Form 3160 -3 (March 2012)				FORM OMB P Expires (	APPROVED No. 1004-0137 October 31, 2014	
UNITED STATES DEPARTMENT OF THE INTERIOR DUDEALLOE LAND MANAGEMENT			5. Lease Serial No. NMLC0064756			
APPLICATION FOR PERMIT TO DRILL OR REENTER			6. If Indian, Allotee	or Tribe Name		
la. Type of work:	R			7. If Unit or CA Agre	sement, Name and No.	
lb. Type of Well: 🔽 Oil Well 🔲 Gas Well 🛄 Other	۲s	ingle Zone 🔲 Multip	ole Zone	8. Lease Name and REVOLVER 24 FE	Well No. 321139 DERAL COM 1H	
2. Name of Operator CONOCOPHILLIPS COMPANY		21781	7	9. API Well No. <u>30 - 01</u>	15-44855	
3a. Address 600 N. Dairy Ashford Rd Houston TX 77079	3b. Phone N (281)293-	0. (include area code) 1748		10. Field and Pool, or WOLFCAMP / WO	Exploratory DLFCAMP	
<ol> <li>Location of Well (Report location clearly and in accordance with any At surface NENE / 20 FNL / 400 FEL / LAT 32.020803 / L At proposed prod. zone NENE / 50 FNL / 0 FEL / LAT 32.04</li> </ol>	) State require _ONG -103 1995 / LON	ments.*) 3.723836 IG -103.722594		11. Sec., T. R. M. or Blk. and Survey or Area SEC 25 / T26S / R31E / NMP		
<ul> <li>14. Distance in miles and direction from nearest town or post office*</li> <li>45 miles</li> </ul>				12. County or Parish EDDY	13. State NM	
15. Distance from proposed* location to nearest 20 feet property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of acres in lease         17. Spacin           2560         720		g Unit dedicated to this well			
<ol> <li>Distance from proposed location* to nearest well, drilling, completed, 4824 feet applied for, on this lease, ft.</li> </ol>	19. Proposed Depth         20. BLM/           11530 feet / 21838 feet         FED: E3			3IA Bond No. on file S0085		
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3161 feet	22 Approximate date work will start* 02/01/2018		23. Estimated duration 30 days			
	24. Atta	chments				
The following, completed in accordance with the requirements of Onshore	e Oil and Gas	Order No.1, must be a	ttached to thi	s form:		
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan. (if the leastion is on National Forest Surtam I</li> </ol>	lands tha	<ol> <li>Bond to cover t Item 20 above).</li> </ol>	he operation	ns unless covered by an	existing bond on file (see	
SUPO must be filed with the appropriate Forest Service Office).	Lands, the	6. Such other site BLM.	specific info	ormation and/or plans as	s may be required by the	
25. Signature (Electronic Submission)	Namo Ashl	e (Printed/Typed) ey Bergen / Ph: (43	2)688-693	8	Date 03/21/2017	
Title Associate Regulatory MCRU						
Approved by (Signature) (Electronic Submission)	Name (Printed/Typed)         Date           Cody Layton / Ph: (575)234-5959         03/26/2018			Date 03/26/2018		
Title	Office			<u> </u>		
Application approval does not warrant or certify that the applicant holds conduct operations thereon. Conditions of approval, if any, are attached.	s legal or equ	itable title to those righ	its in the sub	ject lease which would e	entitle the applicant to	
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a cri States any false, fictitious or fraudulent statements or representations as to	ime for any o any matter	person knowingly and within its jurisdiction.	willfully to m	ake to any department of	or agency of the United	
(Continued on page 2)			_	*(Inst	tructions on page 2)	
ARTESIA DISTRIC		u conditi	ONS			
APR 03 2018 APPROV	KD WI					

Approval Date: 03/26/2018

RECEIVED

Ruf 4-5-18

## **FMSS**

Application for Permit to Drill

## **APD Package Report**

APD ID: 10400011918 APD Received Date: 03/21/2017 01:05 PM Operator: CONOCOPHILLIPS COMPANY

APD Package Report Contents

- Form 3160-3
- Operator Certification Report
- Application Report
- Application Attachments -- Well Plat: 1 file(s)
- Drilling Plan Report
- Drilling Plan Attachments
  - -- Blowout Prevention Choke Diagram Attachment: 1 file(s)
  - -- Blowout Prevention BOP Diagram Attachment: 1 file(s)
  - -- Casing Design Assumptions and Worksheet(s): 4 file(s)
- SUPO Report
- SUPO Attachments
  - -- Attach Well map: 1 file(s)
  - -- Production Facilities map: 2 file(s)
  - -- Water source and transportation map: 1 file(s)
  - -- Well Site Layout Diagram: 2 file(s)
  - -- Existing Vegetation at the well pad attachment: 1 file(s)
  - -- ROW Applications: 1 file(s)
  - -- Other SUPO Attachment: 5 file(s)
- PWD Report
- PWD Attachments
  - -- None
- Bond Report
- Bond Attachments
  - -- None

Date Printed: 03/26/2018 03:50 PM

Well Status: AAPD Well Name: REVOLVER 24 FEDERAL CC Well Number: 1H

> CIN: O.L CONSERVATION ARTESIA DISTRICT

> > APR 03 2018

#### RECEIVED

Carlsbad Field D.S. Department of the Interior OCD Artes: Bureau of Land Management

#### **INSTRUCTIONS**

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

#### NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160

PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service well or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts. ROUTINE USE: Information from the record and/or the record will be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.

EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to allow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

**BURDEN HOURS STATEMENT:** Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

(Continued on page 3)

(Form 3160-3, page 2)

#### **Additional Operator Remarks**

#### Location of Well

SHL: NENE / 20 FNL / 400 FEL / TWSP: 26S / RANGE: 31E / SECTION: 25 / LAT: 32.020803 / LONG: -103.723836 (TVD: 1028 feet, MD: 1028 feet )
 PPP: SENE / 2640 FNL / 400 FEL / TWSP: 26S / RANGE: 31E / SECTION: 13 / LAT: 32.03542 / LONG: -103.723467 (TVD: 11530 feet, MD: 11880 feet )
 PPP: SESE / 50 FSL / 330 FEL / TWSP: 26S / RANGE: 31E / SECTION: 24 / LAT: 32.020994 / LONG: -103.723611 (TVD: 11530 feet, MD: 11880 feet )
 BHL: NENE / 50 FNL / 0 FEL / TWSP: 26S / RANGE: 31E / SECTION: 13 / LAT: 32.04995 / LONG: -103.723611 (TVD: 11530 feet, MD: 11880 feet )

#### **BLM Point of Contact**

Name: Priscilla Perez Title: Legal Instruments Examiner Phone: 5752345934 Email: pperez@blm.gov

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### **Review and Appeal Rights**

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.

## PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

<b>OPERATOR'S NAME:</b>	ConocoPhillips Co.
LEASE NO.:	NMLC064756
WELL NAME & NO.:	Revolver 24 Federal Com 1H
SURFACE HOLE FOOTAGE:	20'/N & 0'/E
<b>BOTTOM HOLE FOOTAGE</b>	50'/N & 0'/E; 13
LOCATION:	Section 25 T.26 S., R.31 E., NMPM
COUNTY:	Eddy County, New Mexico

## COA

H2S	r Yes	r No	
Potash			C R-111-P
Cave Karst Potential	( Low	Medium	🕫 High
Variance		• Flex Hose	• Other
Wellhead	Conventional	Multibowl	C Both
Other	□     □     4 String Area	<b>Г</b> Capitan Reef	<b>F</b> WIPP

#### A. Hydrogen Sulfide

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the **Delaware** formation. As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

## **B.** CASING

- 1. The **11** 3/4 inch surface casing shall be set at approximately **1028** feet (a minimum of 25 feet into the Rustler Anhydrite and above the salt) and cemented to the surface.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
  - b. Wait on cement (WOC) time for a primary cement job will be a minimum of <u>8</u> <u>hours</u> or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement).
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.

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d. If cement falls back, remedial cementing will be done prior to drilling out that string.

# Operator shall filled 2/3<sup>rd</sup> of casing with fluid while running intermediate casing to maintain collapse safety factor.

2. The minimum required fill of cement behind the 85/8 inch intermediate casing is: Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.

Operator has proposed a DV tool, the depth may be adjusted as long as the cement is changed proportionally. The DV tool may be cancelled if cement circulates to surface on the first stage.

- a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job. Additonal cement maybe required. Excess calculates to 17%.
- b. Second stage above DV tool:Cement to surface. If cement does not circulate, contact the appropriate BLM office. Additonal cement maybe required. Excess calculates to 15%.
- In <u>High Cave/Karst Areas</u> if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.
- 3. The minimum required fill of cement behind the 5-1/2 inch production casing is:
  - Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification.

## C. PRESSURE CONTROL

- 1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).
- 2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.
- 3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the intermediate casing shoe shall be 10,000 (10M) psi.

## **GENERAL REQUIREMENTS**

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)
  - Eddy County Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822
- 1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
  - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
  - b. When the operator proposes to set surface casing with Spudder Rig
    - Notify the BLM when moving in and removing the Spudder Rig.
    - Notify the BLM when moving in the 2<sup>nd</sup> Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
    - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
- 2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
- 3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

#### A. CASING

- 1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
- <u>Wait on cement (WOC) for Potash Areas:</u> After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least <u>24 hours</u>. WOC time will be recorded in the driller's log. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 3. <u>Wait on cement (WOC) for Water Basin:</u> After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least <u>8 hours</u>. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
- 5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- 6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- 7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

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8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

#### **B. PRESSURE CONTROL**

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
- 2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
- 3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- 4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
  - e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.
- 5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after

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installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

- b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).
- c. The tests shall be done by an independent service company utilizing a test plug. The results of the test shall be reported to the appropriate BLM office.
- d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- e. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- f. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes. This test shall be performed prior to the test at full stack pressure.
- g. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

#### C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

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#### D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

#### Waste Minimization Plan (WMP)

In the interest of resource development, submission of additional well gas capture development plan information is deferred but may be required by the BLM Authorized Officer at a later date.

