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

July 21, 2008 For temporary pits, closed-loop sytems, and below-grade tanks, submit to the appropriate NMOCD District Office

Form C-144

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

appropriate NMOCD District Office

Pit, Closed-Loop System, Below-Grade Tank, or Proposed 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
Please submit one	application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative requ

Instructions: I est

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

Operator: ConocoPhillips Company	OGRID#: 217817
Address: PO Box 4289, Farmington, NM 87499	
Facility or well name: Storey B LS No. 100S	
API Number: 30-045-34598	OCD Permit Number:
U/L or Qtr/Qtr: L(NW/SW) Section: 5 Township: 30N	Range: 11W County: San Juan
Center of Proposed Design: Latitude: 36.83999' N	Longitude: 108.02044' W NAD: 1927 X 1983
Surface Owner: X Federal State Private T	ribal Trust or Indian Allotment
2 X Pit: Subsection F or G of 19.15.17.11 NMAC Temporary: X Drilling Workover Permanent Emergency X Cavitation P&A X Lined Unlined Liner type: Thickness 12 mil X String-Reinforced Liner Seams: X Welded X Factory Other	X LLDPE
Closed-loop System: Subsection H of 19.15.17.11 NMAC Type of Operation: P&A Drilling a new well Workover of notice of in Drying Pad Above Ground Steel Tanks Haul-off Bins Lined Unlined Liner type: Thickness mil Liner Seams: Welded Factory Other	Other LLDPE HDPE PVD Other N RECEIVED
	er, 6-inch lift and automatic overflow shut-off
5 Alternative Method: Submittal of an exception request is required. Exceptions must be submitted to	o 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)							
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.							
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)							
Signs: Subsection C of 19.15.17.11 NMAC							
12" X 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers		Ì					
X Signed in compliance with 19 15 3.103 NMAC	1						
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:							
Thease their a box of one of more of the following is requested, of not leave blank:							
Administrative approval(s): Requests must be submitted to the appropriate division district of the Santa Fe Environmental Bureau office for cons	ideration 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 source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the							
appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau Office for							
consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying pads or above grade-tanks associated with a closed-loop system.							
		_					
Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	Yes	X No					
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other watercourse, lakebed, sinkhole, or playa	Yes	XNo					
lake (measured from the ordinary high-water mark).		AINO					
- Topographic map; Visual inspection (certification) of the proposed site		ļ					
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial	Yes	X No					
application.	l ,						
(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) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	XNA	ľ					
Within 500 horizonal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering	Yes	X No					
purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.	🗆 '```	ZINO					
- 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		V No					
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. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	Yes	X No					
Within the area overlying a subsurface mine.	∏Yes	XNo					
- Written confirmation or verification or map from the NM EMNRD - Mining and Mineral Division							
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	XNo					
- FEMA map	' '''	٠٠٠٠ ا					

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
Tryangeologic 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 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
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 Removal (Closed-loop systems only)
X On-site Closure Method (only for temporary puts and closed-loop systems)
XIn-place Burnal On-site Trench Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)
Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)
Wester Engagetion and Demonstration and Demonstration Checkblists (10.15.17.12.NMAC) Instructions Finds of the following its measurest by attached to the alarmount of the alarmount of the alarmount of the following its measurest by attached to the alarmount of the alarmoun
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
Ste 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	The Land Mark College of the College					
Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Instructions: Please identify the faculty or facilities for the disposal of liquids, drilling fi	<u>Tanks or Haul-off Bins Only:</u> (19,15.17.13 D NMAC) luids and drill cuttings. Use attachment if more than two fe	ucilities				
are required						
	Disposal Faculity Permit #:					
	Disposal Facility Permit #					
Will any of the proposed closed-loop system operations and associated activities Yes (If yes, please provide the information No	occur on or in areas that will not be used for future se	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 appropriat Re-vegetation Plan - based upon the appropriate requirements of Subsect	•	2				
Site Reclamation Plan - based upon the appropriate requirements of Subsection						
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 Receitain siting 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 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 between 50 and 100 feet below the bottom of the buried waste		X Yes 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.		Yes X No				
- NM Office of the State Engineer - iWATERS 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 significa (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	int watercourse or lakebed, sinkhole, or playa lake	Yes X No				
	wistones at the time of initial analysis in	Yes X No				
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	xistence at the time of minal application.					
Within 500 hourantal fact of a negrate domes to freeh water well or ones that less thousand	Sive households use for demostra as steel sustains	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 existe - NM Office of the State Engineer - iWATERS database; Visual inspection (certification)	nce 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 obtain Within 500 feet of a wetland 	med from the municipality	Yes X No				
- US Fish and Wildlife Wetland Identification map, Topographic map; Visual inspe	ction (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	neral Division					
Within an unstable area.		Yes X No				
 Engineering measures incorporated into the design; NM Bureau of Geology & Mir Topographic map 	neral Resources; USGS; NM Geological Society;					
Within a 100-year floodplain.		Yes X No				
- FEMA map						
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of by a check mark in the box, that the documents are attached.	f 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	e appropriate requirements of 19.15.17.11 NMAC					
Construction/Design Plan of Temporary Pit (for in place burial of a dryin	g pad) - based upon the appropriate requirements of 1	9.15 17 11 NMAC				
X Protocols and Procedures - based upon the appropriate requirements of 1						
Confirmation Sampling Plan (if applicable) - based upon the appropriate	_					
X Waste Material Sampling Plan - based upon the appropriate requirements						
X Disposal Facility Name and Permit Number (for liquids, drilling fluids ar	•	nnot be achieved)				
X Soil Cover Design - based upon the appropriate requirements of Subsecti						
X Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15 17 13 NMAC X Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC						

