1625 N. French Dr , Hobbs, NM 88240

1

District II

1301 W Grand Ave , Artesia, NM 88210

District III

1000 Rio Brazos Rd , Aztec, NM 87410

District IV

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

Department Oil Conservation Division 1220 South St. Francis Dr.

Santa Fe, NM 87505

Form C-144 July 21, 2008

For temporary pits, closed-loop sytems, and below-grade  $% \left( \mathbf{r}\right) =\left( \mathbf{r}\right) \left( \mathbf{r}\right)$ 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

1220 S St Francis Dr , Santa Fe, NM 87505	appropriate NMOCD District Office
2127	Pit, Closed-Loop System, Below-Grade Tank, or
Prop	osed Alternative Method Permit or Closure Plan Application
Type of action:	X 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
	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 of	pplication (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request
environment Noi does approval rel	this request does not relieve the operator of hability should operations result in pollution of surface water, ground water or the ever the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances
1 Operator: ConocoPhillips Company	OGRID#: 217817
Address: PO Box 4289, Farmingto	, NM 87499
Facility or well name: San Juan 28	Unit 249G
•	-039-30339 OCD Permit Number:
U/L or Qtr/Qtr: G(SWNE) Section Center of Proposed Design: Latitude	n: 30 Township: 28N Range: 7W County: Rio Arriba  36.633253'N Longitude: 107.611296'W NAD: X 1927 1983
Surface Owner: Federal	State X Private Trust or Indian Allotment
X Lined Unlined L X String-Reinforced	avitation P&A  her type: Thickness 20 mil X LLDPE HDPE PVC Other  ctory Other Volume: 7000 bbl Dimensions L 120' x W 55' x D 12'
Type of Operation: P&A Drying Pad Above Ground Unlined Line	on H of 19.15.17.11 NMAC    Drilling a new well
Below-grade tank: Subsection  Volume to Tank Construction material:  Secondary containment with leak de Visible sidewalls and liner  Liner Type Thickness	Type of fluid
5 Alternative Method: Submittal of an exception request is rec	tired. Exceptions must be submitted to 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, insti	tution or chur	(h)
Four foot height, four strands of bailed wire evenly spaced between one and four feet		
X Alternate. Please specify 4' hogwire fence with a single strand of barbed wire on top.		
7		
Netting: Subsection E of 19.15.17.11 NMAC (Applies to permanent pits and permanent open top tanks)		
Screen Netting Other		
Monthly inspections (If netting or screening is not physically feasible)		
8		
Signs: Subsection C of 19.15.17.11 NMAC		
12" X 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers		
X Signed in compliance with 19.15 3.103 NMAC		
		1
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 const	deration of ap	proval.
Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval		
10		
Siting Criteria (regarding permitting): 19.15.17.10 NMAC		
Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable 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.	İ	
		<b>—</b>
Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.  - NM Office of the State Engineer - 1WATERS database search; USGS; Data obtained from nearby wells	∐Yes	X No
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other watercourse, lakebed, sinkhole, or playa	□Yes	X 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	Yes	X No
application.		
(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)	X NA	
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	AINA	
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	XNo
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 - 1WATERS database search; Visual inspection (certification) of the proposed site.		
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	Yes	X No
adopted pursuant to NMSA 1978, Section 3-27-3, as amended		AINO
- 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.	□Yes	X No
- Written confirmation or verification or map from the NM EMNRD - Mining and Mineral Division		
Within an unstable area.	Yes	XNo
- 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	ت	ا ۳۰۰ت

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
Tyurogeologic Report (Delow-grade Fanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.13.17.9 NMAC
Tryangeologic Data (Temporary and Emergency Fits)   States apon the 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
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
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: Drilling X Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank Closed-loop System
Alternative   Proposed Closure Method:
Waste Excavation and Kethoval  Waste Excavation and Kethoval  Waste Excavation and Kethoval  Waste Excavation and Kethoval
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 Bookful and Cover Design Specifications has a drive the converging a requirements of Subsection 11 of 10 15 17 13 NIMAC
Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15 17 13 NMAC
Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