#### ZS 022518

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## PECOS DISTRICT SURFACE USE CONDITIONS OF APPROVAL

OPERATOR'S NAME:	ConocoPhillips Co.
LEASE NO.:	NMLC064756
WELL NAME & NO.:	Revolver 24 Federal Com 1H
SURFACE HOLE FOOTAGE:	20'/N & 0'/E
BOTTOM HOLE FOOTAGE	50'/N & 0'/E; 13
LOCATION:	Section 25 T.26 S., R.31 E., NMPM
COUNTY:	Eddy County, New Mexico

## **TABLE OF CONTENTS**

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

Ceneral Provisions
Permit Expiration
Archaeology, Paleontology, and Historical Sites
Noxious Weeds
Special Requirements
Phantom Banks Special Management Area
Cave/Karst
Watershed/Water Quality
Tank Battery
Construction
Notification
Topsoil
Closed Loop System
Federal Mineral Material Pits
Well Pads
Roads
Road Section Diagram
Production (Post Drilling)
Well Structures & Facilities
Pipelines
Electric Lines
Interim Reclamation
Final Abandonment & Reclamation

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#### I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

## **II. PERMIT EXPIRATION**

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

## III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

## **IV. NOXIOUS WEEDS**

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

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## V. SPECIAL REQUIREMENT(S)

### **Phantom Banks Special Management Area:**

Surface disturbance will not be allowed within up to 200 meters of active heronries or by delaying activity for up to 120 days, or a combination of both.

Exhaust noise from engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 ft. from the source of the noise.

## Watershed/Water Quality:

The entire well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad. Topsoil shall not be used to construct the berm. No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad. The berm shall be maintained through the life of the well and after interim reclamation has been completed. Any water erosion that may occur due to the construction of the well pad during the life of the well will be quickly corrected and proper measures will be taken to prevent future erosion.

#### Tank Battery:

Tank battery locations will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing to prevent tears or punctures. Tank battery berms must be large enough to contain 1  $\frac{1}{2}$  times the content of the largest tank. Automatic shut off, check values, or similar systems will be installed for tanks to minimize the effects of catastrophic line failures used in production or drilling.

## **Cave and Karst Conditions of Approval for APDs**

\*\* Depending on location, additional Drilling, Casing, and Cementing procedures may be required by engineering to protect critical karst groundwater recharge areas.

## **Cave/Karst Surface Mitigation**

The following stipulations will be applied to minimize impacts during construction, drilling and production.

#### **Construction:**

In the advent that any underground voids are opened up during construction activities, construction activities will be halted and the BLM will be notified immediately. Smaller powerlines will be routed around sinkholes and other karst features to avoid or lessen the possibility of encountering near surface voids and to minimize changes to runoff or possible leaks and spills from entering karst systems. Larger powerlines will adjust their pole spacing to avoid cave and karst features.

#### No Blasting:

No blasting will be utilized for pad construction. The pad will be constructed and leveled by adding the necessary fill and caliche.

#### **Pad Berming:**

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The entire perimeter of the well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad.

- The compacted berm shall be constructed at a minimum of 12 inches high with impermeable mineral material (e.g., caliche).
- No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad.
- The topsoil stockpile shall be located outside the bermed well pad.
- Topsoil, either from the well pad or surrounding area, shall not be used to construct the berm.
- No storm drains, tubing or openings shall be placed in the berm.
- If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.
- The integrity of the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed.
- Any access road entering the well pad shall be constructed so that the integrity of the berm height surrounding the well pad is not compromised. (Any access road crossing the berm cannot be lower than the berm height.)
- Following a rain event, all fluids will vacuumed off of the pad and hauled off-site and disposed at a proper disposal facility.

#### Tank Battery Liners and Berms:

Tank battery locations and all facilities will be lined and bermed. A 20 mil permanent liner will be installed with a 4 oz. felt backing, or equivalent, to prevent tears or punctures. Tank battery berms must be large enough to contain 1  $\frac{1}{2}$  times the content of the largest tank.

#### Leak Detection System:

A method of detecting leaks is required. The method could incorporate gauges to measure loss, situating values and lines so they can be visually inspected, or installing electronic sensors to alarm when a leak is present. Leak detection plan will be submitted to BLM for approval.

#### Automatic Shut-off Systems:

Automatic shut off, check values, or similar systems will be installed for pipelines and tanks to minimize the effects of catastrophic line failures used in production or drilling.

#### **Cave/Karst Subsurface Mitigation**

The following stipulations will be applied to protect cave/karst and ground water concerns:

#### **Rotary Drilling with Fresh Water:**

Fresh water will be used as a circulating medium in zones where caves or karst features are expected. SEE ALSO: Drilling COAs for this well.

#### **Directional Drilling:**

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Kick off for directional drilling will occur at least 100 feet below the bottom of the cave occurrence zone. SEE ALSO: Drilling COAs for this well.

#### Lost Circulation:

ALL lost circulation zones from the surface to the base of the cave occurrence zone will be logged and reported in the drilling report.

Regardless of the type of drilling machinery used, if a void of four feet or more and circulation losses greater than 70 percent occur simultaneously while drilling in any cavebearing zone, the BLM will be notified immediately by the operator. The BLM will assess the situation and work with the operator on corrective actions to resolve the problem.

#### **Abandonment Cementing:**

Upon well abandonment in high cave karst areas additional plugging conditions of approval may be required. The BLM will assess the situation and work with the operator to ensure proper plugging of the wellbore.

#### **Pressure Testing:**

Annual pressure monitoring will be performed by the operator on all casing annuli and reported in a sundry notice. If the test results indicated a casing failure has occurred, remedial action will be undertaken to correct the problem to the BLM's approval.

## VI. CONSTRUCTION

## A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5909 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

## B. TOPSOIL

The operator shall strip the top portion of the soil (root zone) from the entire well pad area and stockpile the topsoil along the edge of the well pad as depicted in the APD. The root zone is typically six (6) inches in depth. All the stockpiled topsoil will be redistributed over the interim reclamation areas. Topsoil shall not be used for berming the pad or facilities. For final reclamation, the topsoil shall be spread over the entire pad area for seeding preparation.

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Other subsoil (below six inches) stockpiles must be completely segregated from the topsoil stockpile. Large rocks or subsoil clods (not evident in the surrounding terrain) must be buried within the approved area for interim and final reclamation.

### C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

#### D. FEDERAL MINERAL MATERIALS PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

#### E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation. The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

## F. EXCLOSURE FENCING (CELLARS & PITS)

#### **Exclosure Fencing**

The operator will install and maintain exclosure fencing for all open well cellars to prevent access to public, livestock, and large forms of wildlife before and after drilling operations until the pit is free of fluids and the operator initiates backfilling. (For examples of exclosure fencing design, refer to BLM's Oil and Gas Gold Book, Exclosure Fence Illustrations, Figure 1, Page 18.)

#### G. ON LEASE ACCESS ROADS

#### **Road Width**

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed twenty (20) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty-five (25) feet.

#### Surfacing

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

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Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

#### Crowning

Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

#### Ditching

Ditching shall be required on both sides of the road.

#### Turnouts

Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

#### Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

#### Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

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#### Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

400 foot road with 4% road slope:  $\frac{400'}{4\%}$  + 100' = 200' lead-off ditch interval

#### **Cattle guards**

An appropriately sized cattle guard sufficient to carry out the project shall be installed and maintained at fence/road crossings. Any existing cattle guards on the access road route shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattle guards that are in place and are utilized during lease operations.

#### **Fence Requirement**

Where entry is granted across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting. The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fences.

#### **Public Access**

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

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## VII. PRODUCTION (POST DRILLING)

#### A. WELL STRUCTURES & FACILITIES

#### **Placement of Production Facilities**

Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

#### **Exclosure Netting (Open-top Tanks)**

Immediately following active drilling or completion operations, the operator will take actions necessary to prevent wildlife and livestock access, including avian wildlife, to all open-topped tanks that contain or have the potential to contain salinity sufficient to cause harm to wildlife or livestock, hydrocarbons, or Resource Conservation and Recovery Act of 1976-exempt hazardous substances. At a minimum, the operator will net, screen, or cover open-topped tanks to exclude wildlife and livestock and prevent mortality. If the operator uses netting, the operator will cover and secure the open portion of the tank to prevent wildlife entry. The operator will net, screen, or cover the tanks from the location or the tanks no longer contain substances that could be harmful to wildlife or livestock. Use a maximum netting mesh size of 1 ½ inches. The netting must not be in contact with fluids and must not have holes or gaps.

#### Chemical and Fuel Secondary Containment and Exclosure Screening

The operator will prevent all hazardous, poisonous, flammable, and toxic substances from coming into contact with soil and water. At a minimum, the operator will install and maintain an impervious secondary containment system for any tank or barrel containing hazardous, poisonous, flammable, or toxic substances sufficient to contain the contents of the tank or barrel and any drips, leaks, and anticipated precipitation. The operator will dispose of fluids within the containment system that do not meet applicable state or U. S. Environmental Protection Agency livestock water standards in accordance with state law; the operator must not drain the fluids to the soil or ground. The operator will design, construct, and maintain all secondary containment systems to prevent wildlife and livestock exposure to harmful substances. At a minimum, the operator will install effective wildlife and livestock exclosure systems such as fencing, netting, expanded metal mesh, lids, and grate covers. Use a maximum netting mesh size of 1 ½ inches.

#### **Open-Vent Exhaust Stack Exclosures**

The operator will construct, modify, equip, and maintain all open-vent exhaust stacks on production equipment to prevent birds and bats from entering, and to discourage perching, roosting, and nesting. (*Recommended exclosure structures on open-vent exhaust stacks are in the shape of a cone.*) Production equipment includes, but may not be limited to, tanks, heater-treaters, separators, dehydrators, flare stacks, in-line units, and compressor mufflers.

#### **Containment Structures**

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Proposed production facilities such as storage tanks and other vessels will have a secondary containment structure that is constructed to hold the capacity of 1.5 times the largest tank, plus freeboard to account for precipitation, unless more stringent protective requirements are deemed necessary.

#### **Painting Requirement**

All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color, <u>Shale Green</u> from the BLM Standard Environmental Color Chart (CC-001: June 2008).

#### **B. PIPELINES**

#### BURIED PIPELINE STIPULATIONS

A copy of the application (Grant, APD, or Sundry Notice) and attachments, including conditions of approval, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The Holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

2. The Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 <u>et seq.</u> (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, <u>et seq</u>. or the Resource Conservation and Recovery Act, 42 U.S.C.6901, <u>et seq</u>.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil or other pollutant, wherever found, shall be the responsibility of holder, regardless of fault. Upon failure of holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including where

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appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve holder of any responsibility as provided herein.