Form C-144 Oil Conservation Division Page 4 of 5

Operator Application Certification: I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.
Name (Print): Ethel Tally Title: Staff Regulatory Technician
911.111
Signature Date: 9-35-08 e-mail address: ethel tally@conocophillips.com Telephone: 505-599-4027
e-mail address: ethel.tally@conocophillips.cdm Telephone: 505-599-4027
20
OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)
OCD Representative Signature: Sanglon Scandle Approval Date: 10-14-08
" 1
Title: Engino (spec OCD Permit Number:
Closure Report (required within 60 days of closure completion): Subsection K of 19 15 17 13 NMAC
Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure
report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an
approved closure plan has been obtained and the closure activities have been completed.
Closure Completion Date:
22
Closure Method:
Waste Excavation and Removal On-site Closure Method Alternative Closure Method Waste Removal (Closed-loop systems only)
If different from approved plan, please explain.
23
Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:
Instructions: Please identify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities
were utilized. Disposal Facility Name: Disposal Facility Permit Number.
Disposal Facility Name: Disposal Facility Permit Number:
Were the closed-loop system operations and associated activities performed on or in areas that will not be used for future service and operations?
Yes (If yes, please demonstrate compliane to the items below)
Required for impacted areas which will not be used for future service and operations:
Site Reclamation (Photo Documentation)
Soil Backfilling and Cover Installation
Re-vegetation Application Rates and Seeding Technique
24
Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.
Proof of Closure Notice (surface owner and division)
Proof of Deed Notice (required for on-site closure)
Plot Plan (for on-site closures and temporary pits)
Confirmation Sampling Analytical Results (if applicable)
Waste Material Sampling Analytical Results (if applicable)
Usposal Facility Name and Permit Number
Soil Backfilling and Cover Installation
Re-vegetation Application Rates and Seeding Technique
Site Reclamation (Photo Documentation)
On-site Closure Location. Latitude. Longitude. NAD 1927 1983
25
Operator Closure Certification:
I hereby certify that the information and attachments submitted with this closure report is ture, accurate and complete to the best of my knowledge and belief. I also certify that
the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.
the closure complies with all applicable closure requirements and conditions specified in the approved closure plan. Name (Print): Title:
Name (Print) Title:

Form C-144

New Mexico Office of the State Engineer POD Reports and Downloads

Township: 30N	Range: 11W	Sections: 5,6,8	-			
NAD27 X:	Y:	Zone:	<u>'</u>	Search Radius:	!	
County:	Basin:	·		Number:	Suffix:	
Owner Name: (First)	(La	ost) All			© Domestic	
POD / Surface Data Report Avg Depth to Water Report Water Column Report						
	Clear Form	· iWATERS Menu	Phone administra	Help		

