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

Form C-144 July 21, 2008

1301 W Grand Ave , Artesia, NM 88210 District III 1000 Rio Brazos Rd , Aztec, NM 87410

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

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

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

District IV

1220 S St Francis Dr , Santa Fe, NM 87505	аррі	ophate NMOCD District Office
2903 Pro	Pit, Closed-Loop System, Below-Grade Ta	<del></del>
<del></del> -	posed Alternative Method Permit or Closure	
Type of action:	Permit of a pit, closed-loop system, below-grade tank, or	
	Closure of a pit, closed-loop system, below-grade tank, of Modification to an existing permit	or proposed afternative method
	X Closure plan only submitted for an existing permitted or	non-permitted pit, closed-loop system,
	below-grade tank, or proposed alternative method	
	application (Form C-144) per individual pit, closed-loop syst of this request does not relieve the operator of liability should operations result in	· · · · · · · · · · · · · · · · · · ·
envuonment. Not does approval te	there the operator of its responsibility to comply with any other applicable governing	
Operator: ConocoPhillips Compan	y OG	RID#: 217817
Address: PO Box 4289, Farmingto	on, NM 87499	
Facility or well name: Newsom 161	1	
<del></del>	00-045-30682 OCD Permit Number:	
U/L or Qtr/Qtr: D(NWNW) Sect		County: San Juan
Center of Proposed Design: Latitude Surface Owner: X Federal	: 36.491825' N Longitude: 10  State Private Tribal Trust or Indian Allo	7.709814' W NAD: 1927 X 1983
2 X Pit: Subsection F or G of 19.15.1	7 11 NMAC	
Temporary X Drilling Wo	rkover	
Permanent Emergency X	Cavitation P&A	
X Lined Unlined L	iner type: Thickness 12 mil X LLDPE HDPI	E PVC Other
X String-Reinforced		
Liner Seams: X Welded X F	factory Other Volume 4400 bbl	Dimensions L <u>65'</u> x W <u>45'</u> x D <u>10'</u>
3	C U-610 15 17 11 NMAC	
Type of Operation: P&A	tion H of 19 15.17.11 NMAC  Drilling a new well Workover or Drilling (Applies to activi notice of intent)	ties which require prior approval of a permit or
Drying Pad Above Gro	und Steel Tanks Haul-off Bins Other	
	er type: Thicknessmil LLDPE HDPE	PVD Other
Liner Seams: Welded I	ractory Other	PVD Other 13456789707,
4 Below-grade tank: Subsection	I of 19 15.17.11 NMAC	overflow shut-off Cons. DIV. DIST. 3
	bbl Type of fluid:	& HECETTE
Tank Construction material		Si Jan 2009
Secondary containment with leak d	_ <b>-</b>	overflow shut-off R OIL CONS, DIV. Disk
Visible sidewalls and liner	Visible sidewalls only Other	
Liner Type: Thickness	mil HDPE PVC Other	272223
Alternative Method:		
Submittal of an exception request is re	quired Exceptions must be submitted to the Santa Fe Environmenta	Bureau office for consideration of approval