5. All construction and maintenance activity will be confined to the authorized right-of-way.

6. The pipeline will be buried with a minimum cover of <u>36</u> inches between the top of the pipe and ground level.

7. The maximum allowable disturbance for construction in this right-of-way will be 30 feet:

- Blading of vegetation within the right-of-way will be allowed: maximum width of blading operations will not exceed <u>20</u> feet. The trench is included in this area. (*Blading is defined as the complete removal of brush and ground vegetation.*)
- Clearing of brush species within the right-of-way will be allowed: maximum width of clearing operations will not exceed <u>30</u> feet. The trench and bladed area are included in this area. (*Clearing is defined as the removal of brush while leaving ground vegetation (grasses, weeds, etc.) intact. Clearing is best accomplished by holding the blade 4 to 6 inches above the ground surface.*)
- The remaining area of the right-of-way (if any) shall only be disturbed by compressing the vegetation. (*Compressing can be caused by vehicle tires, placement of equipment, etc.*)

8. The holder shall stockpile an adequate amount of topsoil where blading is allowed. The topsoil to be stripped is approximately \_\_\_\_6\_\_\_ inches in depth. The topsoil will be segregated from other spoil piles from trench construction. The topsoil will be evenly distributed over the bladed area for the preparation of seeding.

9. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

10. Vegetation, soil, and rocks left as a result of construction or maintenance activity will be randomly scattered on this right-of-way and will not be left in rows, piles, or berms, unless otherwise approved by the Authorized Officer. The entire right-of-way shall be recontoured to match the surrounding landscape. The backfilled soil shall be compacted and a 6 inch berm will be left over the ditch line to allow for settling back to grade.

11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.

12. The holder will reseed all disturbed areas. Seeding will be done according to the attached seeding requirements, using the following seed mix.

() seed mixture 1	() seed mixture 3
(X) seed mixture 2	() seed mixture 4
() seed mixture 2/LPC (	) Aplomado Falcon Mixture

13. All above-ground structures not subject to safety requirements shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2.

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14. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. All signs and information thereon will be posted in a permanent, conspicuous manner, and will be maintained in a legible condition for the life of the pipeline.

15. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder before maintenance begins. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway. As determined necessary during the life of the pipeline, the Authorized Officer may ask the holder to construct temporary deterrence structures.

16. Any cultural and/or paleontological resources (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

17. The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes associated roads, pipeline corridor and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

18. <u>Escape Ramps</u> - The operator will construct and maintain pipeline/utility trenches [that are not otherwise fenced, screened, or netted] to prevent livestock, wildlife, and humans from becoming entrapped. At a minimum, the operator will construct and maintain escape ramps, ladders, or other methods of avian and terrestrial wildlife escape in the trenches according to the following criteria: Any trench left open for eight (8) hours or less is not required to have escape ramps; however, before the trench is backfilled, the contractor/operator shall inspect the trench for wildlife, remove all trapped wildlife, and release them at least 100 yards from the trench.

For trenches left open for eight (8) hours or more, earthen escape ramps (built at no more than a 30 degree slope and spaced no more than 500 feet apart) shall be placed in the trench.

#### C. ELECTRIC LINES

## STANDARD STIPULATIONS FOR OVERHEAD ELECTRIC DISTRIBUTION LINES

A copy of the grant and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

2. The holder shall comply with all applicable Federal laws and regulations existing or

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hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 <u>et seq</u>. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. There will be no clearing or blading of the right-of-way unless otherwise agreed to in writing by the Authorized Officer.

5. Power lines shall be constructed and designed in accordance to standards outlined in "Suggested Practices for Avian Protection on Power lines: The State of the Art in 2006" Edison Electric Institute, APLIC, and the California Energy Commission 2006. The holder shall assume the burden and expense of proving that pole designs not shown in the above publication deter raptor perching, roosting, and nesting. Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modification or additions to all powerline structures placed on this right-of-way, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the holder without liability or expense to the United States.

Raptor deterrence will consist of but not limited to the following: triangle perch discouragers shall be placed on each side of the cross arms and a nonconductive perching deterrence shall be placed on all vertical poles that extend past the cross arms.

6. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting the fence. No permanent gates will be allowed unless

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approved by the Authorized Officer.

7. The BLM serial number assigned to this authorization shall be posted in a permanent, conspicuous manner where the power line crosses roads and at all serviced facilities. Numbers will be at least two inches high and will be affixed to the pole nearest the road crossing and at the facilities served.

8. Upon cancellation, relinquishment, or expiration of this grant, the holder shall comply with those abandonment procedures as prescribed by the Authorized Officer.

9. All surface structures (poles, lines, transformers, etc.) shall be removed within 180 days of abandonment, relinquishment, or termination of use of the serviced facility or facilities or within 180 days of abandonment, relinquishment, cancellation, or expiration of this grant, whichever comes first. This will not apply where the power line extends service to an active, adjoining facility or facilities.

10. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

11. Special Stipulations:

- For reclamation remove poles, lines, transformer, etc. and dispose of properly.
- Fill in any holes from the poles removed.

## VIII. INTERIM RECLAMATION

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce the size of the location. Interim reclamation should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for

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production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

## IX. FINAL ABANDONMENT & RECLAMATION

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

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#### Seed Mixture 2, for Sandy Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)\* per acre. There shall be <u>no</u> primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law (s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed\* per acre:

Species	l <u>b/acre</u>
Sand dropseed (Sporobolus cryptandrus)	1.0
Sand love grass (Eragrostis trichodes)	1.0
Plains bristlegrass (Setaria macrostachya)	2.0

\*Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed



U.S. Department of the Interior BUREAU OF LAND MANAGEMENT



## **Operator Certification**

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C.

NAME: Ashley Bergen		Signed on: 03/21/2017
Title: Associate, Regulato	ory MCBU	
Street Address: 3300 N.	A Street	
City: Midland	State: TX	<b>Zip</b> : 79710
Phone: (432)688-6938		
Email address: Ashley.B	ergen@conocophillips.com	
Field Represe	ntative	
Representative Name:	ASHLEY BERGEN	
Street Address: P.O. E	3ox 51810	
City: Midland	State: TX	<b>Zip:</b> 79707
Phone: (432)688-6938		
Email address: ASHLE	Y.BERGEN@COP.COM	

## AFMSS

APD ID: 10400011918

Well Type: OIL WELL

U.S. Department of the Interior BUREAU OF LAND MANAGEMENT



Submission Date: 03/21/2017

Well Number: 1H Well Work Type: Drill Highlighted data reflects the most recent changes <u>Show Final Text</u>

#### **Section 1 - General**

**Operator Name: CONOCOPHILLIPS COMPANY** 

Well Name: REVOLVER 24 FEDERAL COM

<b>APD ID:</b> 10400011918	Tie to previous NOS?	Submission Date: 03/21/2017
BLM Office: CARLSBAD	User: Ashley Bergen	Title: Associate, Regulatory MCBU
Federal/Indian APD: FED	Is the first lease penetrated fo	or production Federal or Indian? FED
Lease number: NMLC0064756	Lease Acres: 2560	
Surface access agreement in place?	Allotted? Res	servation:
Agreement in place? NO	Federal or Indian agreement:	
Agreement number:		
Agreement name:		
Keep application confidential? NO		
Permitting Agent? NO	APD Operator: CONOCOPHIL	LIPS COMPANY
Operator letter of designation:		

## **Operator Info**

Operator Organization Name:	CONOCOPHILLIPS COMPANY	(
Operator Address: 600 N. Dai	iry Ashford Rd	7!
Operator PO Box:		<b>21p</b> : 77079
Operator City: Houston	State: TX	
Operator Phone: (281)293-174	48	
Operator Internet Address:		

## **Section 2 - Well Information**

Well in Master Development Plan? NO	Mater Development Plan name:		
Well in Master SUPO? NO	Master SUPO name:		
Well in Master Drilling Plan? NO	Master Drilling Plan name:		
Well Name: REVOLVER 24 FEDERAL COM	Well Number: 1H	Well API Number:	
Field/Pool or Exploratory? Field and Pool	Field Name: WOLFCAMP	Pool Name: WOLFCAMP	
Is the proposed well in an area containing other mineral resources? NONE			

Well Number: 1H

Describe other minerals:				
Is the proposed well in a Helium produ	iction area? N	Use Existing Well Pad	? NO	New surface disturbance?
Type of Well Pad: MULTIPLE WELL		Multiple Well Pad Name: REVOLVER 24 FEDERAL PAD Number of Legs: 1		Number: 1
Well Class: HORIZONTAL				
Well Work Type: Drill				
Well Type: OIL WELL				
Describe Well Type:				
Well sub-Type: INFILL				
Describe sub-type:				
Distance to town: 45 Miles	Distance to ne	arest well: 4824 FT	Distanc	ce to lease line: 20 FT
Reservoir well spacing assigned acres	Measurement:	720 Acres		
Well plat: Revolver_24_Federal_Com	n_1H_C_102_03	8-17-2017.pdf		
Well work start Date: 02/01/2018		Duration: 30 DAYS		

#### **Section 3 - Well Location Table**

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83

Survey number:

#### Aliquot/Lot/Tract Lease Number EW Indicator NS Indicator -ongitude ease Type Elevation EW-Foot Meridian NS-Foot Section Latitude County Range Twsp State TVD QM EDD 20 FNL 400 FEL 26S 31E 25 32.02080 NEW NEW F NMLC0 316 102 102 -103.7238 Y NENE 3 MEXI MEXI 068282 1 8 8 36 NEW NEW F 75 FNL 399 FEL 26S 31E 24 32.02100 -EDD NMLC0 109 109 \_ SESE 28 103.7225 Y MEXI MEXI 064756 779 80 57 472 6 NEW NEW F 50 FSL 330 FEL 26S 31E 24 32.02099 EDD NMLC0 118 115 --103.7236 Y MEXI MEXI SESE 4 064756 836 80 30 11 9

Vertical Datum: NAVD88

U.S. Department of the Interior BUREAU OF LAND MANAGEMENT



APD ID: 10400011918

Operator Name: CONOCOPHILLIPS COMPANY

Well Name: REVOLVER 24 FEDERAL COM

Submission Date: 03/21/2017

Highlighted data reflects the most recent changes <u>Show Final Text</u>

Well Type: OIL WELL

Well Work Type: Drill

Well Number: 1H

## **Section 1 - Geologic Formations**

Formation			True Vertical	Measured			Producing
ID	Formation Name	Elevation	Depth	Depth	Lithologies	Mineral Resources	Formation
1	RUSTLER	2063	1028	1098	DOLOMITE,ANHYDRIT E	NONE	No
2	SALADO	690	1373	1373	SALT	NONE	No
3	CASTILE	-344	2407	2510	SALT	NONE	No
4	DELAWARE	-2147	4210	4231	SANDSTONE	NATURAL GAS,OIL	No
5	CHERRY CANYON	-3037	5100	5140	SANDSTONE	NATURAL GAS,OIL	No
6	BRUSHY CANYON	-4517	6580	6610	SANDSTONE	NATURAL GAS,OIL	No
7	BONE SPRINGS	-5872	7935	7980	SANDSTONE	NATURAL GAS,OIL	No
8	BONE SPRING 3RD	-8247	10310	10350	LIMESTONE	NATURAL GAS,OIL	No
9	WOLFCAMP	-9327	11390	11530	LIMESTONE,SHALE,SA NDSTONE	NATURAL GAS, OIL	Yes

## **Section 2 - Blowout Prevention**

Pressure Rating (PSI): 5M

Rating Depth: 21838

Equipment: Rotating Head, Annular Preventer, Pipe/Blind Rams, Kill Lines, Choke Lines, Adapter Spool

#### Requesting Variance? YES

**Variance request:** A variance is requested to use flexible choke line(s) from the BOP to Choke Manifold. Testing certificate is attached in "Flexhose Variance data" document

**Testing Procedure:** BOP/BOPE will be isolated from the casing and tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. See attached "Drill Plan" document.