WATER COLUMN REPORT 09/25/2008

(qu	arter	s are	= 1=i	W	2=	=NE	3=SW 4=SE)					
(qu	arter	s are	e big	gge	est	t to	smallest)			Depth	Depth	Wat€
POD Number	Tws	Rng	Sec	q	q	q	Zone	x	Y	Well	Water	Colum
SJ 03267	30N	11W		2	1	3				83	60	2
SJ 03245	30N	11W	06	4	4	4				80	65	1
SJ 00183	30N	11W	80	1						360	300	6
SJ 03154	30N	11W	80	1	1	4				40		
SJ 03431	30N	11W	80	1	4					50		
SJ 01999	30N	11W	80	2	2					61	45	1
SJ 00332	30N	11W	80	2	2					52	34	1
SJ 01451	30N	11W	80	2	2					64	34	3
SJ_01968	30N	11W	80	2	2					40	25	1
SJ 01814	30M	11W			2					52	10	Ĺ
SJ 03398	30N	11W		2		1				80	20	ϵ
SJ 03210	30N	11W		2	2	2				60	30	3
SJ 03240	30N	11W		2	2	2				50		
SJ 03381	30N	11W		2	2	2				50		
SJ 03098	30N	11W		2	2	2				63	23	Ļ
SJ_00220	30N	11W		2	2	3				60	36	2
SJ 01115	30N	11W		2	2	4				35	26	
SJ_03639	30N	11W		2	2	4				60	24	3
SJ 00228	30N	11W	80	2	2	4				67	38	2
SJ 03653	30N	11W		2	2	4				62	26	3
SJ 03646	30N	11W	80	2	2	4				61	24	
SJ 02293	30N	11W	80	2	4	2				50	35	1
SJ 00249	30N	11W	80	2	4	2				46	30	1
SJ 03305	30N	11W	80	2	4	2				50		
SJ 03030	30N	11W	80	2	4	2				56	40	1
SJ 03303	30N	11W		2	4	2				55	30	2
SJ 02331	30N	11W	80	2	4	2				53	35	1
SJ 03202	30N	11W	80	2	4	2				45		

SJ	03378	30N	11W	80	2	4	2	50		
SJ	01368	30N	11W	80	3	2		59	39	2
SJ	03089	30N	11W	80	3	2	4	48	36	1
SJ	03480	30N	11W	80	3	2	4	50		
SJ	02413	30N	11W	80	3	4	1	40	31	
SJ	02915	30N	11W	80	3	4	1	45		
SJ	03199	30N	11W	80	3	4	1	40	20	2
SJ	03367	30N	11W	80	3	4	4	29	5	2
SJ	01570	30N	11W	80	4	1		59	37	2
SJ	00925	30N	11W	80	4	1	2	32	20	1
SJ	01520	30N	11W	80	4	1	2	58	18	۷
SJ	03642	30N	11W	80	4	1	2	58	32	2
SJ	03313	30N	11W	80	4	1	4	58	20	3
SJ	02485	30N	11W	80	4	1	4	49	30	1
SJ	02261	30N	11W	80	4	3	2			
SJ	03419	30N	11W	80	4	4	2	41	9	3

Record Count: 44

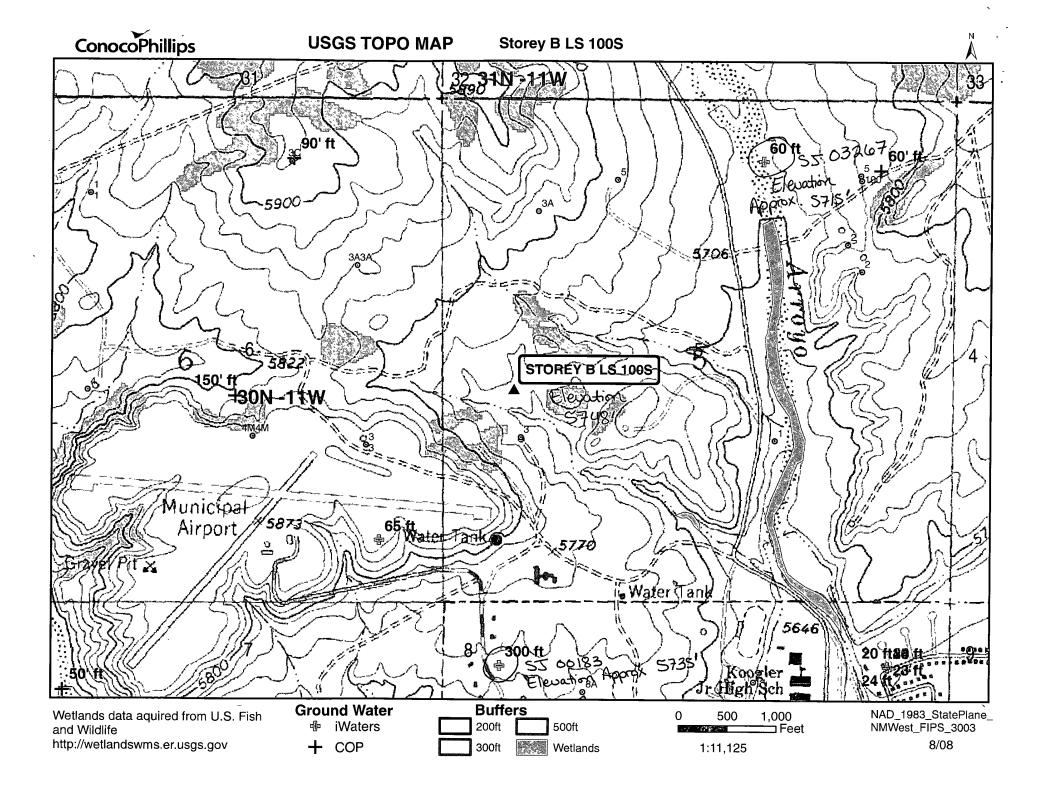
New Mexico Office of the State Engineer POD Reports and Downloads

