths 10/8 Set 100 of 8" PVC CASING.
NO GAS OF BOULders Were EN Countered during CASING
If Casing Strings are cemented, show amounts & types used <u>ComenTed</u> <u>WITH 21 SACKS</u> .
If Cement or Bentonite Plugs have been placed, show depths & amounts used
Depths & thickness of water zones with description of water: Fresh, Clear,
Salty, Sulphur, Etc. Hit Fresh WATER AT 35' During Casing.
Depths gas encountered: None
Ground bed depth with type & amount of coke breeze used: 423
62 SACKS OF Loresco type SW
Depths anodes placed: 410, 403, 357, 387, 387, 373, 315, 308, 300, 253, 287, 289, 225, 205, 130
Depths vent pipes placed: 423
Vent pipe perforations: Bottom 305'
Remarks:
•

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.

Land Type may be shown: F-Federal; I-Indian; S-State; P-Fee. If Federal or Indian, add Lease Number.

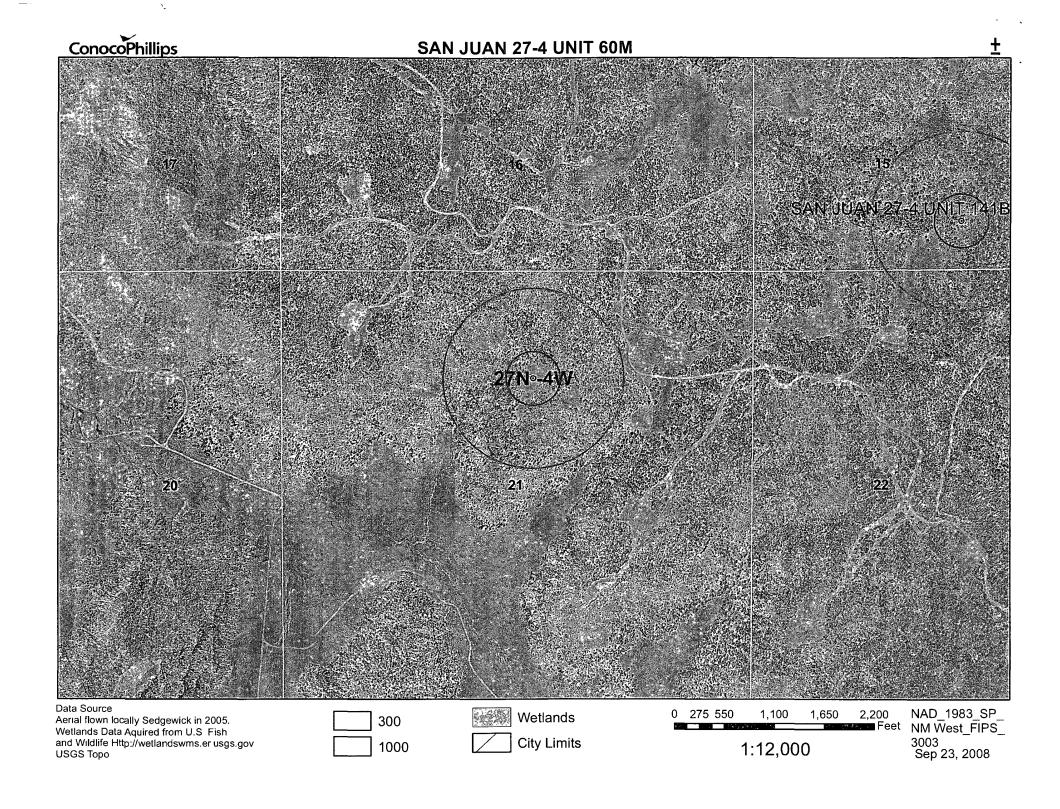
Form C-102 Supersedes C-128 Effective 1-1-65

NEW MEXICO OIL CONSERVATION COM SSION

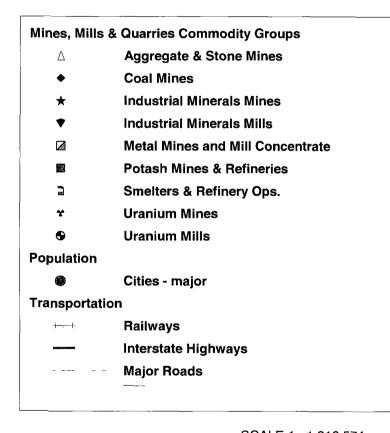
SOLD 392 0954

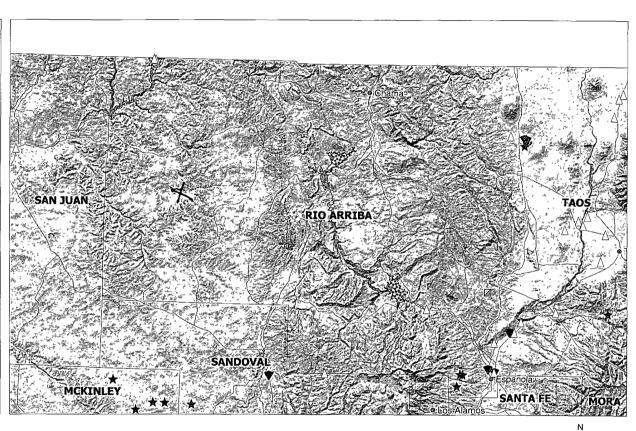
All distances must be from the outer boundaries of the Section.