#### Choke Diagram Attachment:

Revolver\_24\_Federal\_Com\_1H\_Choke\_Manifold\_03-09-2017.pdf

#### **BOP Diagram Attachment:**

Revolver\_24\_Federal\_COM\_Pad\_1\_\_BOPE\_07-21-2017.pdf

Well Number: 1H

Revolver\_24\_Federal\_Com\_1H\_Choke\_Manifold\_03-09-2017.pdf

Revolver\_24\_Federal\_COM\_Pad\_1\_BOPE\_07-21-2017.pdf

## **Section 3 - Casing**

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	14.7 5	11.75	NEW	API	N	0	1028	0	1028	-8369	-9397	1028	J-55	47	OTHER - BTC	3.39	6.68	DRY	15.3	DRY	15.3
2	INTERMED IATE	10.8 75	8.625	NEW	API	N	0	11350	0	11350	-8369	- 19719	11350	<b>P-</b> 110	32	OTHER - BTC	1.48	1.42	DRY	2.77	DRY	2.77
3	PRODUCTI ON	7.87 5	5.5	NEW	API	N	0	21838	0	11450	-8369	- 19819	21838	<b>P-</b> 110	20	OTHER - TXP	1.37	1.77	DRY	1.93	DRY	1.93

#### **Casing Attachments**

Casing ID: 1

String Type:SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

#### Casing Design Assumptions and Worksheet(s):

Revolver\_24\_Federal\_COM\_1H\_Csg\_Design\_Worksheet\_03-09-2017.pdf

Well Number: 1H

#### **Casing Attachments**

Casing ID: 2 String Type: INTERMEDIATE

**Inspection Document:** 

Spec Document:

**Tapered String Spec:** 

#### Casing Design Assumptions and Worksheet(s):

Revolver\_24\_Federal\_COM\_1H\_Csg\_Design\_Worksheet\_03-09-2017.pdf

Casing ID: 3 String Type: PRODUCTION

**Inspection Document:** 

Spec Document:

**Tapered String Spec:** 

#### Casing Design Assumptions and Worksheet(s):

Revolver\_24\_Federal\_COM\_1H\_Csg\_Design\_Worksheet\_03-09-2017.pdf

Revolver\_24\_Federal\_COM\_Pad\_1\_Production\_csg\_specification\_07-21-2017.pdf

#### Section 4 - Cement

String Type	Lead/Tail	Stage Tool	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	1028	529	1.68	8.94	889	100	Class C	Class C + 4.0% Bentonite + 0.2% Anti- Foam + 2.0% CaCl2 +0.125lb/sk LCM + 0.1% Dispersant
SURFACE	Tail				214	1.35	14.8	289	100	Class C	Class C + 0.2% Anti- Foam + 0.1% Lost Circ Control

#### Operator Name: CONOCOPHILLIPS COMPANY

Well Name: REVOLVER 24 FEDERAL COM

Well Number: 1H

String Type	Lead/Tail	Stage Tool	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
INTERMEDIATE	Lead	4300	0	1135 0	642	2.7	11	1733		Class C	75.00 lb/sk BWOB D049 + 1.00 % BWOB D013 Retarder + 10.00 % BWOB D020 Extender + 0.02 gal/sk VBWOB D047 Anti foam + 2.00 % BWOB D154 Extender + 0.15 % BWOB D208 Viscosifier
INTERMEDIATE	Tail				234	1.08	13.5	302	30	Class C	75.00 lb/sk BWOB D049 + 0.50 % BWOB D013 Retarder + 1.00 % BWOB D020 Extender + 3.00 lb/sk WBWOB D042 Extender + 0.02 gal/sk VBWOB D047Anti foam + 0.10 % BWOB D065 Dispersant + 0.13 lb/sk WBWOB D130 Lost Circula + 0.30 % BWOB D238 Fluid loss
PRODUCTION	Lead		0	2183 8	387	2.7	16.4	1200	15	Class C	2nd Stage Lead: Class 'C' + 2.00 % BWOB Extender + 3.40 lb/sk WBWOB D042 Extender + 0.02 gal/sk VBWOB D047 Anti Foam + 2.00 % BWOB D079 Extender + 5.00 % BWOB D154 Extender + 1.00 % BWOB S001 CaCl2
PRODUCTION	Tail				2235	1.08	16.4	2418	15	Class H	+ 1.00 % BWOB D020 Extender + 0.02 gal/sk VBWOB D047 Anti Foam + 0.10 % BWOB D065 Dispersant + 0.15 % BWOB D255 Fluid loss + 0.30 % BWOB D800 Retarder
Well Number: 1H

# **Section 5 - Circulating Medium**

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

**Describe what will be on location to control well or mitigate other conditions:** Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times. See attached "Drill Plan" for additional information.

**Describe the mud monitoring system utilized:** Closed-loop mud system using steel mud containers will be on location. Mud monitoring of any changes in levels (gains or losses) will use Pressure Volume Temperature, Pason, Visual Observations. See attached "Drill Plan" for additional information.

# **Circulating Medium Table**

Top Depth	Bottom Depth	Mud Type	Min Weight (Ibs/gal)	Max Weight (Ibs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	ΡΗ	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	1135 0	OTHER : Cut Brine or OBM	8.6	9.4							
0	2183 8	OIL-BASED MUD	9.5	12							
0	1028	SPUD MUD	8.34	8.6							

# Section 6 - Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:

Production tests will be conducted multiple times per week, through a test separator, during first months following completion. Thereafter, tests will be less frequently. See attached "Drill Plan" for additional information. List of open and cased hole logs run in the well:

GR

#### Coring operation description for the well:

No coring operation is planned, at this time.

Well Number: 1H

#### Section 7 - Pressure

Anticipated Bottom Hole Pressure: 6240

Anticipated Surface Pressure: 3829.46

Anticipated Bottom Hole Temperature(F): 234

Anticipated abnormal pressures, temperatures, or potential geologic hazards? NO

Describe:

**Contingency Plans geoharzards description:** 

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

Revolver\_24\_Federal\_COM\_1H\_H2S\_C\_Plan\_03-09-2017.pdf

#### **Section 8 - Other Information**

#### Proposed horizontal/directional/multi-lateral plan submission:

Revolver\_24\_Federal\_COM\_1H\_Directional\_Plan\_03-14-2017.pdf Revolver\_24\_Federal\_Com\_1H\_Wellbore\_Schematic\_03-14-2017.pdf

#### Other proposed operations facets description:

#### Other proposed operations facets attachment:

Revolver\_24\_Federal\_COM\_1H\_Drill\_Waste\_Containment\_03-14-2017.pdf Gas\_Capture\_Plan\_07-21-2017.pdf Revolver\_24\_Federal\_COM\_1H\_Drill\_Plan\_07-21-2017.pdf Revolver\_24\_Federal\_Pad\_1\_Running\_Procedure\_07-27-2017.pdf

#### Other Variance attachment:

Revolver\_24\_Federal\_COM\_1H\_Generic\_WH\_03-14-2017.pdf Revolver\_24\_Federal\_COM\_Pad\_1\_Flexhose\_Variance\_07-21-2017.pdf

# Attachment #6



- Item Description
  - 1 Pressure Gauge
  - 2 2 Gate Valves, 3-1/16" 10M
  - 3 2 Gate Valves, 3-1/16" 10M
  - 4 2 Gate Valves, 3-1/16" 10M
  - 5 2 Gate Valves, 3-1/16" 10M
  - 6 Upper Manual Adjustable Choke, 4-1/16", 10M
  - 7 Lower Manual Adjustable Choke, 4-1/16", 10M
  - 8 Gate Valve, 3-1/16" 10M
  - 9 Gate Valve, 3-1/16" 10M
  - 10 Remote Controlled Hydraulic Adjustable Choke, 4-1/16", 10M
  - 11 Gate Valve, 3-1/8" 5M
  - 12 Gate Valve, 3-1/8" 5M
  - 13 Gate Valve, 3-1/16" 10M

The 10M Choke Manifold & Valves will be tested to rated working pressure.