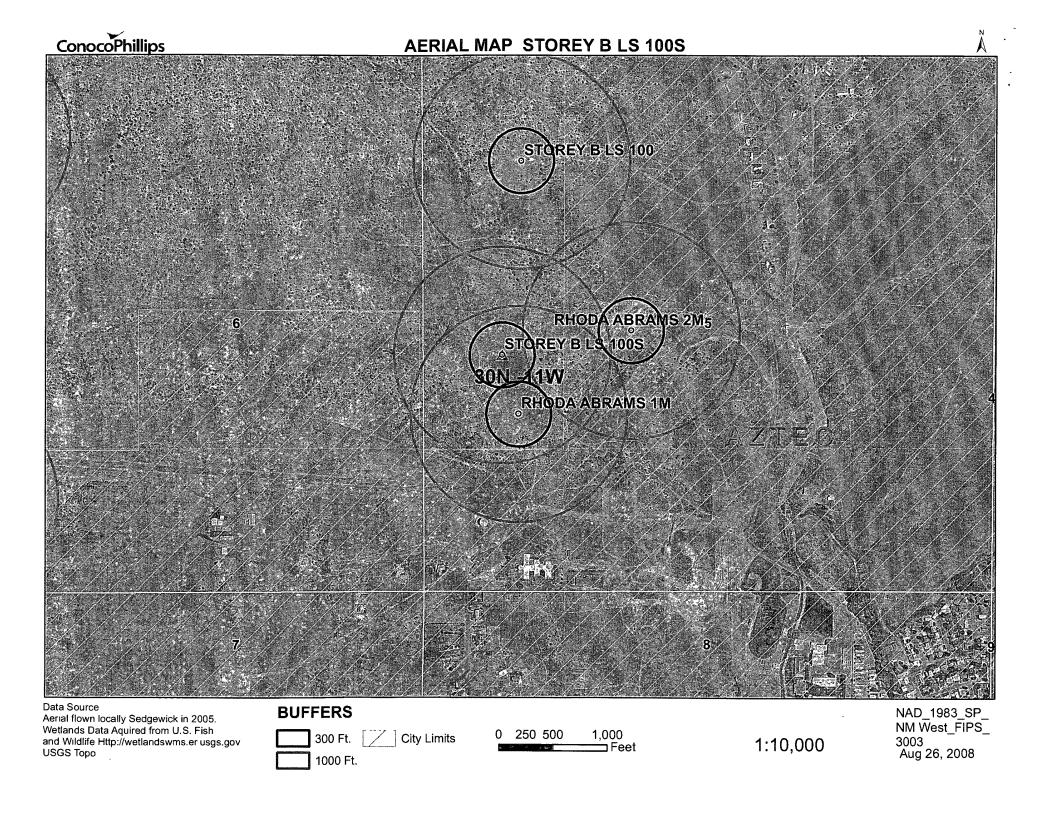
Town	nship: 31N	Range: 11W	Sections: 31,	,32,33		
NAD27	X:	Y:	Zone:		Search Radius:	
County:		Basin:			Number:	Suffix:
Owner Name: (First)	(La	st)		O Non-Domestic	© Domestic
	POD / Sun		er Column Repor		Water Report	3
		Clear Form	· iWATERS Me	enu]	Help.	