Form C-144 Oil Conservation Division Page 3 of 5

16		
Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Stee Instructions. Please identify the facility or facilities for the disposal of liquids, drilling		v ilitia
are required.	jimas ana arai citangs. Ose anachmeni ij more man iwo je	cuires
Disposal Facility Name	Disposal Facility Permit #:	
Disposal Facility Name:	Disposal Facility Permit #:	
Will any of the proposed closed-loop system operations and associated activitie  Yes (If yes, please provide the information No		
Required for impacted areas which will not be used for future service and operations:  Soil Backfill and Cover Design Specification - based upon the appropriate Re-vegetation Plan - based upon the appropriate requirements of Subsection Site Reclamation Plan - based upon the appropriate requirements of Subsection Site Reclamation Plan - based upon the appropriate requirements of Subsection Site Reclamation Plan - based upon the appropriate requirements of Subsection Site Reclamation Plan - based upon the appropriate requirements of Subsection Site Reclamation Plan - based upon the appropriate requirements of Subsection Site Reclamation Plan - based upon the appropriate requirements of Subsection Site Reclamation Plan - based upon the appropriate requirements of Subsection Site Reclamation Plan - based upon the appropriate requirements of Subsection Site Reclamation Plan - based upon the appropriate requirements of Subsection Site Reclamation Plan - based upon the appropriate requirements of Subsection Site Reclamation Plan - based upon the appropriate requirements of Subsection Site Reclamation Plan - based upon the appropriate requirements of Subsection Site Reclamation Plan - based upon the appropriate requirements of Subsection Site Reclamation Site Reclamation Plan - based upon the appropriate requirements of Subsection Site Reclamation Site	ction I of 19 15 17 13 NMAC	
She Reclamation Fian - based upon the appropriate requirements of Suc	section of 19.13.17.13 NWAC	
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 I certain siting criteria may require administrative approval from the appropriate district office for consideration of approval Justifications and/or demonstrations of equivalency are required.	Recommendations of acceptable som ce material are provided belo or may be considered an exception which must be submitted to the .	Santa Fe Environmental Bio cau office
Ground water is less than 50 feet below the bottom of the buried waste		Yes X No
- NM Office of the State Engineer - IWATERS database search, USGS. Data obta	tined 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 - (WATERS 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 - tWATERS database search; USGS, Data obtain	ined from nearby wells	□N/A
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other signific (measured from the ordinary high-water mark).	cant 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		Yes X No
		Yes X No
Within 500 horizontal feet of a private, domestic fresh water well or spring that less that purposes, or within 1000 horizontal fee of any other fresh water well or spring, in exist - NM Office of the State Engineer - iWATERS database; Visual inspection (certific	ence at the time of the initial application.	
Within incorporated municipal boundaries or within a defined municipal fresh water w pursuant to NMSA 1978, Section 3-27-3, as amended	·	Yes X No
- Written confirmation or verification from the municipality; Written approval obtains the following	nined from the municipality	
<ul> <li>Within 500 feet of a wetland</li> <li>US Fish and Wildlife Wetland Identification map; Topographic map, Visual insp</li> </ul>	ection (certification) of the proposed site	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	Aineral Division	
Within an unstable area.		Yes X No
<ul> <li>Engineering measures incorporated into the design; NM Bureau of Geology &amp; Mi Topographic map</li> </ul>	ineral Resources, USGS; NM Geological Society;	
Within a 100-year floodplain FEMA map		Yes X No
18		
<u>On-Site Closure Plan Checklist:</u> (19 15 17.13 NMAC) Instructions: Each by a check mark in the box, that the documents are attached.	of the following items must bee attached to the closur	e plan. Please indicate,
X Siting Criteria Compliance Demonstrations - based upon the appropriate	e requirements of 19.15.17.10 NMAC	
Proof of Surface Owner Notice - based upon the appropriate requiremer	nts of Subsection F of 19.15.17.13 NMAC	
Construction/Design Plan of Burial Trench (if applicable) based upon the	ne appropriate requirements of 19.15.17.11 NMAC	
Construction/Design Plan of Temporary Pit (for in place burial of a dryi		9.15.17 11 NMAC
X Protocols and Procedures - based upon the appropriate requirements of		
Confirmation Sampling Plan (if applicable) - based upon the appropriate	·	
X Waste Material Sampling Plan - based upon the appropriate requiremen		
X Disposal Facility Name and Permit Number (for liquids, drilling fluids a	_	nnot be achieved)
X Soil Cover Design - based upon the appropriate requirements of Subsect		
X   Re-vegetation Plan - based upon the appropriate requirements of Subsec		