6							
<b><u>Yencing:</u></b> Subsection D of 19 15 17 11 NMAC (Applies to permanent pit, temporary pits, and helow-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)							
	muton or can	(cn)					
Four foot height, four strands of barbed wire evenly spaced between one and four feet							
Alternate. Please specify							
7							
Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)							
Screen Netting Other							
Monthly inspections (If netting or screening is not physically feasible)							
8 Signs: Subsection C of 19.15,17.11 NMAC							
12" X 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers							
X Signed in compliance with 19.15.3.103 NMAC		,					
9							
Administrative Approvals and Exceptions:							
Justifications and/or demonstrations of equivalency are required Please refer to 19.15.17 NMAC for guidance.							
Please check a box if one or more of the following is requested, if not leave blank:							
Administrative approval(s). Requests must be submitted to the appropriate division district of the Santa Fe Environmental Bureau office for 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.							
toes not apply to theying pais of above grade-tains associated with a closed-loop system.							
Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.	Yes	No					
- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells		_					
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other watercourse, lakebed, sinkhole, or playa	Yes	□No					
lake (measured from the ordinary high-water mark).							
- Topographic map; Visual inspection (certification) of the proposed site							
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial	ПYes	□No					
application.	🗀 🐃	L.,.					
(Applies to temporary, emergency, or cavitation pits and below-grade tanks)	$\square_{NA}$						
- 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.		□N-					
	∐Yes	∐No					
(Applied to permanent pits)	∐NA						
- 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	Yes	□No					
purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.		_					
- 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	∐No					
- Written confirmation or verification from the municipality; Written approval obtained from the municipality							
Within 500 feet of a wetland.	∏Yes	□No					
- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site		<b>□</b>					
Within the area overlying a subsurface mine.	∏Yes	□No					
- Written confirmation or verification or map from the NM EMNRD - Mining and Mineral Division	LJ'\\\	<b>الله</b>					
Within an unstable area.	Yes	∏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	□No					
- FEMA map	🖵	<u>.                                    </u>					

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
Siting 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
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 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 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)
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 Tanks or Haul-off Bins Only: (19.15.17.1	13 D NMAC)						
Instructions: Please identify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if a are required.							
Disposal Facility Name Disposal Facility Permit #:							
Disposal Facility Name. Disposal Facility Permit #							
Will any of the proposed closed-loop system operations and associated activities occur on or in areas that will not be use.  Yes (If yes, please provide the information No	sed for future service 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 requirements of Subsection H of 19.1:  Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19 15.17.13 NMAC	15.17.13 NMAC						
Site Reclamation Plan - based upon the appropraite requirements of Subsection 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 Recommendations of acceptable source material a certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be for consideration of approval Justifications and/or demonstrations of equivalency are required Please refer to 19 15 17 10 NMAC for guidance.	e submitted to the Santa Fe Environmental Bureau offic ice						
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 obtained from nearby wells	∐N/A						
Ground water is between 50 and 100 feet below the bottom of the buried waste  - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	X Yes No						
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 obtained from nearby wells	∏N/A						
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or play (measured from the ordinary high-water mark).							
- Topographic map; Visual inspection (certification) of the proposed site							
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.  - Visual inspection (certification) of the proposed site; Aerial photo, satellite image	Yes XNo						
Francisco (	Yes X No						
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock v purposes, or within 1000 horizontal fee of any other fresh water well or spring, in existence at the time of the initial application.  - NM Office of the State Engineer - tWATERS database; Visual inspection (certification) of the proposed site	watering						
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance pursuant to NMSA 1978, Section 3-27-3, as amended.	ee adopted Yes XNo						
<ul> <li>Written confirmation or verification from the municipality; Written approval obtained from the municipality</li> <li>Within 500 feet of a wetland</li> </ul>	Yes X No						
- 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.  - Written confirantion 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 Soci	Yes XNo						
Topographic map  Within a 100-year floodplain FEMA map	Yes XNo						
18 On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: Each of the following items must bee attached	d to the closure plan. Please indicate,						
by a check mark in the box, that the documents are attached.    V   Siting Criticals Complemes Department on board was the companies as a siting and the left of t							
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 requirements of Subsection F of 19.15.17.13 NMAC	C						
Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.13							
Construction/Design Plan of Temporary Pit (for in place burial of a drying pad) - based upon the appropriate requirements of 19.13.17.1							
X Protocols and Procedures - based upon the appropriate requirements of 19 15 17.13 NMAC	and menta of 13.13.17.11 tolera						
Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.1	17.13 NMAC						
X Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19 15.17 13 NMAC							
X Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure							
Soil Cover Design - 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							