- Item Description
  - 1 Rotating Head, 13-5/8"
  - 2A Fill up Line and Valve
  - 2B Flow Line (10")
  - 2C Shale Shakers and Solids Settling Tank
  - 2D Cuttings Bins for Zero Discharge
  - 2E Rental Mud Gas Separator with vent line to flare and return line to mud system
  - 3 Annular BOP (13-5/8", 5M)
  - 4 Double Ram (13-5/8", 5M, Blind Ram top x Pipe Ram bottom)
  - 5 Kill Line (2" flexible hose, 5M)
  - 6 Kill Line Valve, Inner (2-1/16", 5M)
  - 7 Kill Line Valve, Outer (2-1/16", 5M)
  - 8 Kill Line Check Valve (2-1/16", 5M)
  - 9 Choke Line (3-1/8", 5M Stainless Steel Coflex Line)
  - 10 Choke Line Valve, Inner (3-1/8", 5M)
  - 11 Choke Line Valve, Outer (3-1/8", Hydraulically operated, 5M)
  - 12 Spacer Spool (13-5/8", 5M)
  - 13 Casing Head (13-5/8" 5M)
  - 14 Ball Valve and Threaded Nipple on Casing Head Outlet, 2" 5M
  - 15 Surface Casing



- Description Item
  - Rotating Head 1
  - Fill up Line and Valve 2A
  - 2B Flow Line (10")
  - 2C Shale Shakers and Centrifuges
  - 2D Cuttings Bins for Zero Discharge
  - 2E Mud Gas Separator with vent line to flare and return line to mud system
  - 3
  - Annular Preventer (11", 10M) Double Ram (11", 10M, Pipe Ram top x Blind Ram bottom) Drilling Spool (11" 10M) Single Ram (11", 10M, Pipe Rams) 4
  - 5
  - 4C
  - 6
  - Kill Line Gate Valve, Inner (2-1/16", 10M) Kill Line Gate Valve, Outer (2-1/16", 10M) 7
  - Kill Line Check Valve (2-1/16, 10M) 8
  - 9
  - CoFlex Choke Line (4-1/16", 10M) 10
  - Choke Line Gate Valve, Inner (4-1/16", 10M)
  - 11 Choke Line Hydraulically Operated Gate Valve. Outer, (4-1/6" 10M w/ Double Acting
  - 12 HCR) Drilling Spool Adapter (11", 10M)



#### Description Item

- Rotating Head
- 2A Fill up Line and Valve
- 2B
- Flow Line (10") Shale Shakers and Centrifuges Cuttings Bins for Zero Discharge 2C
- 2D
- 2E Mud Gas Separator with vent line to flare and return line to mud system
- 3
- Annular Preventer (13-5/8", 10M) Double Ram (13-5/8", 10M, Pipe Ram top x Blind Ram bottom) Drilling Spool (13-5/8" 10M) 4
- 5
- Single Ram (13-5/8", 10M, Pipe Rams) 4C
- 6
- Kill Line Gate Valve, Inner (2-1/16", 10M) Kill Line Gate Valve, Outer (2-1/16", 10M) 7
- 8 Kill Line Check Valve (2-1/16, 10M)
- CoFlex Choke Line (4-1/16", 10M) 9
- Choke Line Gate Valve, Inner (4-1/16", 10M) 10
- Choke Line Hydraulically Operated Gate Valve, Outer, (4-1/6" 10M w/ Double Acting HCR) 11
- 12 Drilling Spool Adapter (13-5/8", 10M)

# **REVOLVER 24 FEDERAL COM 1H**

Type	Depth	Depth	Csg Ionath fi	Ŵ	ΥW	ŝ	Tensile	Drill Flu	P				Lices TV/Dilli								
Surface Casing	1028	1028	1026	3 47	1 3(	21 15	10 7370	00	3.6				- 2000								
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Intermediate 2 Casing	9	0																			
Production 1 Casing	21836	11450	2183	3	12	630 111	00 6410	8	12												
									1												
Burst Design (Safety	) Factors -	BLM Cri	iteria					0	ollapse Desig	in (Safety)	Factors - B	LM Criter	ei	Joint	Strength De	ign (Safe	y) Factors -	BLM Cri	teria		
Burst Design (Safety) Facto	r: SFb							U I	stanse Design (Si	alety) Factor S	SFC			Joint S	trength Design (S	afety) Factor	SFt				
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<ul> <li>BHP is</li> </ul>	s bottom hole ;	pressure in t	is Jad spunoc	quare inch	, (bsı)				•	NW is mud v	veight in pound	s per gallon	(504)		•	is the weight	of the casing st	mod ni gen	ds (fbs)		
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**REVOLVER 24 FEDERAL COM 1H** 

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SF = 1.48 is based on internal ConocoPhillips casing design assuming 1/3 casing evacuation

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# **Production Casing Specification Sheet**

For the latest performance data, always visit our website: www.tenaris.com

August 29 2016



**Connection**: TenarisXP® BTC **Casing/Tubing**: CAS **Coupling Option**: REGULAR Size: 5.500 in. Wall: 0.361 in. Weight: 20.00 lbs/ft Grade: P110 Min. Wall Thickness: 87.5 %

			PIPE BODY	DATA		
			GEOME	<b>FRY</b>		
	Nominal OD	<b>5.5</b> 00 in.	Nominal Weight	20.00 lbs/ft	Standard Drift Diameter	<b>4.653</b> in.
	Nominal ID	4 <b>.77</b> 8 in.	Wall Thickness	0.361 in.	Special Drift Diameter	N/A
	Plain End Weight	19.83 lbs/ft				
			PERFORM	ANCE		
	Body Yield Strength	<b>641</b> × 1000 lbs	Internal Yield	1 <b>263</b> 0 psi	SMYS	110000 psi
	Collapse	<b>1110</b> 0 psi				
		TEP	VARISXP® BTC CO	NNECTION D.	ΔΤΑ	
			GEOME	IRY	·I······	
	Connection OD	<b>6.1</b> 00 in.	Coupling Length	9,450 in.	Connection ID	4.766 in.
	Critical Section Area	<b>5.</b> 8 <b>28</b> sq. in.	Threads per in.	5.00	Make-Up Loss	<b>4,2</b> 04 in.
3			PERFORM	ANCE	<u></u>	
3	Tension Efficiency	100 %	Joint Yield Strength	<b>64</b> 1 x 1000 Ibs	Internal Pressure Capacity <sup>(<u>1</u>)</sup>	<b>1263</b> 0 psi
	Structural Compression Efficiency	100 %	Structural Compression Strength	<b>641</b> x 1000 Ibs	Structural Bending <sup>(2)</sup>	<b>92</b> °/100 ft
	External Pressure Capacity	<b>111</b> 00 psi			·	
		E	STIMATED MAKE-	UP TORQUE <b>S</b> (	3) 	
	Minimum	11270 ft-lbs	Optimum	<b>12520</b> ft-lbs	Maximum	13770 ft-lbs
			OPERATIONAL LI	MIT TORQUES		
	Operating Torque	21500 ft-lbs	Yield Torque	23900 ft-lbs		

http://premiumconnectiondata.tenaris.com/tsh\_print.php?hWall=0.361&hSize=5.500&hGr... 8/29/2016

BUREAU OF LAND MANAGEMENT



APD ID: 10400011918 Operator Name: CONOCOPHILLIPS COMPANY Well Name: REVOLVER 24 FEDERAL COM Well Type: OIL WELL

Submission Date: 03/21/2017

Well Number: 1H Well Work Type: Drill Highlighted data reflects the most recent changes <u>Show Final Text</u>

# Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

Revolver\_24\_Federal\_Pad\_1\_Existing\_Roads\_08-22-2017.pdf

Existing Road Purpose: ACCESS

Row(s) Exist? NO

ROW ID(s)

ID:

Do the existing roads need to be improved? YES

**Existing Road Improvement Description:** The existing road is a two-track road. Construction will upgrade it to a 30' R-O-W for a 20' drive-able surface and 5' on each side in order to accommodate the size of the rig. **Existing Road Improvement Attachment:** 

Revolver\_24\_Federal\_Com\_1H\_Existing\_road\_improvement\_03-20-2017.pdf

# Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

Revolver\_24\_Federal\_Com\_1H\_Access\_Road\_Map\_03-20-2017.pdf

New road type: RESOURCE

Length: 9155 Feet Width (ft.): 30

Max slope (%): 1

**Max grade (%):** 1

Army Corp of Engineers (ACOE) permit required? NO

ACOE Permit Number(s):

New road travel width: 20

**New road access erosion control:** The inside slope of the side ditches shall be 3:1. Any topsoil removed from the access road will be conserved as appropriate and with low profile. This access road is on fairly level ground. No additional erosion control is planned.

New road access plan or profile prepared? NO

**Operator Name: CONOCOPHILLIPS COMPANY** 

Well Number: 1H

Well Name: REVOLVER 24 FEDERAL COM

New road access plan attachment:

Access road engineering design? NO

Access road engineering design attachment:

Access surfacing type: OTHER

Access topsoil source: OFFSITE

Access surfacing type description: Caliche

Access onsite topsoil source depth:

**Offsite topsoil source description:** Caliche will be from a BLM approved source or third-party commercial location. Material meets BLM requirements and standards.

Onsite topsoil removal process:

Access other construction information:

Access miscellaneous information:

Number of access turnouts: Access turnout map:

#### **Drainage Control**

New road drainage crossing: OTHER

**Drainage Control comments:** The proposed road to the location is surveyed and staked with stations set along the centerline at specific intervals. The road will be centerline crowned with a 2% crown for appropriate drainage. The inside slope of the side ditches shall be 3:1. Any topsoil removed from the access road will be conserved as appropriate. This access road is on fairly level ground.

**Road Drainage Control Structures (DCS) description:** No additional road drainage is needed other than standard BLM requirements for this area and those discussed in the BLM "Gold Book". This access road is on level ground. **Road Drainage Control Structures (DCS) attachment:** 

# **Access Additional Attachments**

Additional Attachment(s):

# **Section 3 - Location of Existing Wells**

Existing Wells Map? YES

Attach Well map:

Revolver\_24\_Federal\_Com\_1H\_One\_mile\_radius\_map\_07-24-2017.pdf

Existing Wells description:

Well Number: 1H

#### Section 4 - Location of Existing and/or Proposed Production Facilities

Submit or defer a Proposed Production Facilities plan? SUBMIT

**Production Facilities description:** Revolver 24 Federal CTB #1 is located in Section 24, T26S, R31E and was staked on 12/7/16. Dimensions are 515'x 200' and is attached the Revolver 24 Quad pad (1H-4H). **Production Facilities map:** 

Revolver\_24\_Federal\_Com\_1H\_Preliminary\_Plot\_Plan\_03-20-2017.pdf Revolver\_24\_Federal\_CTB\_1\_03-20-2017.pdf

#### Section 5 - Location and Types of Water Supply

#### Water Source Table

Water source use type: STIMULATION	Water source type: GW WELL
Describe type:	
Source latitude: 31.967545	Source longitude: -103.76012
Source datum: NAD83	
Water source permit type: WATER WELL	
Source land ownership: PRIVATE	
Water source transport method: PIPELINE	
Source transportation land ownership: FEDERAL	
Water source volume (barreis): 33333.332	Source volume (acre-feet): 4.2964363
Source volume (gal): 1400000	

#### Water source and transportation map:

Revolver\_24\_Federal\_COM\_Pad\_1\_Water\_Wells\_07-21-2017.pdf

Water source comments: Water will be trucked from the water wells in Texas. However, COP plans to use additional/ different water well(s) depending on availability at the time of fracturing the wells but the locations will meet BLM requirements and standards. Any temporary pipelines will be filed under separate cover. New water well? NO

#### New Water Well Info

Well latitude:	Well Longitude:	Well datum:
Well target aquifer:		
Est. depth to top of aquifer(ft):	Est thickness of aquifer:	
Aquifer comments:		
Aguifer documentation:		

Well Number: 1H

Well depth (ft):	Well casing type:
Well casing outside diameter (in.):	Well casing inside diameter (in.):
New water well casing?	Used casing source:
Drilling method:	Drill material:
Grout material:	Grout depth:
Casing length (ft.):	Casing top depth (ft.):
Well Production type:	Completion Method:
Water well additional information:	
State appropriation permit:	
Additional information attachment:	

#### **Section 6 - Construction Materials**

**Construction Materials description:** Clean caliche will be used to construct well pad, road, and facility pad. Our first source for caliche will be from Kiehne's pit is located in Section 21, T26S, R32E, Lea County, NM and the second source will be State Pit 643-Eddy located in Section 15, T25S, R27E, Eddy County, NM. However, COP plans to use additional caliche source(s) depending on caliche availability at the time of location construction and material will meet BLM requirements and standards. Trucking for source material will utilize authorized roads as per Access Road Topo A attached. **Construction Materials source location attachment:** 

# Section 7 - Methods for Handling Waste

Waste type: DRILLING

Waste content description: Drilling fluid and cuttings

Amount of waste: 130 barrels

Waste disposal frequency : Daily

Safe containment description: Cuttings will be held in a closed-loop system and trucked to an approved disposal facility.