Opera	tor		,		Lease			• • • • • • • • • • • • • • • • • • • •	Well No.
		EL PA	SO NATURAL (GAS COMPANY	SAN JUAI	1 27-4 t	UNIT (SF-	080674)	78 ·
Unit L	Letter L	S	ection 21	Township 27-N	Range 4.	-W	County RIO	ARRIBA	
Actua	1 Fpotage 1840		on of Well:	SOUTH line and	1115	fee	t from the	WEST	line
	d Level 1 6791	Elev.	Producing Form	nation RED CLIFFS	TAPACI	O PICTU	URED CLIFF	I	cated Acreage: 160.00 Acres
1.	Outlin	e the	acreage dedicat	ed to the subject we	ll by colored	l pencil o	r hachure mai	ks on the pl	at below.
2.			one lease is royalty).	dedicated to the well	, outline eac	h and ide	ntify the own	ership therec	of (both as to working
3.				fferent ownership is on itization, force-pooli		the well, l	have the inte	rests of all	owners been consoli-
	Ye	es [No If an	swer is "yes," type o	f consolidati	on	- Unit	zarion	
			"no," list the o	owners and tract desc	riptions whic	h have ac		•	(Use reverse side of
	No all	owable	will be assigne	d to the well until all or until a non-standard					
•			1		i			CEI	RTIFICATION
				,					that the information con-
				,	1				s true and complete to the vledge and belief.
			1		 			Original Signed	
-			- 				· _	illing Clea	
			1		İ		1 +	Paso natu	ral Cas Co.
			i I		1				26, 1974
	~~~	~~	 >>>>>>>	SECTION 21	j 1				
	~~~							/	fy that the well location
			r-080674	×.				shown on this p	lat was plotted from field surveys made by me or
	1115			×	.			under my supèr	vision, and that the same
							3 1	knowledge and	` ',
X			0		 -				
			184		 		Do	APRIL 1	0, 1974
				×	 		1 1	egistered Profes d/or Land Surve	estonal Engineer
	Carrie de C	7**** *						Jud I	Welver
XX	***						Ce	ertificate No.	1760



San Juan 27-4 Unit 60M Mines, Mills and Quarries Web Map









Hydrogeological report for San Juan 27-4 Unit 60M

Regional Hydrogeological context:

The San Jose Formation of Eocene age occurs in New Mexico and Colorado, and its outcrop forms the land surface over much of the eastern half of the central basin. It overlies the Nacimiento Formation in the area generally south of the Colorado-New Mexico State line and overlies the Animas Formation in the area generally north of the State line.

The San Jose Formation was deposited in various fluvial-type environments. In general, the unit consists of an interbedded sequence of sandstone, siltstone, and variegated shale. Thickness of the San Jose Formation generally increases from west to east (200 feet in the west and south to almost 2,700 feet in the center of the structural basin). Ground water is associated with alluvial and fluvial sandstone aquifers. Thus, the occurrence of ground water is mainly controlled by the distribution of sandstone in the formation. The distribution of such sandstone is the result of original depositional extent plus any post-depositional modifications, namely erosion and structural deformation. Transmissivity data for San Jose Formation are minimal. Values of 40 and 120 feet squared per day were determined from two aquifer tests (Stone et al, 1983, table 5). The reported or measured discharge from 46 water wells completed in San Jose Formation ranges from 0.15 to 61 gallons per minute and the median is 5 gallons per minute. Most of the wells provide water for livestock and domestic use.

The San Jose Formation is a very suitable unit for recharge from precipitation because soils that form on the unit are sandy and highly permeable and therefore readily adsorb precipitation. However, low annual precipitation, relatively high transpiration and evaporation rates, and deep dissection of the San Jose Formation by the San Juan River and its tributaries all tend to reduce the effective recharge to the unit.

Stone et al., 1983, Hydrogeology and Water Resources of the San Juan Basin, New Mexico: Socorro, New Mexico Bureau of Mines and Mineral Resources Hydrologic Report 6, 70 p.

Siting Criteria Compliance Demonstration & Hydro Geologic Analysis

The San Juan 27-4 Unit 60M 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 FEMA Map for the subject well is unavailable due to its location being in the forest. FEMA does not provide floodplain information for Forest Service land. This well is not located near a wash or watercourse and is not in 100 year floodplain as visible on the topographic map. The Cathodic well data from the San Juan 27-4 Unit 78 has an elevation of 6791' and groundwater depth of 100'. The subject well has an elevation of 7074' which is greater than the San Juan 27-4 Unit 78, therefore the groundwater depth is greater than 100'. There are no iWATERS data points located in the area as indicated on the TOPO Map. The hydro geologic analysis indicates the groundwater depth and the San Jose formation will create a stable area for this new location.