Form C-144 Oil Conservation Division Page 4 of 5

hereby certify that the	n Certification: information subir	antted with this application is true, ac	curate and complete to the	e best of my knowledge and belief.
Name (Print)		Kelly Jeffery	Title:	Regulatory Technician
Signature:			Date	2/04/09
e-mail address:	<u>kelly rje</u>	Hery@cononcophillips.com	Telephone	505-599-4025
0 DCD Approval: 🎉	Permit Applic	ation (including closure plan)	Closure Plan (only	OCD Conditions (see attachment)
	_	011	11	
OCD Representative		00 M V 11		Approval Date: 2-10-09
litle: <u>£</u>	Enviro	sper	OCD Per	mit Number:
1				
	aired within 60	days of closure completion): Su	ibsection K of 19 15 17 13 NMA	AC
nstructions Operators	are required to or	btain an approved closure plan prior	r to implementing any clos	sure activities and submitting the closure report. The closure
		tivision within 60 days of the comple and the closure activities have been		ies. Please do not complete this section of the form until an
			<u> </u>	re Completion Date:
losure Method:				
Waste Excavation	on and Removal	On-site Closure Method	Alternative Closur	e Method Waste Removal (Closed-loop systems only)
If different from	approved plan, p	lease explain.	<del></del>	
	<u></u>			
	ling Waste Remo	oval Closure For Closed-loop Syste	ms That Utilize Above G	Fround Steel Tanks or Haul-off Bins Only:
	ntify the facility	or facilities for where the liquids, dr	illing fluids and drill cut	tings were disposed. Use attachment if more than two facilities
ere utilized. Disposal Facility Nat	me.		Disposal Facilit	y Permit Number:
Disposal Facility Nat			•	ry Permit Number
		ns and associated activities performe		not be used for future service and opeartions?
		omplilane to the items below)	No	
Required for impacte	ed areas which wi	ill not be used for future service and	operations.	
Site Reclamation	n (Photo Docume	ntation)		
=	and Cover Install			
Re-vegetation A	pplication Rates a	and Seeding Technique	·	
4	_			
Closure Report A			llowing items must be at	tached to the closure report. Please indicate, by a check mark in
		ce owner and division)		
<b>=</b>	•	d for on-site closure)		
Plot Plan (for o	on-site closures	and temporary pits)		
Confirmation S	Sampling Analyt	tical Results (if applicable)		
		lytical Results (if applicable)		
Waste Materia		rmit Number		
Waste Materia Disposal Facili	ty Name and Pe			
Disposal Facili	•			
Disposal Facili Soil Backfilling	g and Cover Inst			
Disposal Facili Soil Backfilling Re-vegetation	g and Cover Inst	tallation es and Seeding Technique		
Disposal Facili Soil Backfilling Re-vegetation	g and Cover Inst Application Rate on (Photo Docur	tallation es and Seeding Technique	Longitude:	NAD   1927   1983
Disposal Facili Soil Backfilling Re-vegetation Site Reclamati	g and Cover Inst Application Rate on (Photo Docur	tallation es and Seeding Technique mentation)	Longitude:	NAD   1927   1983
Disposal Facili Soil Backfilling Re-vegetation Site Reclamati	g and Cover Inst Application Rate on (Photo Docur	tallation es and Seeding Technique mentation)	Longitude:	NAD   1927   1983
Disposal Facili Soil Backfilling Re-vegetation Site Reclamati On-site Closur	g and Cover Inst Application Rate on (Photo Docur e Location: L	tallation es and Seeding Technique mentation)	Longitude:	NAD 1927 1983
Disposal Facili Soil Backfilling Re-vegetation Site Reclamatic On-site Closure  Departor Closure Content of the	g and Cover Inst Application Rate on (Photo Docur e Location: L  ertification: unformation and a	tallation es and Seeding Technique mentation)atitude	ire report is ture, accurat	e and complete to the best of my knowledge and belief. I also certify th
Disposal Facili Soil Backfilling Re-vegetation Site Reclamati On-site Closur  Deperator Closure Contents of the content of the	g and Cover Inst Application Rate on (Photo Docur e Location: L  ertification: unformation and a	tallation es and Seeding Technique mentation)atitude	ire report is ture, accurat specified in the approved	e and complete to the best of my knowledge and belief. I also certify th
Disposal Facili Soil Backfilling Re-vegetation Site Reclamati On-site Closur  perator Closure Concepts Certify that the e closure complies with	g and Cover Inst Application Rate on (Photo Docur e Location: L  ertification: unformation and a	tallation es and Seeding Technique mentation)atitude	ire report is ture, accurat	e and complete to the best of my knowledge and belief. I also certify th
Disposal Facili Soil Backfilling Re-vegetation Site Reclamati On-site Closure  perator Closure Contereby certify that the	g and Cover Inst Application Rate on (Photo Docur e Location: L  ertification: unformation and a	tallation es and Seeding Technique mentation)atitude	ire report is ture, accurat specified in the approved	e and complete to the best of my knowledge and belief. I also certify th

Depth

Well

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

Township: 28N Range: 07W Sections: 19,20,29,30,31,32
NAD27 X: Zone: Search Radius:
County: Basin: Number: Suffix:
Owner Name: (First) (Last) O Non-Domestic O Domestic
POD / Surface Data Report Avg Depth to Water Report
Water Column Report
Clear Form iWATERS Menu Help
WATER COLUMN REPORT 02/03/2009
(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are biggest to smallest)

