District I 1625 N French Dr , Hobbs, NM 88240

District II

1301 W Grand Ave, Artesia, NM 88210 District III 1000 Rio Brazos Rd, Aztec, NM 87410 District IV 1220 S St Francis Dr , Santa Fe, NM 87505

State of New Mexico **Energy Minerals and Natural Resources**

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

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	
Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request	
Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances	
l	
Operator: Burlington Resources Oil & Gas Company, LP OGRID#: 14538	_
Address: PO Box 4289, Farmington, NM 87499	_
Facility or well name: Hardie 4P	_
API Number: 30-045-34531 OCD Permit Number	_
U/L or Qtr/Qtr: F(SENW) Section: 24 Township: 29N Range: 8W County: San Juan	_
Center of Proposed Design: Latitude: 36.71336' N Longitude: 107.63121' W NAD: 1927 X 198:	3
Surface Owner: X Federal State Private Tribal Trust or Indian Allotment	
X Pit: Subsection F or G of 19.15.17 11 NMAC Temporary: X Drilling Workover Permanent Emergency Cavitation P&A X Lined Unlined Liner type: Thickness 20 mil X LLDPE HDPE PVC Other X String-Reinforced Liner Seams: X Welded X Factory Other Volume: 4400 bbl Dimensions 65' x W 45' x D 10'	
Closed-loop System: Subsection H of 19.15.17 11 NMAC Type of Operation: P&A Drilling a new well Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)	
Drying Pad Above Ground Steel Tanks Haul-off Bins Other Lined Unlined Liner type: Thickness mil LLDPE HDPE PVD Other Liner Seams Welded Factory Other	
Below-grade tank: Subsection I of 19 15.17.11 NMAC Volume	
Liner Type Thickness milHDPEPVCOther	
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 X Alternate. Please specify 4' hogwire fence with a single strand of barbed wire on top.	ttution or chur	ch)
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 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 constant 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 - iWATERS database search; USGS; Data obtained from nearby wells	Yes	XNo
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	Yes	XNo
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.	Yes	XNo
(Applies to temporary, emergency, or cavitation pits and below-grade tanks)	∐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. (Applied to permanent pits) 	Yes XNA	No
 Visual inspection (certification) of the proposed site; Aerial photo; Satellite image Within 500 horizonal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. 	Yes	XNo
- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site.		
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended	Yes	XNo
 Written confirmation or verification from the municipality; Written approval obtained from the municipality Within 500 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site 	Yes	XNo
Within the area overlying a subsurface mine Written confirmation or verification or map from the NM EMNRD - Mining and Mineral Division	Yes	XNo
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	Yes	XNo
Within a 100-year floodplain - FEMA map	Yes	XNo

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
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 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
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 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 Steel Instructions Please identify the facility or facilities for the disposal of liquids, drilling f		ucilities
are required.		
	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	s occur on or in areas that will not be used for future se	rvice 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 Subsect Site Reclamation Plan - based upon the appropriate requirements of Subsect	tion I 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 siting criteria may require administrative approval from the appropriate district office o for consideration of approval Justifications and/or demonstrations of equivalency are required	ecommendations of acceptable source material are provided belov r may be considered an exception which must be submitted to the .	
	Treate 1900 to 1910 to	Yes X No
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 obtain	ned from nearby wells	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 signification (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 e - Visual inspection (certification) of the proposed site; Aerial photo; satellite image	xistence at the time of initial application.	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 existe - NM Office of the State Engineer - iWATERS database, Visual inspection (certificate 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 obtains	nce at the time of the initial application ation) of the proposed site ell field covered under a municipal ordinance adopted	Yes X No
Within 500 feet of a wetland - US Fish and Wildlife Wetland Identification map, Topographic map; Visual inspe		Yes X 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. - Engineering measures incorporated into the design; NM Bureau of Geology & Mir. Transport of the design of Geology & Mir.	neral Resources; USGS; NM Geological Society;	Yes X No
Topographic map Within a 100-year floodplain - FEMA map		Yes X No
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.	of the following items must bee attached to the closure	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	ng pad) - based upon the appropriate requirements of 19	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	requirements of Subsection F of 19.15.17.13 NMAC	
X Waste Material Sampling Plan - based upon the appropriate requirements		
X Disposal Facility Name and Permit Number (for liquids, drilling fluids an	-	not be achieved)
X Soil Cover Design - based upon the appropriate requirements of Subsecti		
 X Re-vegetation Plan - based upon the appropriate requirements of Subsect X Site Reclamation Plan - based upon the appropriate requirements of Subsect 		