WATER COLUMN REPORT 09/23/2008

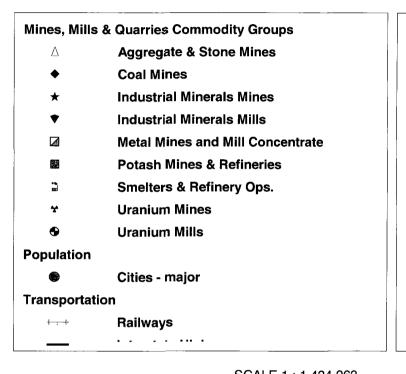
	(quarter	s are 1=	:NM Z=NE	3=SW 4=1	SE)				
	(quarter	s are bi	ggest to	smalle	st)		Depth	Depth	Wat∈
POD Number	Tws	Rng Sec	gqq	Zone	x	Y	Well	Water	Colum
SJ 01811	31N	11W 31	2 2				89	50	3
SJ 02994	31N	11W 33	4 3 2				300	200	1(
SJ 02993	31N	11W 33	4 3 2				280	160	12
SJ 01137	31N	11W 33	4 4 4				37	19	1

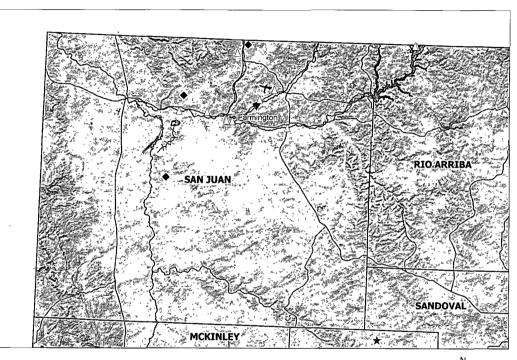
Record Count: 4





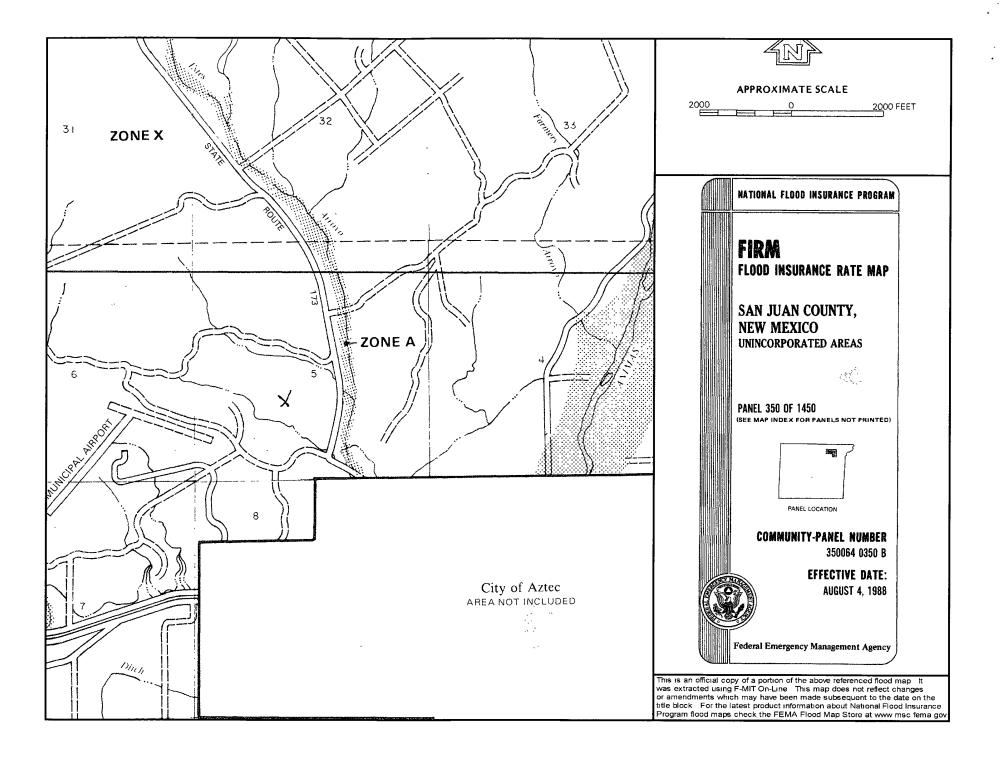
STOREY B LS 100S/MINES, MILLS AND QUARRIES WEB MAP











Hydrogeological Report for Storey B LS 100S

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 Storey BLS 100S 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 groundwater depth is considered to be greater than 90' as determined by the topographic map and the subject well has an elevation of 5748' which is great than the iWATER SJ03267 with an elevation of 5715, which is slightly less that the Storey B LS 100S, therefore the groundwater depth is greater than 90'. The iWATERS data point depth is 60' as indicated on the TOPO Map. Using this data point groundwater depth is greater than 90'. The hydro geologic analysis indicates the groundwater depth and the Nacimiento formation will create a stable area for this new location.