Tws Rng Sec q q q Zone X

No Records found, try again

POD Number

Wat∈

Colum

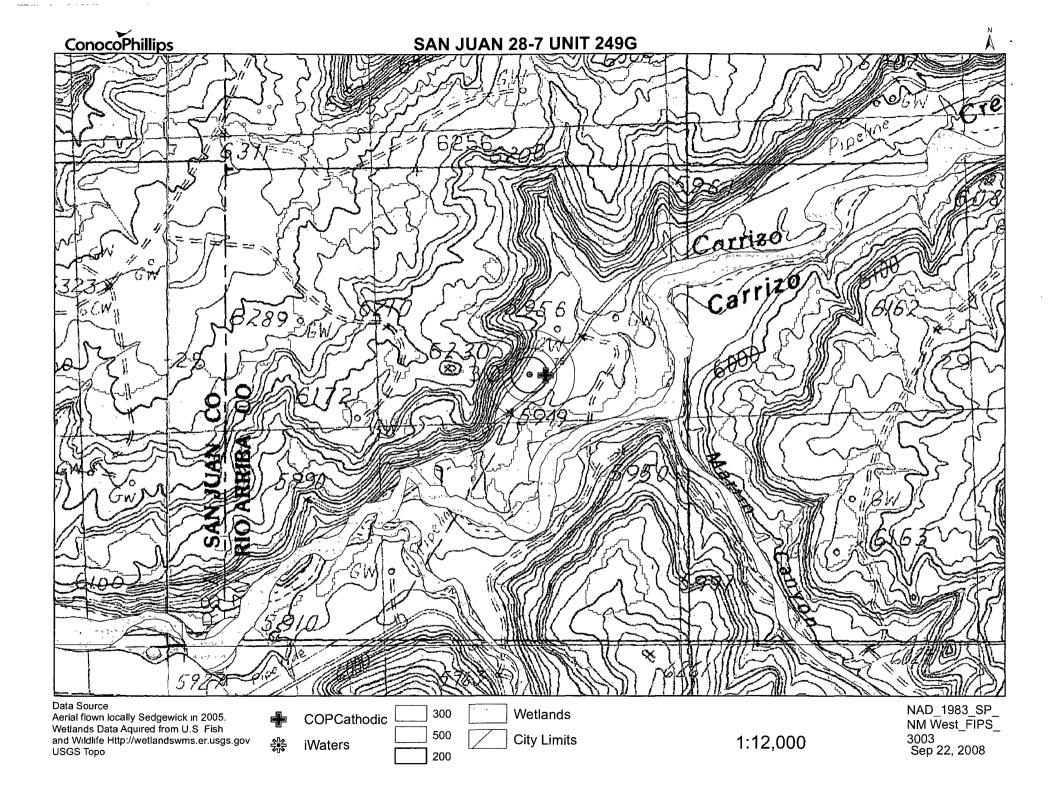
Depth

Water

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

-
Township: 28N Range: 08W Sections: 24,25,36
NAD27 X: Zone: Search Radius:
County: Basin: Number: Suffix:
Owner Name: (First) (Last) C Non-Domestic C Domestic
POD / Surface Data Report Avg Depth to Water Report
Water Column Report  Clear Form iWATERS Menu Heip
WATER COLUMN REPORT 02/03/2009  (quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are biggest to smallest) Depth Depth Water POD Number Tws Rng Sec q q q Zone X Y Well Water Column

No Records found, try again



### TIERRA CORROSION CONTROL, INC. <u>DRILLING LOG</u>

COMPANY: Conoco Phillips LOCATION: San Juan 28-7 249G

STATE: NM BIT SIZE: 7 7/8"

LBS COKE BACKFILL: 2,600# ANODE TYPE: 2' X 60" Duriron

DATE: April 23, 2008 LEGALS: S30 T28N R7W DRILLER: Gilbert Peck

CASING SIZE/TYPE: 8" X 20' PVC

VENT PIPE: 300' ANODE AMOUNT: 10 COUNTY: Rio Arriba

DEPTH: 300'

COKE TYPE: Asbury PERF PIPE: 140'

**BOULDER DRILLING: None** 

DEPTH	DRILLER'S LOG	AMPS	DEPTH	DRILLER'S LOG	AMPS
20	Casing	.9	310		
25	Gray Shale	.8	315		
30		.7	320		
35		.7	325		
40		.7	330		
45		.6	335		
50		.9	340		
55		.4	345		
60		.4	350		
65		.6	355		
70		.9	360		
75		.9	365		
80		1.2	370		
85		1.2	375		
90		1.7	380		
95		1.8	385		
100		1.5	390		
105		1.8	395		
110		1.8	400		
115		1.4	405		
120		1.2	410		
125		1.3	415		
130		1.6	420		
135	<b>—</b>	1.8	425		
140	Black Shale	2.8	430		
145		2.9	435		
150		3.0	440		
155	-	2.2	445		
160	Gray Shale	1.6	450		
165	I	1.4	455	***	
170	<u> </u>	.9	460		
175		1.0	465		_
180		1.1	470		-
185		1.1	475		
190		1.1	480		
195		1.1	485	***	
200		1.2	490		
205		1.3	495		
210		1.3	500		
215		1.0		1	
220		1.0	1		
225		1.1			
230		1.1			
235	<del>                                     </del>	1.2			
240	<del></del>	1.1			
245		1.1			
250		1.1			
255	<del></del>	1.1	<del>                                     </del>		
260		1.1	<del> </del>		
265	<del>                                     </del>	1.2			
270		1.3	<u> </u>		
275	<del>                                     </del>	1.5	<del>                                     </del>		
280	<del>                                     </del>	1.5			+
		1.5	<del> </del> -		
285 290	<del>                                     </del>	1.4	ļ		
	ļ				+
295 300	<del>                                     </del>	1.4 td			$\overline{}$