Operator Application Certification:  Thereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief
Name (Print): Crystal Tafoya Title: Regulatory Technician
Signature Ostal Tologo Date: 12/31/08
e-mail address: crystal tafoya@conocopylillips.com Telephone 505-326-9837
C-main dedices.
20 OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)
OCD Representative Signature: Brund fell Approval Date: 1-13-69
Title: OCD Permit Number:
Title. Epotivo i Spec. Och Terinit 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
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)  Disposal 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
Operator Closure Certification:  Thereby 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.
Name (Print): Title.
Signature Date:  - Paril address Telephone:

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

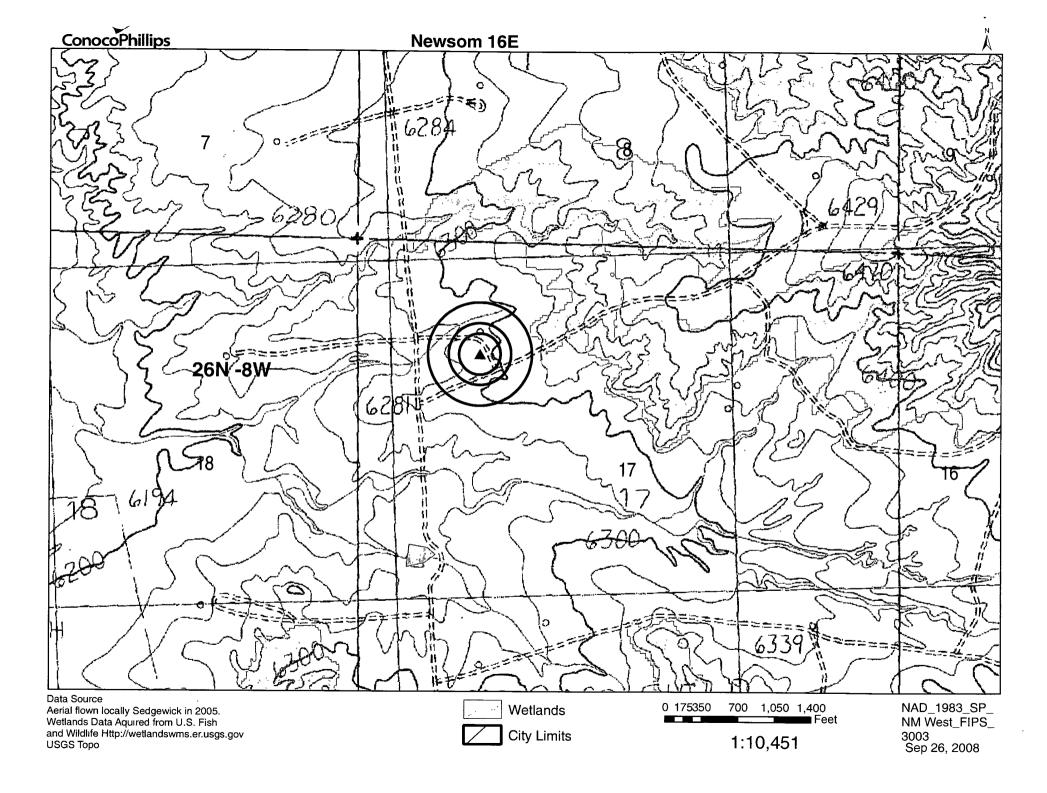
Towns	ship: 26N	Range: 08W	Sections:		,
NAD27	X:	Y:	Zone:	Search Radius:	
County:		Basin:		Number:	Suffix:
Owner Name: (F	First)	(Las	st) (•• All	① Non-Domestic	① Domestic
	POD / Sur	face Data Report Wate	Av r Column Repo	g Depth to Water Report	כ
		Clear Form	iWATERS M	enu Help	