Form C-144 Oil Conservation Division Page 4 of 5

19 🕜		-		
Operator Application	1 3 1011			
	he information submitted with this application			
Name (Print)	Crystal Tafoya	Title:	Regulatory Technician	
Signature	motal Jak	Date:	9/25/08	
e-mail address:	crystal tafoya@conocophillps.c	Telephone:	505-326-9837	
20				
OCD Approval:	Permit Application (including closure	plan) Closure Plan (only)	OCD Conditions (see attac	hment)
OCD Representat	ive Signature:	7.//	Approval Date:	10-14-08
				70 , 100
Title:	Envirolspec	OCD Pern	nit Number:	
	•			
21				
	equired within 60 days of closure compl ors are required to obtain an approved closure			ure report. The closure
-	be submitted to the division within 60 days of t		9	•
approved closure pla	n has been obtained and the closure activities	have been completed.		
<u></u>		Closure	Completion Date:	
22 Closure Method:				
	ation and Removal On-site Closure	Method Alternative Closure	Method Waste Removal (Clo	osed-loop systems only)
	om approved plan, please explain.		Waste Removal (CR	osed loop systems only)
ii dinerent ii	om approved plan, piease explain.			
23				_
	arding Waste Removal Closure For Closed-			
were utilized.	identify the facility or facilities for where the	uquias, ariiing jiuias ana ariii cutti	ngs were aisposea. Use attacnment	if more than two facilities
Disposal Facility	Name:	Disposal Facility	Permit Number	
Disposal Facility		Disposal Facility		
Were the closed-le	oop system operations and associated activities			artions?
Yes (If yes, p	lease demonstrate complilane to the items belo	ow) No		
Required for impo	acted areas which will not be used for future se	rvice and operations:		
Site Reclama	tion (Photo Documentation)		,	
Soil Backfilli	ng and Cover Installation			
Re-vegetation	n Application Rates and Seeding Technique			
24				
Closure Report	Attachment Checklist: Instructions: Eac	h of the following items must be atto	ched to the closure report. Please i	indicate, by a check mark in
the box, that the	documents are attached.			
	sure Notice (surface owner and division)			
	ed Notice (required for on-site closure)			
Plot Plan (fo	or on-site closures and temporary pits)			
Confirmatio	n Sampling Analytical Results (if applicab	le)		
Waste Mate	rial Sampling Analytical Results (if applica	ible)		
Disposal Fa	cility Name and Permit Number			
Soil Backfil	ling and Cover Installation			
Re-vegetation	on Application Rates and Seeding Technique	ie		
Site Reclam	ation (Photo Documentation)			
On-site Clos	sure Location: Latitude:	Longitude:	NAD 1	1927 🔲 1983
				.
25				, ,
Operator Closure	Certification:			
	he information and attachments submitted with	· · · · · · · · · · · · · · · · · · ·		eledge and belief. I also certify that
the closure complies	with all applicable closure requirements and c	onattions specified in the approved o	tosure plan.	1
Name (Print):		Title:		1
Signature: _		Date:		
e-mail address:		Telephone:		ļ
		receptione.		