	I.E. Transcription		Z
ANODE #	DEPTH	NO COKE	COKE
1	295	1.4	3.6
2	285	1.4 1.5	3.6
3	275	1.5	3.9
4	265	1.2	3.7
5	255	1.2 1.1	3.7
6	245	1.1	4.0
7	235	1.2 1.1	4.2
8	225	1.1	4.1
9	215	1.0	4.1
10	205	1.3	4.0
8 9 10 11			
1			
13			
14 15 16 17			
15			
16			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27	ļ		
28			
29			
30			

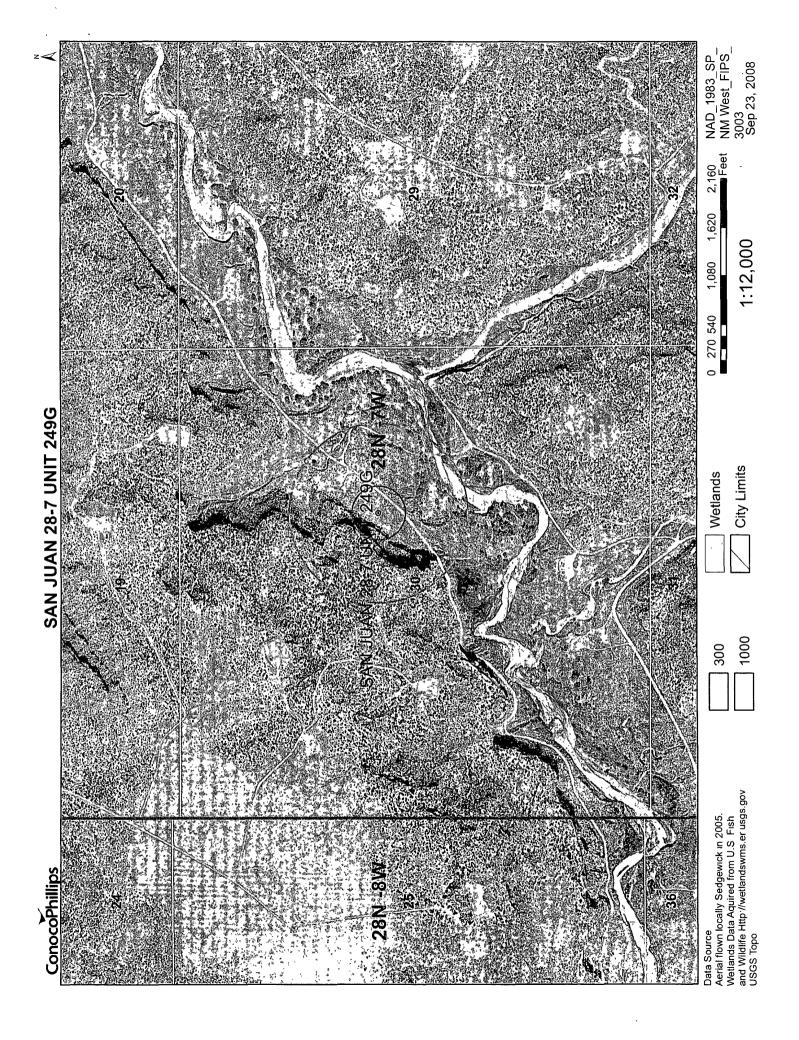
WATER DEPTH: 75'
ISOLATION PLUGS: None
LOGING VOLTS: 12.40