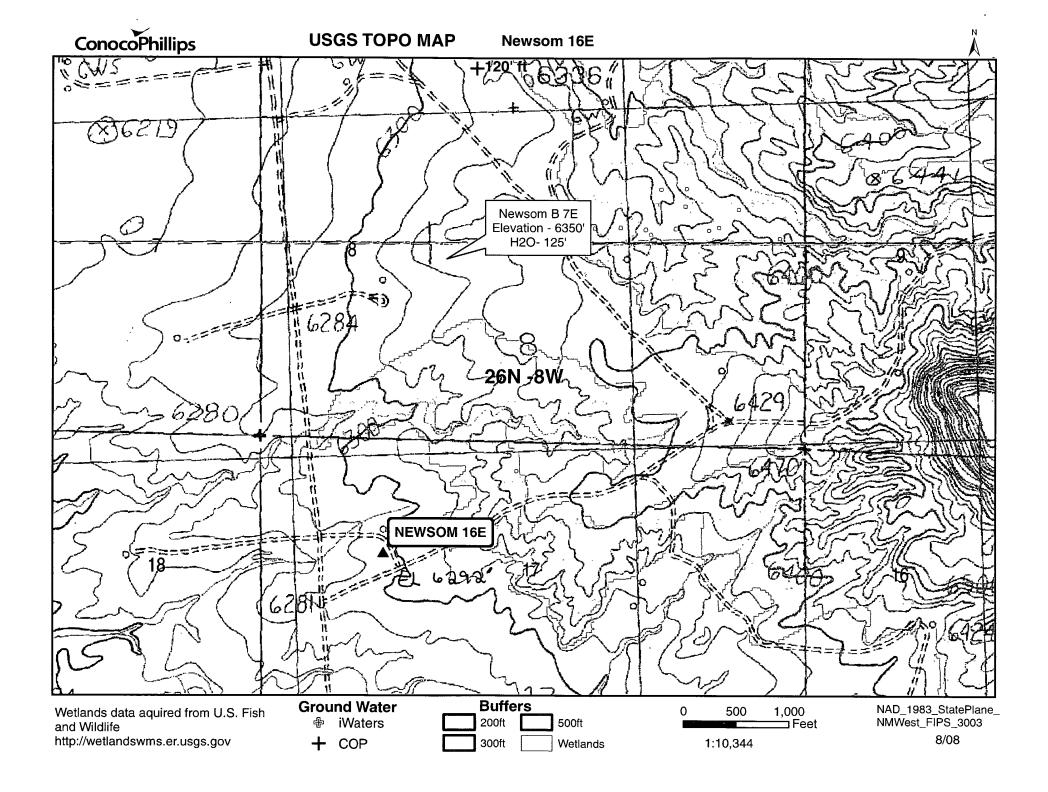
#### WATER COLUMN REPORT 12/31/2008

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

	(quarter	s are	e biq	gge	est	to:	smallest)			Depth	Depth	Wat∈
POD Number	Tws	Rng	Sec	q	q	q	Zone	Х	Y	Well	Water	Colum
SJ 02405	26N	08W	01	3	4	3				180	100	3
SJ 02411	26N	W80	01	4	4	1				6000		
SJ 02407	26N	08W	01	4	4	1				2200		

Record Count: 3





30-045-25662

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

Operator Meridian Oil INC. Location: Unit K Sec. 08Twp 36 Rng 08
Name of Well/Wells.or Pipeline Serviced
Newsom B#7E
Elevation 6350 Completion Date 4/21/94 Total Depth 387 Land Type F
Casing Strings, Sizes, Types & Depths #/14 Set 99' of8" Dvc Casing.
NO GAS OF WATER, BUT 45 of Boulders Were ENCOUNTERED DUTING CASING.
If Casing Strings are cemented, show amounts & types used <u>Cemented</u>
WITH 24 SACKS.
If Cement or Bentonite Plugs have been placed, show depths & amounts used
NONE
Depths & thickness of water zones with description of water: Fresh, Clear,
Salty, Sulphur, Etc. HIT Some Fresh WATER AT 125, And
More Fresh WATER AT 230, A WATER SAMPLE WAS TAKEN.
Depths gas encountered: NONE
Ground bed depth with type & amount of coke breeze used: 387 DepTH.
Used 50 SACK OF LOTESCO SW (5000#)
Depths anodes placed: 300,290,280,270,260,245,235,225,205,195,185,175,156,148, +140.
Depths vent pipes placed: Sulface To 387
Vent pipe perforations: BOTTOM 270. DECEIVED
Remarks: JAN 2 0 1395
DIGT. Q

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.