Form C-144 Oil Conservation Division

New Mexico Office of the State Engineer POD Reports and Downloads

Township: 29N Range: 08W Sections:
NAD27 X: Y: Zone: Search Radius:
County: Basin: Number: Suffix:
Owner Name: (First) (Last) C Non-Domestic C Domestic C All
POD://Surface:Data:Report Avg Depth to Water Report Water Column Report
Clear Form WATERS Menu Help

WATER COLUMN REPORT 08/20/2008

(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are biggest to smallest) Depth Depth Water (in feet) Rng Sec q q q POD Number Tws Zone X Well Water Column SJ 00028 29N 08W 01 2 1 4 606 300 306 SJ 00196 29N 08W 09 3 1624 500 1124 525 SJ 00003 29N 08W 18 1 29N 08W 18 591 70 521 SJ 00004 1 600 29N 08W 18 2 3 2 SJ 03050 29N 08W 21 2 502 SJ 00019 200 29N 08W 21 3 606 406 SJ 00005 SJ_00025 29N 08W 21 606 406 200 SJ 00006 29N 08W 26 560

Record Count: 9

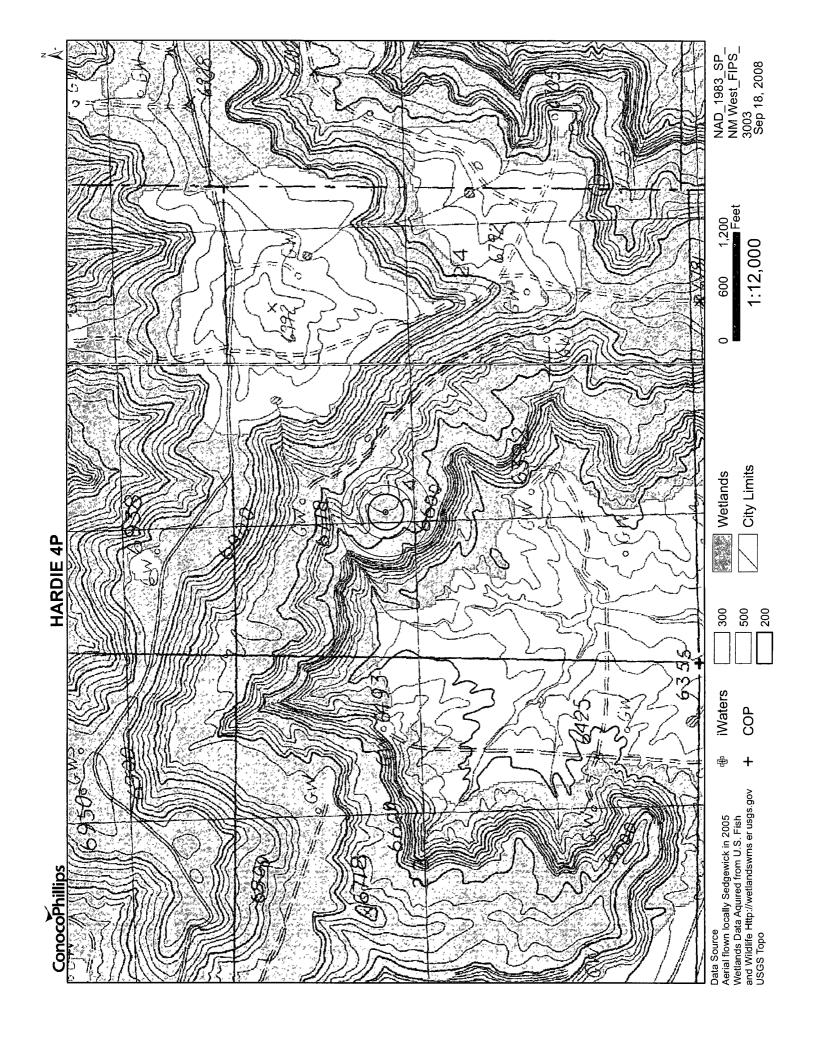
New Mexico Office of the State Engineer POD Reports and Downloads