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: COMMERCIAL

FACILITY

Disposal type description:

Disposal location description: 20 miles T/ Halfway

#### **Reserve Pit**

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit?

Reserve pit length (ft.) Reserve pit width (ft.)

Reserve pit depth (ft.)

Reserve pit volume (cu. yd.)

Well Number: 1H

Is at least 50% of the reserve pit in cut?

Reserve pit liner

Reserve pit liner specifications and installation description

#### **Cuttings Area**

Cuttings Area being used? NO Are you storing cuttings on location? NO Description of cuttings location Cuttings area length (ft.) Cuttings area depth (ft.) Is at least 50% of the cuttings area in cut? WCuttings area liner Cuttings area liner specifications and installation description

#### **Section 8 - Ancillary Facilities**

Are you requesting any Ancillary Facilities?: NO Ancillary Facilities attachment:

Comments:

# Section 9 - Well Site Layout

#### Well Site Layout Diagram:

Revolver\_24\_Federal\_Com\_1H\_Location\_Lay\_Out\_03-20-2017.pdf Revolver\_24\_Federal\_Com\_1H\_Arch\_Boundary\_03-20-2017.pdf **Comments:** 

#### Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance

Multiple Well Pad Name: REVOLVER 24 FEDERAL PAD

#### Multiple Well Pad Number: 1

#### Recontouring attachment:

**Drainage/Erosion control construction:** Topsoil will be stripped and set along designated side of the wellsite. The next layer of dirt (stockpile) is done with the cut and fill method whereby the highest portion of the wellsite is pushed to lower portion(s) to balance the pad. The access road is done in a similar manner. To the greatest extent practicable, the location is

#### Well Number: 1H

placed so that the least amount of dirt is to be cut and disturbed, and so a good balance can be maintained during project. Topsoil stockpile will have lowest practicable profile to reduce wind erosion. For more detail please see attached Surface Use Plan of Operations.

**Drainage/Erosion control reclamation:** Upon project completion, if this well is a producer, excess caliche is removed from the interim reclamation portion of pad. Topsoil stockpile is balanced back onto the unused portion of the well pad and recontoured as appropriate. Any drainage ditches will not be blocked with topsoil and/or organic material. Lowering the profile of the topsoil stockpile will reduce wind erosion. Erosion controls will be maintained per BLM guidelines and conditions. For more detail please see attached Surface Use Plan of Operations. Reclamation activities are planned to be accomplished within six months of project completion, contingent upon weather. A site specific "Reclamation Diagram" interim plan is attached.

Wellpad long term disturbance (acres): 6.9	Wellpad short term disturbance (acres): 2
Access road long term disturbance (acres): 5.9	Access road short term disturbance (acres): 0.3
Pipeline long term disturbance (acres): 5.1453166	Pipeline short term disturbance (acres): 0
Other long term disturbance (acres): 0.2	Other short term disturbance (acres): 0
Total long term disturbance: 18.145317	Total short term disturbance: 2.3

**Reconstruction method:** If this well is a producer site rehabilitation will be completed within six months, weather permitting. Excess caliche will be removed, as appropriate and either disposed of in a permitted facility or, if clean, stored for future use. Topsoil from the stockpile will be spread along areas to be interim reclaimed. Any drainage ditches will not be blocked with topsoil. Under normal weather conditions, the timetable for rehabilitation will allow two to three months to complete any recontouring and top-soiling necessary. At such time as well is permanently abandoned, ConocoPhillips Company will contact BLM for development of final rehabilitation plan. Upon abandonment, a dry hole marker will be installed as directed by Authorized BLM Officer at the time, in accordance with 43 CFR 3162.6. An above ground dry hole marker sealing the casing will have a weep hole which will allow pressure to dissipate and make detection of any fluid seepage easier. If below ground "well marker" is directed, ConocoPhillips Company will follow BLM requirements and standards for that method of abandonment. Excess caliche will be removed, as appropriate and either disposed of in a permitted facility. Location soil may be "flipped" with BLM concurrence, clean topsoil spread and re-contoured to blend with surrounding area. This method will be accomplished in accordance to BLM standards set forth by the Authorized Officer.

**Topsoil redistribution:** Areas planned for interim reclamation will be re-contoured to the extent feasible. Topsoil will be evenly re-spread and re-vegetated over the disturbed area not needed for continuing production operations. At such time as well is abandoned, disturbed areas will be re-contoured to a contour that blends with surrounding landscape. Topsoil will be redistributed evenly over the entire disturbed site to depth of 4-6 inches.

**Soil treatment:** The topsoil will be stripped and set along the designated perimeter of the wellsite. The next layer of dirt is moved with the cut and fill method whereby the highest point of the wellsite is cut into and then pushed to a lower side in order to balance the well pad. Upon well completion, the soil will be balanced back onto portions of the pad not needed for long-term operations. Erosion will be minimized by maintaining a lower stockpile profile.

**Existing Vegetation at the well pad:** Vegetation in the project area is based on an EA that was observed on 10/19/16 on a project area three miles away from proposed quad pad. Based on the existing EA the proposed area can be classified as transitional between the Plains-Mesa Sand Scrub and Chihuahuan Desert Scrub plant communities. The area surrounding the location has dominant shrub speicies including white thorn acia, range ratany, javelin bushy, honey mesquite, invading creosote and a few althorns. Dominant grass species in the project included but not limited to sand and mesa dropseed, roa grande bristlegrass, black grama and burrograss. An EA will be performed and will be provided to the BLM that will list all species in the area.

Existing Vegetation at the well pad attachment:

Revolver\_24\_Federal\_Com\_1H\_Location\_Photos\_03-20-2017.pdf

Existing Vegetation Community at the road: Existing Vegetation Community at the road attachment: Existing Vegetation Community at the pipeline: Existing Vegetation Community at the pipeline attachment:

Existing Vegetation Community at other disturbances: Existing Vegetation Community at other disturbances attachment:

Non native seed used? NO

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? NO

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation? NO Seed harvest description: Seed harvest description attachment:

#### **Seed Management**

Seed Table	
Seed type:	Seed source:
Seed name:	
Source name:	Source address:
Source phone:	
Seed cultivar:	
Seed use location:	
PLS pounds per acre:	Proposed seeding season:
Seed Summary	Total pounds/Acre:

Pounds/Acre

Seed Type

#### **Operator Name: CONOCOPHILLIPS COMPANY**

Well Name: REVOLVER 24 FEDERAL COM

#### Well Number: 1H

#### Seed reclamation attachment:

#### **Operator Contact/Responsible Official Contact Info**

First Name: Ashley	Last Name: Bergen
Phone: (432)688-6938	Email: ashley.bergen@cop.com

Seedbed prep:

Seed BMP:

Seed method:

Existing invasive species? NO

Existing invasive species treatment description:

#### Existing invasive species treatment attachment:

Weed treatment plan description: Two Class B noxious weed species, African rue and Malta starthistle and two Class C noxious weed species, Russian olive and salt cedar are of concern. ConocoPhillips Company will consult with BLM for acceptable weed control methods, if the need arises. Any weed control would follow USEPA and BLM requirements and standards. No noxious weed species are expected in the project area. Weed treatment plan attachment:

**Monitoring plan description:** Weeds will be controlled on disturbed areas within the exterior limits of the well pad. Monitoring will be in accordance with Best Management Practices and guidelines established by BLM. **Monitoring plan attachment:** 

Success standards: Reclamation success standards will utilize BLM approved methods

Pit closure description: No pits will be used, a closed-loop system will be in place

Pit closure attachment:

#### **Section 11 - Surface Ownership**

Disturbance type: WELL PAD Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

**BIA Local Office:** 

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

**USFWS** Local Office:

Well Number: 1H

Other Lo	cal Off	ice:
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**USFS** Region:

USFS Forest/Grassland:

USFS Ranger District:

Disturbance type: NEW ACCESS ROAD	
Describe:	
Surface Owner: BUREAU OF LAND MANAGEMENT	
Other surface owner description:	
BIA Local Office:	
BOR Local Office:	
COE Local Office:	
DOD Local Office:	
NPS Local Office:	
State Local Office:	
Military Local Office:	
USFWS Local Office:	
Other Local Office:	
USFS Region:	
USFS Forest/Grassland:	USFS Ranger District:

Disturbance type: PIPELINE	
Describe:	
Surface Owner: BUREAU OF LAND MANAGEMENT, PRIVATE OWNERSHIP	
Other surface owner description:	
BIA Local Office:	
BOR Local Office:	
COE Local Office:	
DOD Local Office:	
NPS Local Office:	

Well Number: 1H

Use APD as ROW? NO

State Local Office:	
Military Local Office:	
USFWS Local Office:	
Other Local Office:	
USFS Region:	
USFS Forest/Grassland:	USFS Ranger District:

# **Section 12 - Other Information**

Right of Way needed? YES ROW Type(s):

#### **ROW Applications**

Revolver\_24\_Federal\_COM\_1H\_SF299\_03-06-2017.pdf

SUPO Additional Information: Onsite conducted 12/7/16. Use a previously conducted onsite? NO Previous Onsite information:

# **Other SUPO Attachment**

Revolver\_24\_Federal\_Com\_1H\_Reclamation\_Diagram\_03-20-2017.pdf Revolver\_24\_Federal\_Com\_1H\_Flow\_Lines\_03-20-2017.pdf Revolver\_24\_Federal\_Com\_1H\_Surface\_Use\_Plan\_03-21-2017.pdf Revolver\_24\_Federal\_Com\_1H\_Power\_Line\_03-21-2017.pdf Gas\_Capture\_Plan\_03-21-2017.pdf