Tafoya, Crystal

From:

Tafoya, Crystal

Sent:

Thursday, July 10, 2008 8:16 AM

To:

'mark_kelly@nm.blm.gov'

Subject:

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

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

HOGIOIS IIV

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

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, 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 & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102 Revised October 12, 2005 Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

☐ AMMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

30-039- 3	Pi Number 80344	L	723	Pool Code 319/715	99	P	dám DAKOT	ool Name Blanc AVMESAVERDE	0-
⁴ Property Cad 7452	g				5 Propo	UAN 27-4 Uni	it		⁶ Well Number 60M
1 OGRID No 14538			BU	JRLINGTIC		ntor Name RCES OIL & GAS	COMPANY		⁹ Elevation 7,074'
					10 SURFACE	E LOCATION			
UL or lot no. B	Section 21	Township 27-N	Range 04-W	Lot idn	Feet from the 1,260'	North/South line NORTH	Feet from the 2,290'	East/West line EAST	County RIO ARRIBA
,			11 E	ottom Ho	le Location	If Different Fro	m Surface		
JL or lot no.	Section	Township	Range		Feet from the	North/South line	Feet from the	East/West line	County
В						']	1]	
Dedicated Acres 320 E/2		or Infill (4	Consolidation	Code 15	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

CALC. CA	16				
Thereby certify that the information condition that this organization either owns a working brusers or unleased mineral interest in the land including the proposed betting holder to working interest or unleased mineral interest in the land including the proposed betting holder or working interest or unleased mineral interest in the land including the proposed betting holder or working interest, or to a volume pooling agreement or a computation or working interest, or to a volume pooling agreement or a computatory pooling order hereinforce enter by the daygoo. I AT: 36: 562488111* N LONG: 107.255258333* W LAT: 36: 532.7485786* N LONG: 107° 15.2795639* W EZ DEDICATED ACREAGE USA SF-080674 SECTION 21 I hereby certify that the well location shows on this plat was plotted from field notes of acroal surveys made by more or under my supervision, and that the same is true and correct to the best of my belief. Date of Survey: 11/07/06 Signolure and Seel of Professional Surveyor:	<u> </u>	WEST	5280' (CALC	<u>.</u>	OPERATOR CERTIFICATION
2,290' NAD 83 DATUM LAT: 36.562486111' N LONG: 107.255258333' W NAD 27 DATUM LAT: 36° 33.7485786' N LONG: 107° 15.2795659' W ET2 DEDICATED ACREAGE USA SF-080674 SECTION 21 Date of Survey: 11/07/06 Signature and Sed of Professional Surveyor:	CALC.		1,260'	CAL	incresy certify that the information contained never as true and complete to the best of my knowledge and beltif, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary
NAD 83 DATUM LAT: 36.562486111° N LONG: 107.255258333° W NAD 27 DATUM LAT: 36° 33.7485786' N LONG: 107° 15.2795659' W EXAMPLE OF THE PROPERTY				2,290'	by the division. Nucley W. Mermoc Signature
E/2 DEDICATED ACREAGE USA SF-080674 SECTION 21 Date B SURVEYOR CERTIFICATION		T: 36.562486111" N			Printed Name Regulatory Technician
I hereby cartify that the well location shown on this plat was plotted from field notes of actual surveys made by ms or under my supervision, and that the same is true and correct to the best of my belief. E/2 DEDICATED ACREAGE USA SF-080674 Date of Survey: 11/07/06 Signature and Seal of Professional Surveyor:		T: 36° 33.7485786' N		· .	December 12 2006
I hereby cartify that the well location shown on this plat was plotted from field notes of actual surveys made by ms or under my supervision, and that the same is true and correct to the best of my belief. E/2 DEDICATED ACREAGE USA SF-080674 Date of Survey: 11/07/06 Signature and Seal of Professional Surveyor:	DB LONG:	107° 15.2795659' W			9
Date of Survey: 11/07/05 SECTION 21 Section 21 Signature and Section of Professional Surveyor:				E/2 DEDICATED ACREAGE	I hereby certify that the well location shown on this plat
				SECTION 21	Date of Survey: 11/07/06 Signature and Seal of Professional Surveyor:
CALC CALC	CALC			Co.	THE STATE OF THE S
WEST 5283.96' (CALC.) Certificate Number: NM 11393		WEST	5283.96' (CAL		9

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:

- 1. 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 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
 - 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.

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	(1000)500

- 9. 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.
- 10. 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.
- 11. 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
- 12. Re-contouring of location will match fit, shape, line, form and texture of the surrounding. Reshaping 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.
- 13. Notification will be sent to OCD when the reclaimed area is seeded.
- 14. 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. 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.

Forest Service Seed Mix	Variety	Pounds/Acre
Indian ricegrass	Paloma	1.0
Western wheatgrass	Arriba	2.0
Blue Gramma	Hacheta or Alma	1.0
Antelope Bitterbrush	Unknown	.10
Four-wing saltbush	Unknown	.25
Pubescent wheatgrass	Luna	2.0
Intermediate wheatgrass	Oahe	2.0
Small burnet	Delar	1.0

15. 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.