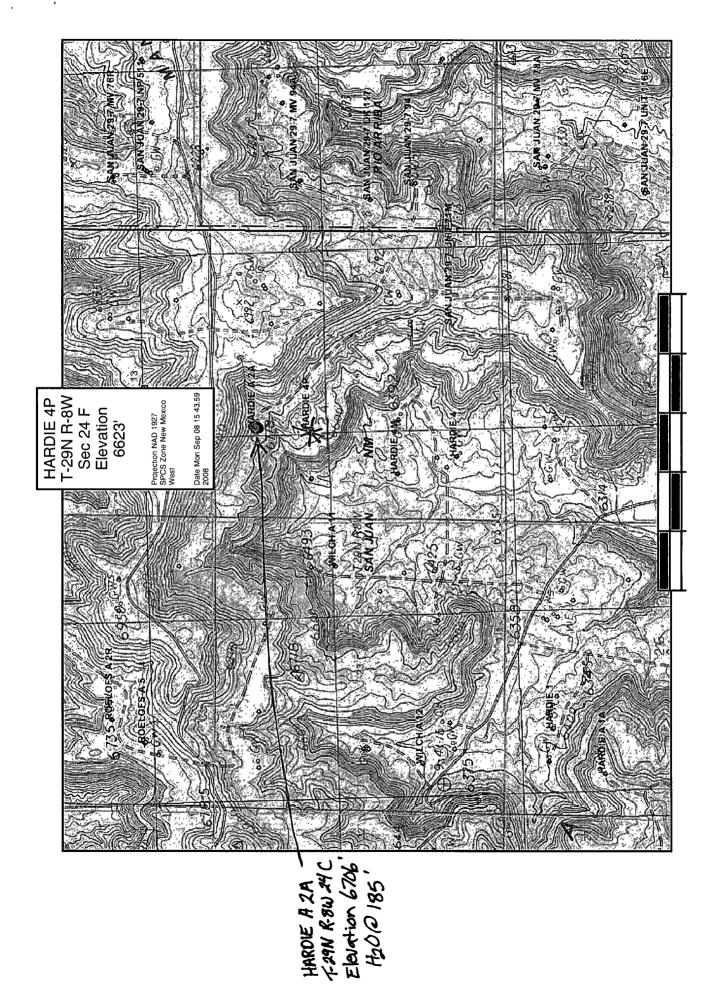
WATER COLUMN REPORT 08/20/2008

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

(on	uarter	s are	bi.	aae	st to	smalles	t)		Depth	Depth	Water	(in feet)
POD Number	Tws	Rng				Zone	x	Y	Well	Water	Column	
SJ 00580	29N	07W	05	2	3					160		
SJ 02636	29N	07W	05	3	1 2				300	200	100	
SJ 03453	29N	07W	05	4	1 4				355	20	335	
SJ 00541	29N	07W	06	1	4 4				360	360		
SJ 00807	29N	07W	06	2	4				290	255	35	
SJ 01199	29N	07W	09	3	2 4		•		265	125	140	•
SJ 03390	29N	07W	13	1	2 4				320	120	200	
SJ 00053	29N	07W	13	3					536	460	76	
SJ 01228	29N	07W	23	2	1				285	205	80	
SJ 02891	29N	07W	24	2	3 2				210	160	50	
SJ 03391	29N	07W	24	2	3 2				210			
SJ 03573	29N	07W	24	2	4 1				900			
SJ 01112	29N	07W	28	2	4 4				2453	900	1553	
SJ 00039	29N	07W	29	3	2				585	435	150	

Record Count: 14





https://148twp.conocophillips.net/servlet/com.esri.esrimap.Esrimap?ServiceName=SanJuan&ClientVersion=4.0&Form=True&En... 9/8/2008

1782

DATA SHEET FOR DEEP GROUND BED CATHODIC PROTECTION WELLS NORTHWESTERN NEW MEXICO (Submit 3 copies to OCD Aztec Office)

