District I

1625 N. French Dr., Hobbs, NM 88240

District II

1301 W Grand Ave., Artesia, NM 88210

1000 Rio Biazos Rd , Aztec, NM 87410

District IV

API Number:

Surface Owner:

Center of Proposed Design: Latitude:

Federal

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

Form C-144

tanks, submit to the appropriate NMOCD District Office.

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

Pit, Closed-Loop System, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application X Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method Type of action: 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 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 hability 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 Operator: ConocoPhillips Company OGRID#: 217817 Address: PO Box 4289, Farmington, NM 87499 Facility or well name: Thurston Com #100 30-045-34734 OCD Permit Number: U/L or Qtr/Qtr: M(SWSW) Section: 31 31N 11W Township: Range: County: San Juan

Longitude:

X Private Tribal Trust or Indian Allotment

108.036822' W

Permanent Benergency Cavitation P&A LLDPE HDPE PVC Other	
X Closed-loop System: Subsection H of 19.15.17.11 NMAC Type of Operation: P&A X Drilling a new well Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent) X Drying Pad X Above Ground Steel Tanks Haul-off Bins Other X Lined Unlined Liner type: Thickness 20 mil X LLDPE HDPE PVD Other Liner Seams: X Welded X Factory Other	Temporary: Drilling Workover Permanent Emergency Cavitation P&A Lined Unlined Liner type: Thickness mil LLDPE HDPE PVC Other String-Reinforced
Below-grade tank: Subsection I of 19.15.17.11 NMAC Volume: bbl Type of fluid: Tank Construction material: Secondary containment with leak detection Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off Visible sidewalls and liner Visible sidewalls only Other Liner Type: Thickness mil	X Closed-loop System: Subsection H of 19.15.17.11 NMAC Type of Operation: P&A X Drilling a new well Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent) X Drying Pad X Above Ground Steel Tanks Haul-off Bins Other X Lined Unlined Liner type: Thickness 20 mil X LLDPE HDPE PVD Other Liner Seams: X Welded X Factory Other Other Contact Co
5 Alternative Method:	Below-grade tank: Subsection I of 19.15.17.11 NMAC Volume: bbl Type of fluid: Tank Construction material: Secondary containment with leak detection Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off Visible sidewalls and liner Visible sidewalls only Other Liner Type: Thickness mil HDPE PVC Other

36.851718' N

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, institution or church) Four foot height, four strands of barbed wire evenly spaced between one and four feet Alternate Please specify				
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 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 consideration of approval Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval				
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 No			
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	Yes No			
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.	Yes No			
(Applies to temporary, emergency, or cavitation pits and below-grade tanks) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	NA			
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. (Applied to permanent puts) - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	Yes No			
Within 500 horizonal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.	Yes No			
- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site. Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended	Yes No			
 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 Within the area overlying a subsurface mine. Written confirmation or verification or map from the NM EMNRD - Mining and Mineral Division 	Yes No			
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	Yes No			
Within a 100-year floodplain - FEMA map	Yes No			

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				
X Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC				
Value Note				
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				
Previously Approved Operating and Maintenance Plan API 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 Situng 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 19.15.17.11 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: Drilling Workover Emergency Cavitation P&A Permanent Pit Below-grade Tank X Closed-loop System Alternative				
Proposed Closure Method: Waste Excavation and Removal				
X Waste Removal (Closed-loop systems only)				
On-site Closure Method (only for temporary pits and closed-loop systems)				
In-place Burtal 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				
Sine Recitation Fian - based upon the appropriate requirements of Subsection G of 19.15.17 13 NMAC				