Revolver 24 Federal COM 1H



Revolver 24 Federal CTB #1- Preliminary Plot Plan





![](_page_61_Figure_0.jpeg)

![](_page_62_Figure_0.jpeg)

![](_page_63_Figure_0.jpeg)

![](_page_64_Figure_0.jpeg)

![](_page_65_Figure_0.jpeg)

![](_page_66_Picture_0.jpeg)

STANDARD FORM 299 (05/2009)Prescribed by DOI/USDA/DOTP.L. 96-487 and FederalRegister Notice 5-22-95		TION FOR TRANSPORTATION AND ITY SYSTEMS AND FACILITIES ON FEDERAL LANDS	FORM APPROVED OMB Control Number: 0596-0082 Expiration Date: 1/31/2017	
			FOR AGENCY USE ONLY	
NOTE: Before completing and filing the application, the applicant should completely review this package and schedule a preapplication meeting with representatives of the agency responsible for processing the application. Each agency may have		Application Number		
specific and unique requirements to be met in preparing and processing the application. Many times, with the help of the agency representative, the application can be completed at the preapplication meeting.			Date Filed	
1. Name and address of applicant (include zip code)		2. Name, title, and address of authorized agent if	3. Telephone (area code)	
		different from item 1 (include zip code)	432-688-6938	
ConocoPhillips Company		Ashley Bergen	Applicant	
P.O. Box 51810		Associate Regulatory	ConocoPhillips Company	
Midland, Texas 79710		P.O. Box 51810	Authorized Agent	
		Midland, Texas 79710	Ashley Bergen	
4. As applicant are you? (check one) 5. Specify v		fy what application is for: (check one)		
a, D Individual	a. D	New authorization		
b. D Corporation* b. D Renewing exist		Renewing existing authorization No.		
c. D Partnership/Association*	c. D	Amend existing authorization No.		
d. D State GovernmenUState Agency	d. D	Assign existing authorization No.		
e. D Local Government e. D Existing use for which no authorization has been re			eived *	
f. D Federal Agency	f. D	Other*		
* If checked, complete supplemental page	* If check	ked, provide details under item 7		
6. If an individual, or partnership are you a citizen(s) of the United States? D Yes D No				

7. Project description (describe in detail): (a) Type of system or facility, (e.g., canal, pipeline, road); (b) related structures and facilities; (c) physical specifications (Length, width, grading, etc.); (d) term of years needed: (e) time of year of use or operation; (f) Volume or amount of product to be transported; (g) duration and timing of construction; and (h) temporary work areas needed for construction (Attach additional sheets, if additional space is needed.)

8. Attach a map covering area and show location of project proposal	
9. State or Local government approval: D Attached D Applied for D	Not Required
10. Nonreturnable application fee: D Attached D Not required	
11. Does project cross international boundary or affect international waterways?	D Yes D No (if "yes," indicate on map)

12. Give statement of your technical and financial capability to construct, operate, maintain, and terminate system for which authorization is being requested.

STANDARD FORM 299 (REV. 5/2009)

13a. Describe other reasonable alternative routes and modes considered.

b. Why were these alternatives not selected?

c. Give explanation as t o why it is necessary to cross Federal Lands.

14. List authorizations and pending applications filed for similar projects which may provide information to the authorizing agency. (Specify number, date, code, or name)

15. Provide statement of need for project, including the economic feasibility and items such as: (a) cost of proposal (construction, operation, and maintenance): (b) estimated cost of next best alternative; and (c) expected public benefits.

16. Describe probable effects on the population in the area, including the social and economic aspects, and the rural lifestyles.

17. Describe likely environmental effects that the proposed project will have on: (a) air quality; (b) visual impact; (c) surface and ground water quality and quantity; (d) the control or structural change on any stream or other body of water; (e) existing noise levels; and (f) the surface of the land, including vegetation, permafrost, soil, and soil stability.

18. Describe the probable effects that the proposed project will have on (a) populations of fish, plantlife, wildlife, and marine life, including threatened and endangered species; and (b) marine mammals, including hunting, capturing, collecting, or killing these animals.

19. State whether any hazardous material, as defined in this paragraph, will be used, produced, transported or stored on or within the right-of-way or any of the right-of-way facilities, or used in the construction, operation, maintenance or termination of the right-of-way or any of its facilities. "Hazardous material" means any substance, pollutant or contaminant that is listed as hazardous under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. 9601 et seq., and its regulations. The definition of hazardous substances under CERCLA includes any "hazardous waste" as defined in the Resource Conservation and Recovery Act of 1976 (RCRA), as amended, 42 U.S.C. 6901 et seq., and its regulations. The definition of hazardous substances under CERCLA includes any "hazardous waste" as defined in the Resource Conservation and Recovery Act of 1976 (RCRA), as amended, 42 U.S.C. 6901 et seq., and its regulations or byproduct material as defined by the Atomic Energy Act of 1954, as amended, 42 U.S.C. 2011 et seq. The term does not include petroleum, including crude oil or any fraction thereof that is not otherwise specifically listed or designated as a hazardous substance under CERCIA Section 101(14), 42 U.S.C. 9601(14), nor does the term include natural gas.

20. Name all the Department(s)/Agency(ies) where this application is being filed.

I HEREBY CERTIFY, That I am of legal age and authorized to do business in the State and that I have personally examined the information contained				
in the application and believe that the information submitted is correct to the best of my knowledge.				
- Similar of Anglicant				
Signature of Applicant	D-4-			
	Date			

Title 18, U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious, or fraudulent statements or representations as to any matter within its jurisdiction.

#### GENERAL INFORMATION ALASKA NATIONAL INTEREST LANDS

This application will be used when applying for a right-of-way, permit, license, lease, or certificate for the use of Federal lands which lie within conservation system units and National Recreation or Conservation Areas as defined in the Alaska National Interest lands Conservation Act. Conservation system units include the National Park System, National Wildlife Refuge System, National Wild and Scenic Rivers System, National Trails System, National Wildlerness Preservation System, and National Forest Monuments.

Transportation and utility systems and facility uses for which the application may be used are:

1. Canals, ditches, flumes, laterals, pipes, pipelines, tunnels, and other systems for the transportation of water.

2. Pipelines and other systems for the transportation of liquids other than water, including oil, natural gas, synthetic liquid and gaseous fuels, and any refined product produced therefrom.

3. Pipelines, slurry and emulsion systems, and conveyor belts for transportation of solid materials.

4. Systems for the transmission and distribution of electric energy.

5. Systems for transmission or reception of radio, television, telephone, telegraph, and other electronic signals, and other means of communications.

6. Improved right-of-way for snow machines, air cushion vehicles, and all-terrain vehicles.

7. Roads, highways, railroads, tunnels, tramways, airports, landing strips, docks, and other systems of general transportation.

This application must be filed simultaneously with each Federal department or agency requiring authorization to establish and operate your proposal.

In Alaska, the following agencies will help the applicant file an application and identify the other agencies the applicant should contact and possibly file with:

Department of Agriculture Regional Forester, Forest Service (USFS) Federal Office Building, P.O. Box 21628 Juneau, Alaska 99802-1628 Telephone: (907) 586-7847 *(or a local Forest Service Office)* 

Department of the Interior Bureau of Indian Affairs (BIA) Juneau Area Office Federal Building Annex 9109 Mendenhall Mall Road, Suite 5 Juneau, Alaska 99802 Telephone: (907) 586-7177

Department of the Interior Bureau of Land Management 222 West 7th Avenue P.O. Box 13 Anchorage, Alaska 99513-7599 Telephone: (907) 271-5477 (or a local BLM Office)

U.S. Fish & Wildlife Service (FWS) Office of the Regional Director 1011 East Tudor Road Anchorage, Alaska 99503 Telephone: (907) 786-3440 National Park Service (NPA) Alaska Regional Office, 2225 Gambell St., Rm. 107 Anchorage, Alaska 99502-2892 Telephone: (907) 786-3440

Note - Filings with any Interior agency may be filed with any office noted above or with the Office of the Secretary of the Interior, Regional Environmental Office, P.O. Box 120, 1675 C Street, Anchorage, Alaska 9513.

Department of Transportation Federal Aviation Administration Alaska Region AAL-4, 222 West 7th Ave., Box 14 Anchorage, Alaska 99513-7587 Telephone: (907) 271-5285

NOTE - The Department of Transportation has established the above central filing point for agencies within that Department. Affected agencies are: Federal Aviation Administration (FAA), Coast Guard (USCG), Federal Highway Administration (FHWA), Federal Railroad Administration (FRA).

#### OTHER THAN ALASKA NATIONAL INTEREST LANDS

Use of this form is not limited to National Interest Conservation Lands of Alaska.

Individual department/agencies may authorize the use of this form by applicants for transportation and utility systems and facilities on other Federal lands outside those areas described above.

For proposals located outside of Alaska, applications will be filed at the local agency office or at a location specified by the responsible Federal agency.

#### SPECIFIC INSTRUCTIONS (Items not listed are self-explanatory)

- 7 Attach preliminary site and facility construction plans. The responsible agency will provide instructions whenever specific plans are required.
- 8 Generally, the map must show the section(s), township(s), and range(s) within which the project is to be located. Show the proposed location of the project on the map as accurately as possible. Some agencies require detailed survey maps, The responsible agency will provide additional instructions.
- 9, 10, and 12 The responsible agency will provide additional instructions.
- 13 Providing information on alternate routes and modes in as much detail as possible, discussing why certain routes or modes were rejected and why it is necessary to cross Federal lands will assist the agency(ies) in processing your application and reaching a final decision. Include only reasonable alternate routes and modes as related to current technology and economics.
- 14 The responsible agency will provide instructions.
- 15 Generally, a simple statement of the purpose of the proposal will be sufficient. However, major proposals located in critical or sensitive areas may require a full analysis with additional specific information. The responsible agency will provide additional instructions.
- 16 through 19 Providing this information is as much detail as possible will assist the Federal agency(ies) in processing the application and reaching a decision. When completing these items, you should use a sound judgment in furnishing relevant information. For example, if the project is not near a stream or other body of water, do not address this subject. The responsible agency will provide additional instructions.

Application must be signed by the applicant or applicant's authorized representative.

EFFECT OF NOT PROVIDING INFORMATION: Disclosure of the information is voluntary. If all the information is not provided, the application may be rejected.