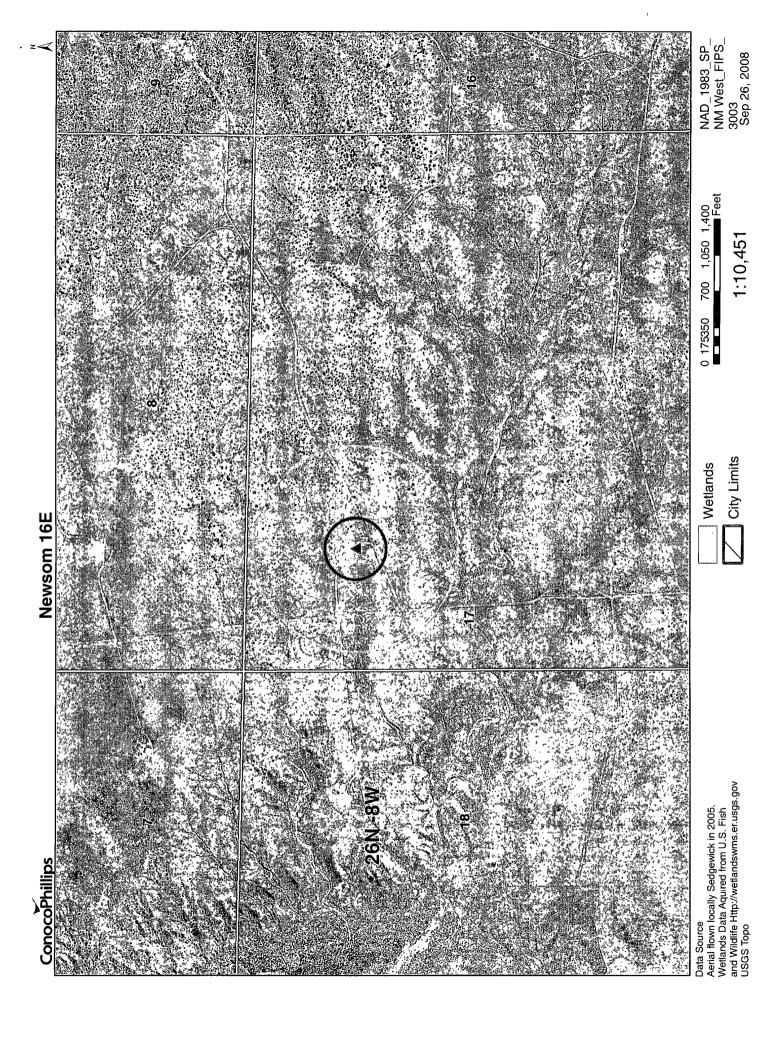
District i
PO Box 1788, Hobbs, NM 28241-1789
District ii
PO Drewer OD, Artenie, NM 28211-6719
District iii
1630 Blo Brasen Rd., Azton, NM 27418
District IV

State of New Mexico
Excrety, Mineran & Notation Handerton Department

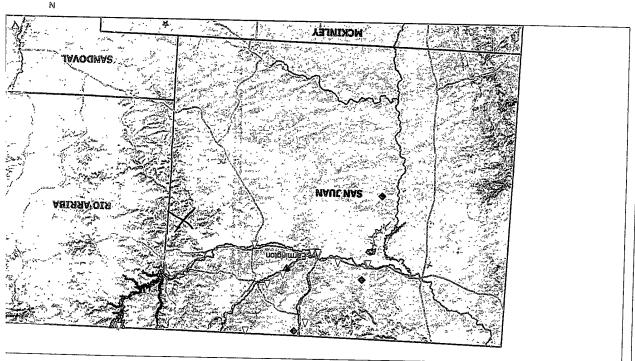
OIL CONSERVATION DIVISION PO Box 2088 Santa Fe, NM 87504-2088 Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lesse - 4 Copies