Form C-144 Oil Conservation Division

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Waste Removal Closure For Closed-loop Systems That Utilize Above Groun- Instructions Please identify the facility or facilities for the disposal of liquids, dr are required.	d Steel Tanks or Haul-off Bins Only filling fluids and drill cuttings Use at	v: (19.15 17.13.D NMAC) ttachment if more than two f	acılıtıes
Disposal Facility Name: Envirotech	Disposal Facility Permit #-	NM-01-0011	
Disposal Facility Name: Basin Disposal Facility	Disposal Facility Permit #:	NM-01-005	
Will any of the proposed closed-loop system operations and associated act Yes (If yes, please provide the information No			ervice and operations?
Required for impacted areas which will not be used for future service and operated. Soil Backfill and Cover Design Specification - based upon the application Plan - based upon the appropriate requirements of S. Site Reclamation Plan - based upon the appropriate requirements of S.	ropriate requirements of Subsectio ubsection I of 19.15 17.13 NMAC		С
Siting Criteria (Regarding on-site closure methods only: 19.15.17 10 n Instructions Each siting criteria requires a demonstration of compliance in the closure p certain siting criteria may require administrative approval from the appropriate district for consideration of approval Instifications and/or demonstrations of equivalency are re-	olan Recommendations of acceptable soi office or may be considered an exception	which must be submitted to the	
Ground water is less than 50 feet below the bottom of the buried waste			Yes No
- NM Office of the State Engineer - IWATERS database search; USGS: Dat	a obtained from nearby wells		□N/A
Ground water is between 50 and 100 feet below the bottom of the buried	waste		Yes No
- NM Office of the State Engineer - IWATERS database search; USGS; Data	obtained from nearby wells		
Ground water is more than 100 feet below the bottom of the buried waste.			☐Yes ☐No
- NM Office of the State Engineer - tWATERS database search; USGS; Data			
	•		
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other s (measured from the ordinary high-water mark)	ignificant watercourse or lakebed, sin	khole, or playa lake	YesNo
- Topographic map, Visual inspection (certification) of the proposed site			
 Within 300 feet from a permanent residence, school, hospital, institution, or chur Visual inspection (certification) of the proposed site; Aerial photo; satellite 	•	oplication.	Yes No
- visual dispection (certification) of the proposed site, Aerial photo, sateline	image		☐Yes ☐No
Within 500 horizontal feet of a private, domestic fresh water well or spring that le purposes, or within 1000 horizontal fee of any other fresh water well or spring, if a NM Office of the State Engineer - iWATERS database; Visual inspection (or	existence at the time of the initial app	_	
Within incorporated municipal boundaries or within a defined municipal fresh w pursuant to NMSA 1978, Section 3-27-3, as amended - Written confirmation or verification from the municipality, Written approv		ipal ordinance adopted	Yes No
Within 500 feet of a wetland	ar obtained from the manterpairty		☐Yes ☐No
- US Fish and Wildlife Wetland Identification map; Topographic map; Visua	nl inspection (certification) of the prop	oosed site	
Within the area overlying a subsurface mine.			Yes No
- Written confiramtion or verification or map from the NM EMNRD-Mining	and Mineral Division		
Within an unstable area			Yes No
 Engineering measures incorporated into the design; NM Bureau of Geology Topographic map 	& Mineral Resources, USGS; NM G	eological Society;	
Within a 100-year floodplain - FEMA map			Yes No
18 On-Site Closure Plan Checklist: (19.15.17.13 NMAC) Instructions: In	Each of the following items must	hee attached to the closu	re plan. Please indicate.
by a check mark in the box, that the documents are attached.			- /
Siting Criteria Compliance Demonstrations - based upon the appro	priate requirements of 19.15.17.10) NMAC	
Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC			
Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC			
Construction/Design Plan of Temporary Pit (for in place burial of a drying pad) - based upon the appropriate requirements of 19 15.17.11 NMAC			
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			
Waste Material Sampling Plan - 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 or in case on-site closure standards cannot be achieved) Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC			
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			
Site Reclamation Plan - based upon the appropriate requirements of Subsection C of 10.15.17.13 NMAC			