Operator MERIDIAN OIL	Location: Unit NW Sec. 24 Twp 29 Rng 8
Name of Well/Wells or Pipeline Servi	ced HARDIE A #2A
	cps 1303w
Elevation 6706'Completion Date 10/28/7	8 Total Depth 380' Land Type* N/A
Casing, Sizes, Types & Depths	
If Casing is cemented, show amounts	& types usedN/A
If Cement or Bentonite Plugs have be	en placed, show depths & amounts used
Depths & thickness of water zones wi Fresh, Clear, Salty, Sulphur, Etc	th description of water when possible: 185' SAMPLE TAKEN .
Depths gas encountered: N/A	
Type & amount of coke breeze used:	34 SACKS
Depths anodes placed: 345', 335', 325',	315', 305', 295', 285', 275', 265', 245'
Depths vent pipes placed: 360'	DECEN
Vent pipe perforations: 200'	VI - A F I M E U
Remarks: gb #1	MAY31 1991
	ON. DIV.

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 (iler.	9- 33 5-68	9
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		_

UNITED STATES BUBMIT DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE.

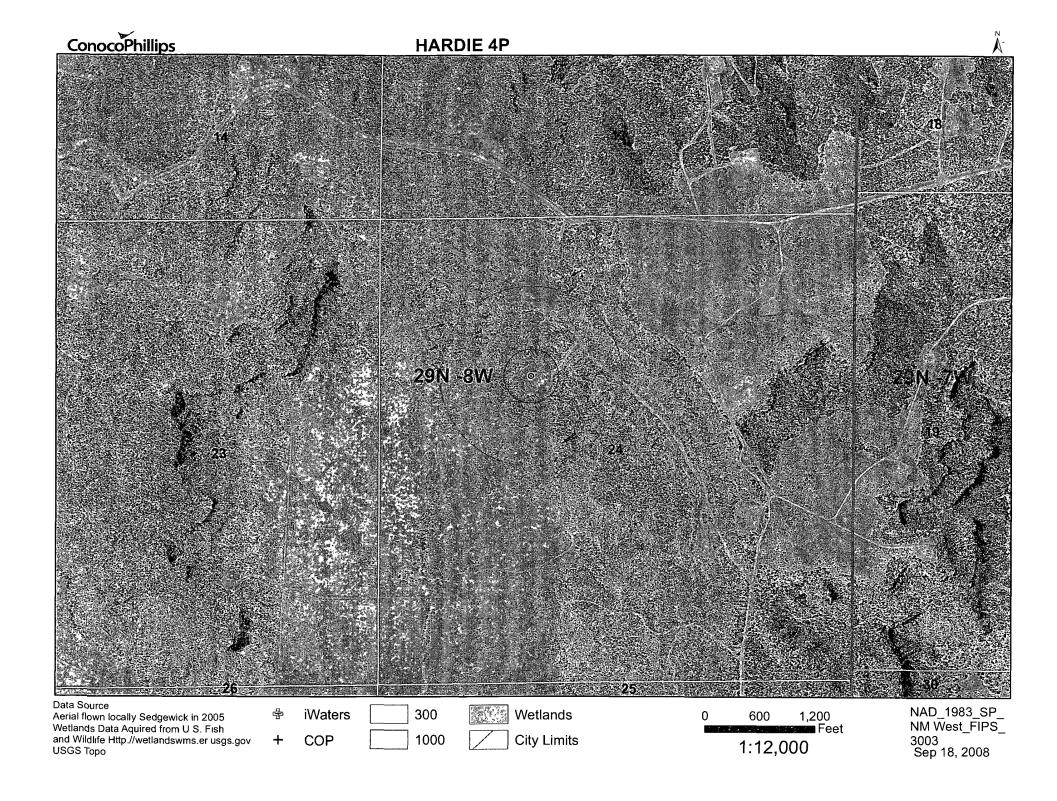
(Secother Instructions on reverse side)

Budget Bureau No. 42-R355.5.