**VOLT SOURCE: AUTO BATTERY** 

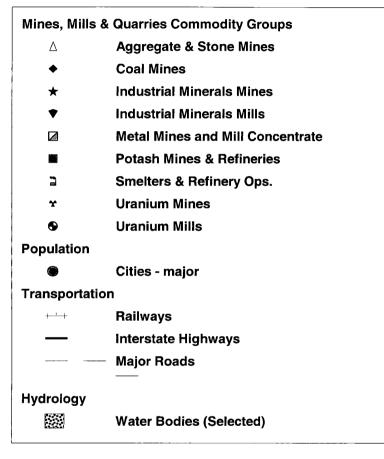
TOTAL AMPS: 9.1

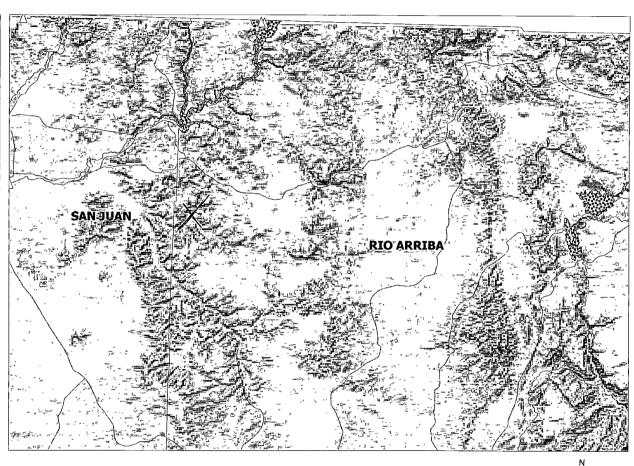
**TOTAL GB RESISTANCE: 1.35** 

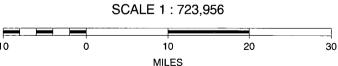
**REMARKS:** 



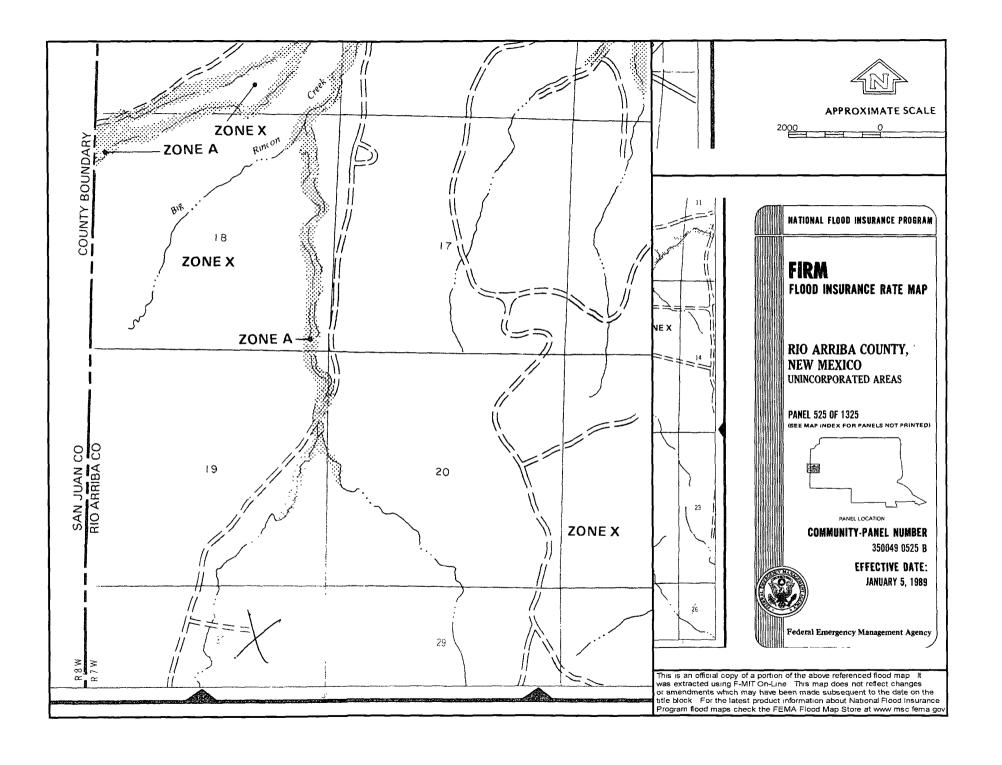
### San Juan 28-7 Unit 249G Mines, Milles and Quarries Web Map











### Siting Criteria Compliance Demonstration & Hydro Geologic Analysis

The San Juan 28-7 Unit 249G 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 75' as determined by the topographic map and the Cathodic well data. There are no iWATERS data points located in the area as indicated on the TOPO Map. The hydro geologic analysis indicates the groundwater depth and the San Jose formation will create a stable area for this new location.

#### Hydrogeological report for San Jose Formation

#### 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.

### Jeffery, Kelly R

From: Sent:

Jeffery, Kelly R Wednesday, February 04, 2009 9:15 AM ' (Mark\_kelly@nm.blm.gov)' Surface Owner Notification

To:

Subject:

Contacts:

Kelly Mark

Surface Owner Notification

The following location temporary pit will be closed on-site. Please let me know if you have any questions. Thank you!

San Juan 28-7 Unit 249G

DISTRICT 1 1625 N. French Dr., Hobbs, N.M. 88240

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

State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102 Revised October 12, 2005

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

OIL CONSERVATION DIVISION 1220 South St. Francis Dr.

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

Santa Fe, NM 87505

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

UL or lot no. Section Township Range

DRILLED PLAT" "A5

☐ AMENDED REPORT

RCVD MAR 25 '08 WELL LOCATION AND ACREAGE DEDICATION PLAT OIL CONS. DIV.