Operator Application Contification	
Operator Application Certification: Thereby certify that the information submitted with this application is	is true, accurate and complete to the best of my knowledge and belief.
Name (Print) Crystal Tafoya	Title. Regulatory Technician
Signature: Constal Talo	Date: 8/21/08
e-mail address crystal.tafoya@conocophillup.cou	Telephone: 505-326-9837
e-man address	E Perephone. 355 356 3637
20 OCD Approval: Permit Application (including closure p	
OCD Representative Signature:	
Title: Envirolspec	OCD Permit Number:
\	plan prior to implementing any closure activities and submitting the closure report. The closure in completion of the closure activities. Please do not complete this section of the form until an have been completed.
	Closure Completion Date:
22 Closure Method: Waste Excavation and Removal On-site Closure If different from approved plan, please explain.	Method Alternative Closure Method Waste Removal (Closed-loop systems only)
	oop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities
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 opeartions?
Yes (If yes, please demonstrate compliane to the items belo	w) No
Required for impacted areas which will not be used for future set Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation	rvice and operations.
Re-vegetation Application Rates and Seeding Technique	
24 Closure Report Attachment Checklist: Instructions: Each 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)	n of the following items must be attached to the closure report. Please indicate, by a check mark in
Confirmation Sampling Analytical Results (if applicable	la
Waste Material Sampling Analytical Results (if application of the control of the	
Disposal Facility Name and Permit Number	
Soil Backfilling and Cover Installation	
Re-vegetation Application Rates and Seeding Technique	e
Site Reclamation (Photo Documentation)	
On-site Closure Location Latitude:	Longitude NAD 1927 1983
Operator Closure Cartification	
Operator Closure Certification: I hereby certify that the information and attachments submitted with the closure complies with all applicable closure requirements and co	this closure report is ture, accurate and complete to the best of my knowledge and belief. I also certify that onditions specified in the approved closure plan
Name (Print):	Title:
Signature:	Date.
e-mail address	Telephone:

ConocoPhillips Company

Closed Loop Design:

The closed loop design will not incorporate a temporary pit or below grade tank. The plan will utilize an above grade tank suitable for holding the cuttings and fluids generated during drilling operations. The volume of the tank shall be of a sufficient volume to maintain an adequate free board for periodic removal and disposal of cuttings and fluids.

ConocoPhillips Company may incorporate the use of a 20 mil, string reinforced, LLDPE liner with factory welded seams to line the drying pad in order to minimize the volume of fluids to be disposed of. The drying pad will be designed to prevent contamination of fresh water, protect public health and the environment, and have sumps to facilitate the collection of liquids derived from drilling cuttings, as specified per subsection H of 19.15.17.11. The cuttings pad will be constructed above grade and containment will be through the use of earthen berms of sufficient height to contain the cuttings and prevent run-off of surface water or fluids. The drying pad area will replace the area of the drill site previously designated for the reserve pit. It will be signed in compliance with 19.15.3.103.NMAC. Frac tanks will be utilized on site for fresh water storage.

Closed Loop Operations and Maintenance:

The closed loop system will be operated and maintained for solids and liquid containment to prevent ground water contamination as follows:

- Any free liquids will be recovered and reused or disposed of at the Basin Disposal Facility (Permit # NM-01-005). Reuse may include the relocating of liquids to be used in other permitted drilling operations.
- 2. Drill solids will be recovered from location and hauled to a Envirotech (Permit #NM-01-0011) periodically as required to maintain a safe free board in the cuttings tank. No onsite trench burial of cuttings will occur.
- 3. In the event a drying pad is utilized, the cuttings will be picked up and transported to Basin Disposal Facility (Permit #NM-01-005). The liner will be disposed of at the San Juan County Landfill located on CR 3100. The drying pad will be closed within 6 months from the date that the drilling rig is released. Berms constructed from native materials will be bladed on site to the location's contour.
- 4. Any drilling materials or trash will be stored and disposed of appropriately.
- 5. The NMOCD will be notified within 48 hours of the discovery of compromised integrity of the closed loop containment. Any required repairs will commence immediately.

Closed Loop Closure Plan:

- Upon completion of the drilling operations, all solids and liquids will be removed and disposed of to Envirotech (Permit #NM-01-0011) and Basin Disposal Facility (Permit # NM-01-005). Equipment shall also be removed from location. In the event a drying pad is utilized, the solids contained on the pad shall remain on site to allow sufficient drying and will then be transported to Envirotech (Permit # NM-01-0011) within 6 months from the date that the drilling rig is released.
- 2. After the drying pad is removed the surface below will be visually inspected for any contamination. If contamination is discovered a five point composite sample will be taken of the drying pad area 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	500

- 3. 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.
- Notification will be sent to OCD when the reclaimed area is seeded.
- 5. COP shall seed the disturbed areas the first growing season after the operator closes the drying pad. 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) 50 percent Purity 80 percent Purity Germination 40 percent Germination 63 percent Percent PLS 20 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