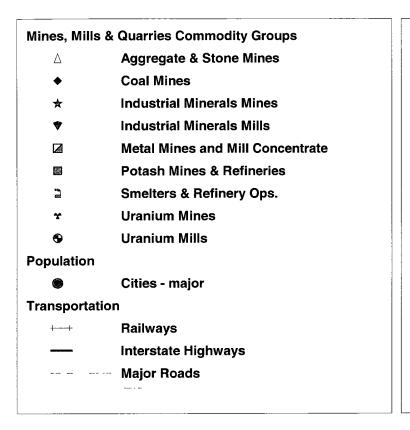
5 LEANE DESIGNATION AND BERIAL NO.

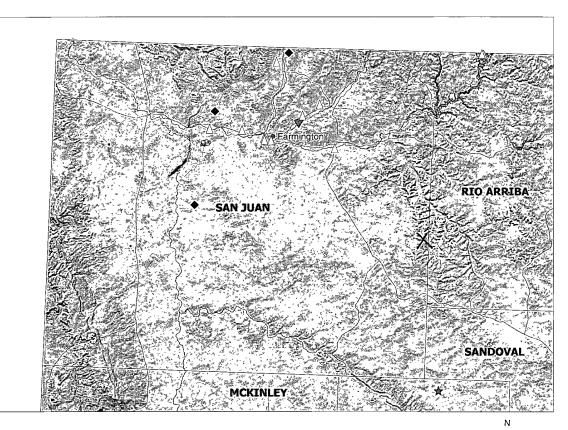
SF 078502-A

h. TYPE OF COMPLETION: "WILL COURSE PRED PRED		7						1 21 0/82	02-A
E. PARKE OF COMPLETION: ***********************************	WELL CO	MPLETION	OR RECOM	PLETION	REPORT	AND LO)G *	6. IF INDIAN,	ALLOTTER OR TRIBE NAME
NAME STATE	is. TYPE OF WEL	L: OIL WEL	L GAS WELL X	DRT .	Other			7. UNIT AGREE	MENT NAME
2. MARK OF OPERATOR		WORK [DEE	P- [DIFF.				S VARY OR LE	AGE NAME
ET PASO NATURAL GAS COMPANY P. O. Box 990, Farmington, New Mexico 87401 1. 100 AND 990, Farmington, New Mexico 8700, Farmington, New M			LJ BACK L	DERVR.	Other			.	
2. A DATE STUDENG 18. DATE TO. REACHED 17. DATE CONTL. (Residy to proft.) 18. DATE STUDENG 18. DATE TO. REACHED 17. DATE CONTL. (Residy to proft.) 18. DATE STUDENG 18.			Company						
### At total depth 15. Date to. Reaching of the profession of th								2A	
At total depth At total depth								10. FIELD AND	POOL, OR WILDCAT
At total depth At total depth 16. Permitt NO. Date INBLED 17. COUNTY OF SAN DISCOURTED BY SAN DATE INBLED 18. DATE RECORD 18. DATE TO. REACHED 17. DATE COMPL. (Reedy to prod.) 18. ELEVATIONS (or. RES. RE. SAN DIAM.) NOW MEXICAL STATEMENT, UP a TVD 11. PLOUG BACK EAR. NO. RE. RE. AND TO. 22. IF MULTIPLE CONFL 12. INSTRUMENT SAN DIAM. TOOLS 5908' 5952 18. PRODUCING INTERVALICE), OF THIS CONFLETION—TOP, BOTTOM, NAME (MO AND TVD)* 19. STIFF ELECTRIC AND OTHER LOGS RUN 10. STIFF ELECTRIC RUN				cordance with a	ny State requir	ements)*		Blanco	Mesa Verde
16. FEBALIT NO. DATE 188.ED 12 CONTRT ON 13. STATE 15. DATE 188.ED 12 CONTRT ON 13. STATE 15. DATE 188.ED 15. DATE 188.ED 17. DATE 188.ED 18. DATE 188.ED 19. DATE 188.E	1	•						OP AREA	