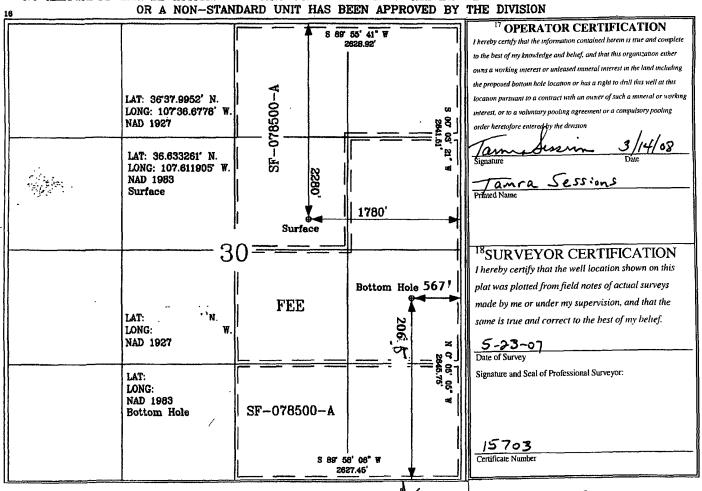
Lot ldn Feet from the North/South line Feet from the East/West line

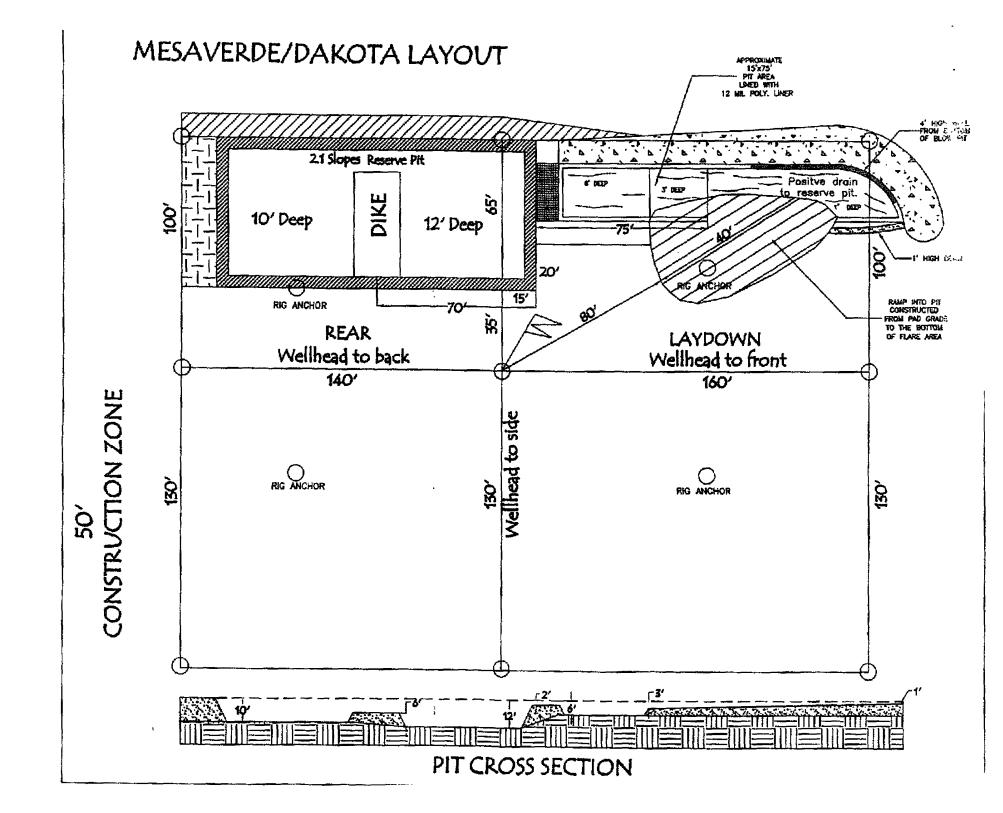
<sup>1</sup> API Nuinber 30-039-30339	*Pool Code 71599 / 72319	°Pool Name BASIN DAKOTA/BLANCO MESAVE	DIST. 3
*Property Code	<sup>6</sup> Property SAN JUAN 28-	Name	* Well Number 249G
31739 *OGRID No.	*Operator		<sup>9</sup> Elevation
217817	CONOCOPHILLIP	S COMPANY	5947

<sup>10</sup> Surface Location

	G	30	28-N	7~₩		2280'	NORTH	1780'	EAST	RIO ARRIBA
_	7			11 Botte	om Hole	Location I	f Different Fro	m Surface		
	UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	Yorth/South line	Feet from the	Best/West line	County
7	108	30	28-N	7-W		2065	SOUTH	567'	EAST	RIO ARRIBA
>	18 Dedicated Acre	8		13 Joint or	Infil	<sup>14</sup> Consolidation (	Code	<sup>15</sup> Order No.		
	320	.00				İ				I

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED





# ConocoPhillips Company San Juan Basin Pit Design and Construction Plan

In accordance with Rule 19.15.17 the following information describes the design and construction 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.