Fee Lease - 3 Copies

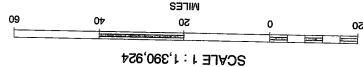
,	UPI Numbe	₹		' Post Ce	de		' Peol N	986			
30-0	45-25	562	374	5/715	99 Ва	ca Gallum/H	Basin Dak	ota			
· Property	Cede				Property	والمنافع وال		1	•	Well Number	
736	3				Newsom B		75				
OGRID	No.				' Operator	Name			Dargues		
1453	8			MF	RIDIAN OI	t INC.		-	(	6350'	
					16 Surface	Location					
or iot so.	Section	Township	Rengo	Let ide	Fest from the	North/Septh line	Feet from the	East/West	tipe	Centry	
ĸ	8	26 N	8 W		1750	South	1810	Wes	t	S.J.	
			11 Bot	tom Ho	le Location I	f Different Fro	om Surface				
L or 104 ac.	Socion	Township	Renge	Lot fde	Feet from the	North/South line	Fort from the	East West	line.	Сепату	
	Į			ļ	1	1	1	1		1	
)adiantos Ac	res " Joint	or Islai vo	Compositivetic	a Ceda   10	Order No.			***		Contract of the contract of th	
0-W/32	0	1		1							
O ALLO	WABLE	WILL BE	ASSIGNE	D TO T	HIS COMPLETI	ON UNTIL ALL	INTERESTS I	AVE BE	EN CO	NSOLIDATI	
		or a	NON-ST	ANDARI	UNIT HAS B	een approved	BY THE DIV	rision	•		
2/2//2		141114	uiiiiii	8		April North Committee Comm	17 OPE	PATOP	CED.	TIFICATI	
from:	a nlat	dated	10_20	<b>N</b> 02			12				
by Mi			10-2	<i>M</i> 05			18 '	••		Amendades and A	
Dy ME	CHUCL	Cary.		73			1	•	•	-	
				73			1				
				8					>	•	
	ļ					. ,	16.	. I	,		
	<del>, , , , , , , , , , , , , , , , , , , </del>		Nijeri	<del>///</del>			200		ral	huld	
				<u> </u>			Signetary	. D	C	3	
							Printed No.	y Bradi	tier	<u> </u>	
				$\mathbb{S}$			11		A dm	inistrat	
							Title				
							6-25	-96			
				<b>%</b>		, .	Date				
		1			'		11				
		<i>\$111111</i>		<b>%</b>						TIFICATI	
							12SUR	VEYOR	CER de lecusi	TIFICATI	
	Higgs on a supple				DEC	E M E C	12SUR	VEYOR rafy that the w prom field no	CER el lecusi en e/ cen	TIFICATI	
	1816-				11数	EIVED	I haveby en treat planted or under m	VEYOR rash staz she w from field not y supervision.	CER cal boxas car of con cant short	TIFICATI	
	1810.	<i>977777</i>			1118	<b>E 1 V S D 2</b> 6 1936	12 SUR's 12 Accepts on the contract of the con	VEYOR  rufy that the w  from field not  y supervision.  ha bost of my	CER cal boxas car of con cant short	TIFICATI	
7	1810.	- 0.			II JUN	2 6 1936	I handry on trust plated or under on a series of a ser	VEYOR rays that the w from field and y supervision. ha bost of my  4-96	CER	TIFICATI	
	1810.	- 0.			II JUN	2 6 1936	I handry ear transport of the second of the	VEYOR resp star the w from field no y experience. ha bout of my  4-96	CER cal boxas car of con cant short	TIFICATI	
	1810.	0			OUT CO	2 6 1936 19	I handry on trust plated or under on a series of a ser	VEYOR  ray that the w from field and y supervision.  to boat of my  4-96	CER	TIFICATI	
	1810.	0			OUT CO	2 6 1936 E	I handry ear transport of the second of the	VEYOR  ray that the w from field and y supervision.  to boat of my  4-96	CER	TIFICATI	
	1810.	- 0.			OUT CO	2 6 1936 19	I handry ear transport of the second of the	VEYOR rapy that the w from field ear y expervation. he best of my  4-96	EOA	TIFICATI	
	1810.	0			OUT CO	2 6 1936 19	I handry ear transport of the second of the	VEYOR rapy that the w from field ear y expervation. he best of my  4-96	CER	TIFICATI en electron en elec- cel enercipa escala elec escala el eras	
	1810.	0			OUT CO	2 6 1936 19	I handry ear transport of the second of the	VEYOR rapy that the w from field ear y expervation. he best of my  4-96	EOA	TIFICAT.	
	1810.	0			OUT CO	2 6 1936 19	I handry ear transport of the second of the	VEYOR rapy that the w from field ear y expervation. he best of my  4-96	EOA	TIFICATI  on charms on chi  chi discorpe manis  chi same te sene	