18. PERMIT NO. DATE INSLED 12 COUNTY OF SAID 18. STATE New Mexic 5. DATE SPECIOSE 16. DATE T.D. REACHED 17. DATE COPIE. (Rendy to prod.) 18. SLEVATIONS (OF. RICE, NO. ETC.) 10. ELEC. CASHINGHESS 59.62 15. DOI: 10. ELEC. CASHINGHESS 59.68 15. ELEC. CASHINGHESS 15.	•							N	мрм
S. DATE SPUDDED 16. DATE T.D. REACHED 17. DATE CONFL. (Reindy to prod.) 18. ELECATIONS (OF, RAKE, OK, ET.) 19. ELECT. CASING HEAD 19. CASING HEA	At total depth			1 14 penute vo	 	DATE ISE! ER			
5. DATE SPECIOSED 10. PARE TO. RECOVER 17. DATE CONFEL. (Red to prod.) 18. ELEVATIONS (OF NER, NT. OR, ETC.)* 19. PLEY, CARRINGHEAD 9-12-76 9-12-76 10-27-76 1	,			14. PERMIT NO		DATE ISSUED		PARISH	ŀ
10	5. DATE SPUDDED	18. DATE T.D. RE	CACHED 17. DATE	COMPL. (Ready	to prod.) 18	. ELEVATIONS (DF, RKB,		
S968 S952 HOW MART*									
28. No No No No No No No N	ı	a TVD 21. PLUG		VD 22. IF MU HOW					CABLE TOOLS
SO SO SO SO SO SO SO SO		VALUS) OF THIS		ROTTOM NAME (MD AND TVD)*		<u> </u>	0-5968	25. WAS DIRECTIONAL
STIFE ELECTRIC AND OTHER LOGS REN 100				DOTTON, NAME (3.5 4.5 2.5,				SURVET MADE
IGR; FDC-GR; Temperature Survey **ASING RECORD (Report all strings set in well) **CASING RIEE* **CASING RICE***	. 1 5050	, 3337 (F	,						No .
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15. LIST OF ATTACHMENTS 16. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records	•			,		i		Roger! 19	and 76
16. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records	5. LIST OF ATTACH	IENTS							
$A: \mathcal{A} \times \mathcal{A}$					<u> </u>			Ls chalcon	
SIGNED AV. LINECO TITLE Drilling Clerk DATE 11-12-76	so. I nereby certify	tnat the foregoin		ormation is com	piete and corn	set as determi	ned from		
	SIGNED W.	J. J.)	ueco	_ TITLE _	Drilling	g Clerk		DATE	11-12-76



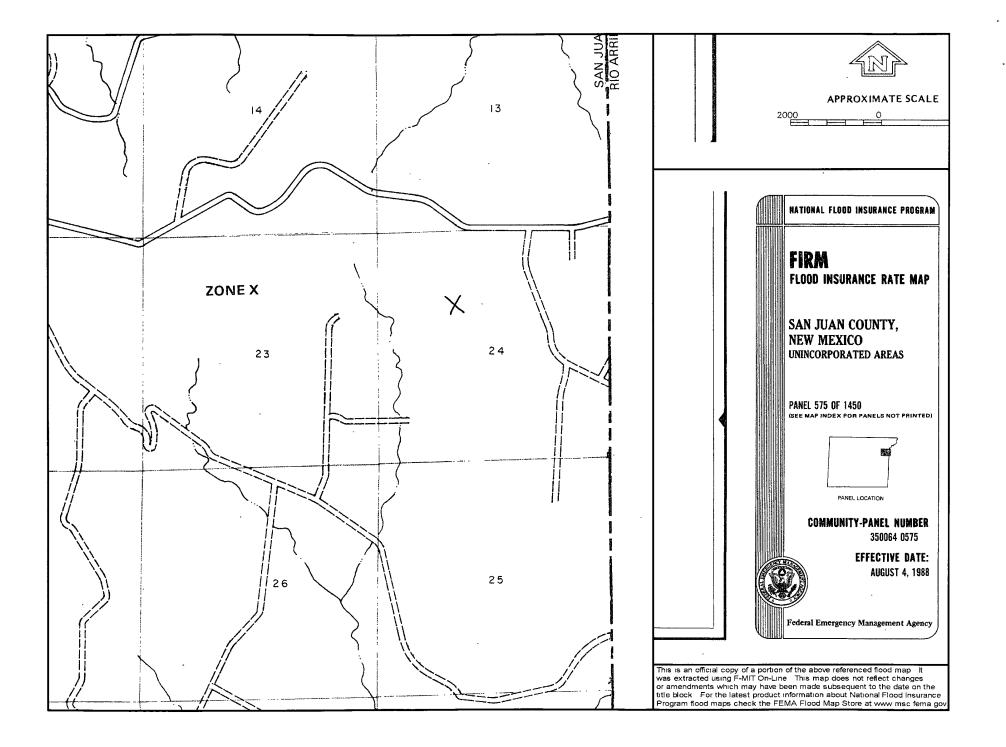
Hardie 4P Mines, Mills and Quarries Web Map