#### **General Plan:**

- 1. COPC will design and construct a properly sized and approved temporary pit which will contain liquids and solids and should prevent contamination of fresh water and protect public health and environment.
- 2. Prior to constructing the pit, topsoil will be stockpiled in the construction zone for later use in restoration.
- 3. COPC will sign the well location in compliance with 19.15.3.103 NMAC.
- 4. COPC shall construct all new fences around the temporary pit utilizing 48" steel mesh field-fence (hogwire) on the bottom with a single strand of barbed wire on top. T-posts shall be installed every 12 feet and corners shall be anchored utilizing a secondary T-post. Temporary pits will be fenced at all times excluding drilling or workover operations, when the front side of the fence will be temporarily removed for operational purposes.
- 5. COPC shall construct the temporary pit so that the foundation and interior slopes are firm and free of rocks, debris, sharp edges or irregularities to prevent liner failure.
- COPC shall construct the pit so that the slopes are no steeper than two horizontal feet to one vertical foot.
- 7. Pit walls will be walked down by a crawler type tractor following construction.
- 8. All temporary pits will be lined with a 20-mil, string reinforced, LLDPE liner, complying with EPA SW-846 method 9090A requirements.
- 9. Geotextile will be installed beneath the liner when rocks, debris, sharp edges or irregularities cannot be avoided.
- All liners will be anchored in the bottom of a compacted earth-filled trench at least 18 inches deep.
- 11. COPC will minimize liner seams and orient them up and down, not across a slope. Factory seams will be used whenever possible. COPC will ensure all field seams are welded by qualified personnel. Field seams will be overlapped four to six inches and will be oriented parallel to the line of maximum slope. COPC will minimize the number of field seams in corners and irregularly shaped areas.
- 12. The liner shall be protected from any fluid force or mechanical damage through the use of mud pit slides, or a manifold system.
- 13. The pit shall be protected from run-off by constructing and maintaining diversion ditches around the location or around the perimeter of the pit in some cases.
- 14. The volume of the pit shall not exceed 10 acre-feet, including freeboard.
- 15. Temporary blow pits will be constructed to allow gravity flow to discharge into lined drill pit.
- 16. The lower half of the blow pit (nearest lined pit) will be lined with a 20-mil, string reinforced, LLDPE liner. The upper half of the blow pit will remain unlined as allowed in Rule 19.15.17.11 F.11.
- 17. COPC will not allow freestanding liquids to remain on the unlined portion of a temporary blow pit.

# ConocoPhillips Company San Juan Basin Maintenance and Operating Plan

In accordance with Rule 19.15.17 the following information describes the operation and maintenance 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.

#### **General Plan:**

- COPC will operate and maintain a temporary pit to contain liquids and solids and maintain the integrity of the liner and liner system to prevent contamination of fresh water and protect public health and environment.
- 2. COPC will conserve drilling fluids by transferring liquids to pits ahead of the rigs whenever possible. All other drilling fluids will be disposed at Basin Disposal Inc., permit # NM-01-005.
- 3. COPC will not discharge or store any hazardous waste in any temporary pit.
- 4. If any pit liner's integrity is compromised, or if any penetration of the liner occurs above the liquid's surface, then COPC shall notify the Aztec Division office by phone or email within 48 hours of the discovery and repair the damage or replace the liner.
- 5. If a leak develops below the liquid's level, COPC shall remove all liquids above the damaged liner within 48 hours and repair the damage or replace the liner. COPC shall notify the Aztec Division office by phone or email within 48 hours of the discovery for leaks less than 25 barrels. COPC shall notify the Aztec Division office as required pursuant to Subsection B of 19.15.3.116 NMAC shall be reported within twenty-four (24) hours of discovery of leaks greater than 25 barrels. In addition, immediate verbal notification pursuant to Subsection B, Paragraph (1), and Subparagraph (d) of 19.15.3.116 NMAC shall be reported to the division's Environmental Bureau Chief.
- 6. The liner shall be protected from any fluid force or mechanical damage through the use of mud pit slides, or a manifold system.
- 7. The pit shall be protected from run-off by constructing and maintaining diversion ditches around the location or around the perimeter of the pit in some cases.
- 8. COPC shall immediately remove any visible layer of oil from the surface of the temporary pit after cessation of a drilling or workover operation. Oil absorbent booms will be utilized to contain and remove oil from the pit's surface. An oil absorbent boom will stored on-site until closure of pit.
- Only fluids generated during the drilling or workover process may be discharged into a temporary pit.
- 10. COPC will maintain the temporary pit free of miscellaneous solid waste or debris.
- 11. During drilling operations, COPC will inspect the temporary pit at least once daily to ensure compliance with this plan. Inspections will be logged in the IADC reports. COPC will file this log with the Aztec Division office upon closure of the pit.
- 12. After drilling operations, COPC will inspect the temporary pit weekly so long as liquids remain in the temporary pit. A log of the inspections will be stored at COPC's office electronically and will be filed with the Aztec Division office upon closure of the pit.
- 13. COPC shall maintain at least two feet of freeboard for a temporary pit.
- 14. COPC shall remove all free liquids from a temporary pit within 30 days from the date the operator releases the drilling rig.
- 15. COPC shall remove all free liquids from a cavitation pit within 48 hours after completing cavitation. COPC may request additional time to remove liquids from the Aztec Division office if it is not feasible to remove liquids within 48 hours.

## 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:

- 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.
- 4. 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	500
Chlorides	EPA 300.1	100Ø/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 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. 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.