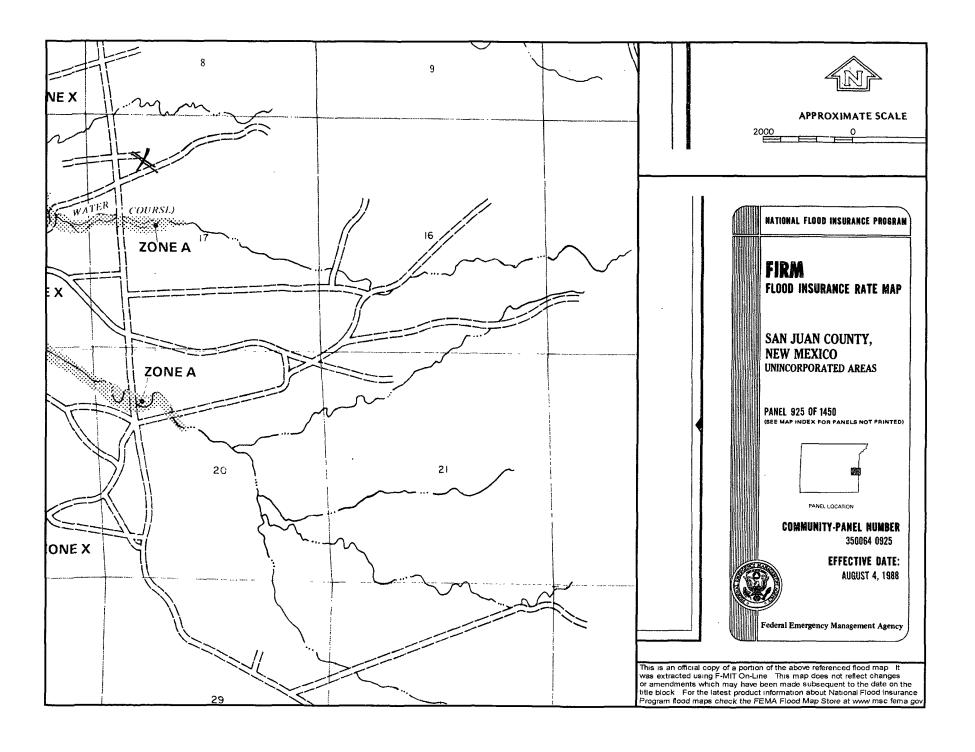


# MMQonline Public Version Map



syrwlish	1 4
	noitatioqensiT
vojism - saiviđ	<b>®</b>
	n <b>oits</b> lugo9
siliM muinsiU	9
səniM muinsıU	\$.
Smelters & Refinery Ops.	
esitanita & saniM rierica	69
Metal Mines and Mill Concentrate	<b>e</b> :
sliki alarah Minerals Mills	۵
səniM elraniM İsitsubul	•
Coal Mines	•
seniM enot2 & etagerepA	7
Quarries Commodity Groups	s elliM ,esniM