Hydrogeological report for Hardie 4P

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 Hardie #4P 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 100' as determined by the topographic map and the Cathodic well data from the Hardie A 2A with an elevation of 6706' and groundwater depth of 185'. The subject well has an elevation of 6623' which is greater than the Hardie A 2A, 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 Cathodic data provided the indication of groundwater depth is greater than 100'. 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.bim.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 guestions. 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

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

DISTRICT III 1000 Rio Brazos Rd., Aztec, N.M. 87410

UL or lot no.

F

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

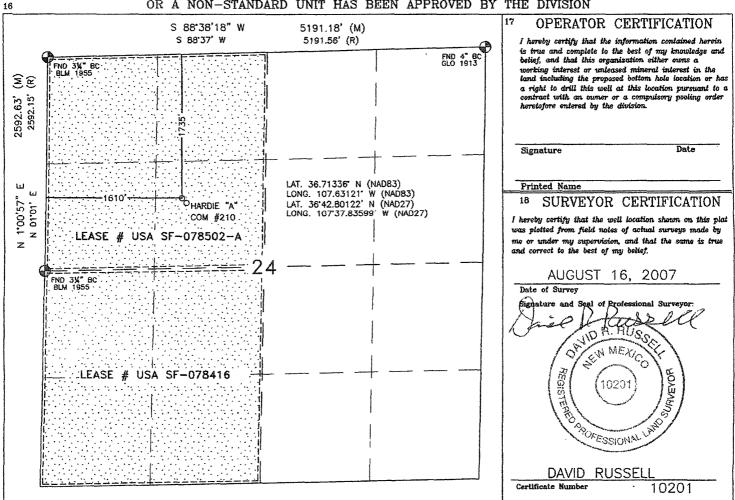
¹ API Number	² Pool Code ³ Pool Name						
		BASIN DAKOTA/ BLANCO MESAVER					
⁴ Property Code	⁶ Pro	⁶ Property Name ⁸ Well Number					
A725961, A706509		HARDIE 4 P					
OGRID No.	⁸ Operator Name ⁹ Elevation						
	BURLINGTON RESOURCE	BURLINGTON RESOURCES OIL AND GAS COMPANY LP 6623'					

¹⁰ Surface Location Section Feet from the North/South line East/West line Township Range Lot Idn Feet from the County 1610' NORTH WEST SAN JUAN 29N 8W 1735 24

11 Bottom Hole Location If Different From Surface

bottom note Location in 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	
		•				·		,		
12 Dedicated Acres			18 Joint or Infill		14 Consolidation Code		15 Order No.			
320.00 A	(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



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
 - 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	-5 00	
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. BLM or Forest Service stipulated seed mixes will used on federal lands. Vegetative cover will equal 70% of the native perennial vegetative cover (unimpacted) 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
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

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.