1625 M. French Dr., Hobbs, N.M. 88240

1000 Rio Brance Rd., Astec, N.M. 87410

State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102 Revised October 12, 2005

DISTRICT II 1301 W. Grand Avenue, Artesia, N.M. 88210

OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

☐ AMENDED REPORT

DESTRUCT IV 1220 S. St. Francis Dr., Santa Fe, NK 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	² Paol Code	Pool Name BASIN FRUITLAND COAL					
⁴ Property Code		*Property Name *Well Number STOREY 8 LS 100 S					
YOGRID No.	•	retor Name * Elevation IILLIPS, COMPANY 5748'					

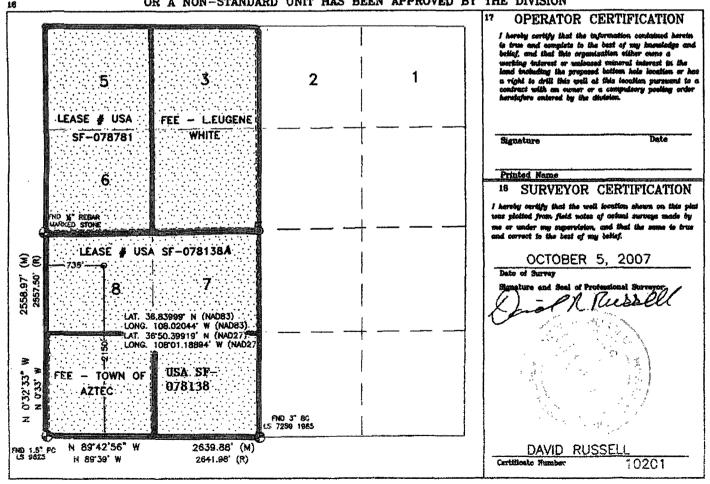
10 Surface Location

П	JL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
	L	5	30N	11W	8	2150'	SOUTH	735'	WEST	SAN JUAN

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres			is joint or	Mil	¹⁴ Consolidation Code		¹⁵ Ordar No.		
318.39 Acres - (W/2)									

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



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

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

San Juan 28-6 Unit 459S

San Juan 28-7 Unit 151E

San Juan 28-7 Unit 195P

San Juan 29-6 Unit 22N

San Juan 29-6 Unit 8M

San Juan 29-7 Unit 30N

San Juan 29-7 Unit 57E

San Juan 29-7 unit 587

San Juan 29-7 Unit 588

San Juan 29-7 unit 589

San Juan 29-7 Unit 60N

San Juan 29-7 unit 67M

San Juan 29-7 Unit 70M

San Juan 30-5 Unit 27F

San Juan 30-5 Unit 71F

San Juan 30-5 Unit 73N

San Juan 30-6 Unit 441S

San Juan 31-6 Unit 24F

San Juan 31-6 Unit 27M

San Juan 31-6 Unit 31P

San Juan 31-6 Unit 39M

San Juan 31-6 Unit 3M

San Juan 31-6 Unit 45N

San Juan 31-6 Unit 49P

San Juan 31-6 Unit 4N

San Juan 31-6 Unit 4P

San Juan 31-6 Unit 6F

San Juan 31-6 Unit 7M

San Juan 31-6 Unit 8N

San Juan 32-7 Unit 18M

San Juan 32-7 Unit 19A

San Juan 32-7 Unit 71A

San Juan 32-7 Unit Com 20

San Juan 32-8 Unit 18N

San Juan 32-8 Unit 30M

San Juan 32-8 Unit 49M

Storey B LS 100

(Storey BLS 100S)

Sunray E 221S

Sunray G 2C

Vaughn 15N

Wood 3M

Wood 3N

Crystal L. Tafoya Regulatory Technician ConocoPhillips Company San Juan Business Unit

San Juan Business Unit Phone: (505) 326-9837

Email: Crystal.Tafoya@conocophillips.com

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.
- 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.

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. 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.