#### Hydrogeological Report for Newsom 16E

#### **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 Newsom 16E is not located in an unstable area. The location is not over a mine and is not on the side of a hill as indicated on the Mines, Mills and Quarries Map and Topographic Map. The location of the excavated pit material will not be located within 300' of any continuously flowing watercourse or 200' from any other watercourse as indicated on the Topographic Map. The location is not within a 100-year floodplain area as indicated on the FEMA Map. The Cathodic well data from the Newsom B 7E has an elevation of 6350' and groundwater depth of 125'. The subject well has an elevation of 6292' which is 58' less than the Newsom B 7E, therefore the groundwater depth is greater than 67'. 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 Nacimiento formation will create a stable area for this new location.

#### Tafoya, Crystal

From:

Sent:

Tafoya, Crystal Wednesday, December 31, 2008 1:32 PM 'mark\_kelly@nm.blm.gov' Tafoya, Crystal Newsom 16E

To:

Cc:

Subject:

The subject wells location has a temporary pit that will be closed on-site. Please let me know if you have any questions.

Thank you,

Crystal L. Tafoya Regulatory Technician ConocoPhillips Company San Juan Business Unit Phone: (505) 326-9837

Email: Crystal.Tafoya@conocophillips.com

[1:511.01 ] 03 B/L 1980 H0M/L NW 88941-1980

inthint II 10:1 wr Th 7(1981) NY 68211-0713

(1977) 1 1.1. Y 0 0 1 1975, 00 1786 NH 8741)

Figure 6 Appropriate District Office CTL CONSERVATION CIVIETON PO Box 2088

Submit to Appropriate District Office Ctain case - 4 Ognit replicase - 3 Capier Submit Fe, NM 87504 2086

6857

_	API Numbe			*DOD1 Cod		CREAGE DED		Focl Nam				
30-04	5-30	36.82	2	KOTA								
'Property /8/0	Code 9	'Property Name NEWSOM							Well Number 16E			
705410 0050	i				*Operator Name CONOCO, INC.					'Elevation 6292'		
					<sup>10</sup> Sunface	Location				7.		
u or lat no	Section 17	26N	Flange 8W	Lot Ion	Feet from the	NORTH	1	t from the	East/Mest 110 WEST	SAN JUA		
UL or lot no	Section	11 E	Ottom Pange	Hole L	OCATION I	f Different North/South line		om Sunf et from the	ace East/Nest ) in	e County		
Dedicated Acres		O Acres	(W/2)	I	13 Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Onde	r No				
NO ALLOY	NABLE W	ILL BE A	ASSIGNEI NON-ST	D TO TH	IS COMPLETI UNIT HAS BE	ON UNTIL ALL EEN APPROVED	INT	ERESTS H THE DIVI	IAVE BEEN SION	CONSOL IDATED		
5	,00I	t	52	204.76						RTIFICATION Nation Contained herein ; If my knowledge and belie		
		İ				Ì						

SF-078433 98 5132. 18 SURVEYOR CERTIFICATION
I nereby certify that the well) location around in this play
was plotted from field notes of actual surveys made by reor under my supervision and that the same is true and
connect to the best of my belief APRIL 17, 2001

5216.64

## ConocoPhillips Company 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 ConocoPhillips Company (COPC) locations. This is COPC'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 COPC's closing of the temporary pit prior to closure as per the approved closure plan via certified mail, return receipt requested.
- Within 6 months of the Rig Off status occurring COPC 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
  - 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	50,0
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	GRO/DRO EPA SW-846 8015M	
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 COPC 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. COPC 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. two (better quality) Source No. One (poor quality) Purity 80 percent Purity 50 percent 40 percent Germination 63 percent Germination 50 percent Percent PLS 20 percent Percent PLS 2 lb. bulk seed required to make 5 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.