#### DATA COLLECTION STATEMENT

The Federal agencies collect this information from applicants requesting right-of-way, permit, license, lease, or certification for the use of Federal lands. The Federal agencies use this information to evaluate the applicant's proposal. The public is obligated to submit this form if they wish to obtain permission to use Federal lands.

	SUPPLEMENTAL		
N	OTE: The responsible agency(ies) will provide instructions	CHECK APP BLO	ROPRIATE CK
	I-PRIVATE CORPORATIONS	ATTACHED	FILED*
a.	Articles of Incorporation	D	D
b.	Corporation Bylaws	D	D
с.	A certification from the State showing the corporation is in good standing and is entitled to operate within the State	D	D
d	Copy of resolution authorizing filing	D	D
e.	The name and address of each shareholder owning 3 percent or more of the shares, together with the number and percentage of any class of voting shares of the entity which such shareholder is authorized to vote and the name and address of each affiliate of the entity together with, in the case of an affiliate controlled by the entity, the number of shares and the percentage of any class of voting stock of that affiliate owned, directly or indirectly, by that entity, and in the case of an affiliate which controls that entity, the number of shares and the percentage of any class of voting stock of that affiliate and the percentage of any class of voting stock of that entity to shares and the percentage of any class of voting stock of that entity and in the case of an affiliate which controls that entity, the number of shares and the percentage of any class of voting stock of that entity owned, directly or indirectly, by the affiliate.	D	D
f.	If application is for an oil or gas pipeline, describe any related right- of-way or temporary use permit applications, and identify previous applications.	D	D
g.	If application is for an oil and gas pipeline, identify all Federal lands by agency impacted by proposal.	D	D
	11-PUBLIC CORPORATIONS		
- a.	Copy of law forming corporation	D	D
b.	Proof of organization	D	D
c.	Copy of Bylaws	D	D
d.	Copy of resolution authorizing filing	D	D
е.	If application is for an oil or gas pipeline, provide information required by item "I - f and "I - g" above.	D	D
	111 - PARTNERSHIP OR OTHER UNINCORPORATED ENTITY		
a.	Articles of association, if any	D	D
b.	If one partner is authorized to sign, resolution authorizing action is	D	D
c.	Name and address of each participant, partner, association, or other	D	D
d.	If application is for an oil or gas pipeline, provide information required by item "I - f and "I - g" above.	D	D

\*If the required information is already filed with the agency processing this application and is current, check block entitled "Filed." Provide the file identification information (e.g., number, date, code, name). If not on file or current, attach the requested information.

#### SUPPLEMENTAL
#### NOTICES

Note: This applies to the Department of Agriculture/Forest Service (FS)

This information is needed by the Forest Service to evaluate the requests to use National Forest System lands and manage those lands to protect natural resources, administer the use, and ensure public health and safety. This information is required to obtain or retain a benefit. The authority for that requirement is provided by the Organic Act of 1897 and the Federal Land Policy and Management Act of 1976, which authorize the secretary of Agriculture to promulgate rules and regulations for authorizing and managing National Forest System lands. These statutes, along with the Term Permit Act, National Forest Ski Area Permit Act, Granger-Thye Act, Mineral Leasing Act, Alaska Term Permit Act, Act of September 3, 1954, Wilderness Act, National Forest Roads and Trails Act, Act of November 16, 1973, Archeological Resources Protection Act, and Alaska National Interest Lands Conservation Act, authorize the Secretary of Agriculture to issue authorizations or the use and occupancy of National Forest System lands. The Secretary of Agriculture's regulations at 36 CFR Part 251, Subpart B, establish procedures for issuing those authorizations.

#### BURDEN AND NONDISCRIMINATION STATEMENTS

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0596-0082. The time required to complete this information collection is estimated to average 8 hours hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, 1400 Independence Avenue, SW, Washington, DC 20250-9410 or call toll free (866) 632-9992 (voice). TDD users can contact USDA through local relay or the Federal relay at (800) 877-8339 (TDD) or (866) 377-8642 (relay voice). USDA is an equal opportunity provider and employer.

The Privacy Act of 1974 (5 U.S.C. 552a) and the Freedom of Information Act (5 U.S.C. 552) govern the confidentiality to be provided for information received by the Forest Service.

















# **Surface Use Plan of Operations**

## Introduction

The following surface use plan of operations will be followed and carried out once the APD is approved. No other disturbance will be created other than what was submitted in this surface use plan. If any other surface disturbance is needed after the APD is approved, a BLM approved sundry notice or right of way application will be acquired prior to any new surface disturbance.

Before any surface disturbance is created, stakes or flagging will be installed to mark boundaries of permitted areas of disturbance, including soils storage areas. As necessary, slope, grade, and other construction control stakes will be placed to ensure construction in accordance with the surface use plan. All boundary markers will be maintained in place until final construction cleanup is completed. If disturbance boundary markers are disturbed or knocked down, they will be replaced before construction proceeds.

If terms and conditions are attached to the approved APD and amend any of the proposed actions in this surface use plan, we will adhere to the terms and conditions.

## 1. Existing Roads

a. The existing access road route to the proposed project is depicted on Access Road Map, TOPO A & Access Road Map TOPO B. Improvements to the driving surface will be done where necessary. No new surface disturbance will be done, unless otherwise noted in the New or Reconstructed Access Roads section of this surface use plan..

b. The existing access road route to the proposed project does not cross lease or unit boundaries, so a BLM rightof-way grant will not be acquired for this proposed road route.

c. The operator will improve or maintain existing roads in a condition the same as or better than before operations begin. The operator will repair pot holes, clear ditches, repair the crown, etc. All existing structures on the entire access route such as cattleguards, other range improvement projects, culverts, etc. will be properly repaired or replaced if they are damaged or have deteriorated beyond practical use.

d. We will prevent and abate fugitive dust as needed, whether created by vehicular traffic, equipment operations, or wind events. BLM written approval will be acquired before application of surfactants, binding agents, or other dust suppression chemicals on roadways.

## 2. New or Reconstructed Access Roads

a. An access road will be needed for this proposed project. See the survey plat for the location of the access road.

b. The length of access road needed to be constructed for this proposed project is about 9155 feet.

c. The maximum driving width of the access road will be 30 feet. The maximum width of surface disturbance when constructing the access road will not exceed 25 feet. All areas outside of the driving surface will be revegetated.

d. The access road will be constructed with 6 inches of compacted Caliche.

e. When the road travels on fairly level ground, the road will be crowned and ditched with a 2% slope from the tip of the road crown to the edge of the driving surface. The ditches will be 3 feet wide with 3:1 slopes. See Road Cross Section diagram below.



- f. The access road will be constructed with a ditch on each side of the road.
- g. The maximum grade for the access road will be 1 percent.

h. Turnouts will be constructed for the proposed access road and will be constructed to the dimensions shown in the diagram below. See survey plat or map for location of the turnouts.



- i. No cattleguards will be installed for this proposed access road.
- j. Since the proposed access road crosses lease boundaries, a right-of-way will be required for the access road. A right-of-way grant will be applied for through the BLM. The access road will not be constructed until an approved BLM right-of-way grant is acquired.
- k. No culverts will be constructed for this proposed access road.
- 1. No low water crossings will be constructed for the access road.
- m. Since the access road is on level ground, no lead-off ditches will be constructed for the proposed access road.

n. Newly constructed or reconstructed roads, on surface under the jurisdiction of the Bureau of Land Management, will be constructed as outlined in the BLM "Gold Book" and to meet the standards of the anticipated traffic flow and all anticipated weather requirements as needed. Construction will include ditching, draining, crowning and capping or sloping and dipping the roadbed as necessary to provide a well-constructed and safe road.

o. 484' of the road is temporary and will be reclaimed after well is completed. 1367' of the road will be new road and 7304' of the road is an existing two track that will be upgraded. The road will have a 30' ROW so that 20' is for drivable surface (to accommodate the rig) and 5' on each side.

## 3. Location of Existing Wells

a. Well Proximity Map, TOPO C of the APD depicts all known wells within a one mile radius of the proposed well.

b. There is no other information regarding wells within a one mile radius.

## 4. Location of Existing and/or Proposed Production Facilities

a. All permanent, lasting more than 6 months, above ground structures including but not limited to pumpjacks, storage tanks, barrels, pipeline risers, meter housing, etc. that are not subject to safety requirements will be painted a non-reflective paint color, Shale Green, from the BLM Standard Environmental Colors chart, unless another color is required in the APD Conditions of Approval.

b. If any type of production facilities are located on the well pad, they will be strategically placed to allow for maximum interim reclamation, recontouring, and revegetation of the well location.

c. A production facility is proposed to be installed on the proposed well location. Production from the well will be processed on site in the production facility. Location Layout, Figure #1 & Reclamation Diagram, Figure #4 depicts the location of the production facilities as they relate to the well and well pad.

d. The proposed production facility will have a secondary containment structure that is constructed to hold the capacity of 1-1/2 times the largest tank, plus freeboard to account for percipitation, unless more stringent protective requirements are deemed necessary.

e. Preliminary Plot Plan depicts the production facility as well.

If any plans change regarding the production facility or other infrastructure (pipeline, electric line, etc.), we will submit a sundry notice or right of way (if applicable) prior to installation or construction.

#### Additional Pipeline(s)

We propose to install 2 additional pipeline(s):

1. Buried Gas pipeline:

a. We plan to install a 10 inch buried Coated Steel pipeline from Proposed Facility to the Delaware Basin Midstream Pipeline until the tie in point can be hooked up to the proposed Red Hills Trunk Line. The proposed length of the pipeline will be 7471 feet. The working pressure of the pipeline will be about 1150 psi. A 30 feet wide work area will be needed to install the buried pipeline. We will need an extra 10 foot wide area near corners to safely install the pipeline. In areas where blading is allowed, topsoil will be stockpiled and separated from the excavated trench mineral material. Final reclamation procedures will match the procedures in Plans for Surface Reclamation. When the excavated soil is backfilled, it will be compacted to prevent subsidence. No berm over the pipeline will be evident.

b. Water Gather & Gas Gathering Pipeline R-O-W (3 pages) depicts the proposed Gas pipeline route.

c. Since the proposed pipeline crossess lease boundaries, a right of way grant will be acquired prior to installation of the proposed pipeline.

2. Buried Water pipeline:

a. We plan to install a 8 inch buried steel pipeline from Proposed Facility to the existing COP SWD line until the tie in point can be hooked up to the proposed Red Hills Trunk Line. The proposed length of the pipeline will be 7471 feet. The working pressure of the pipeline will be about 250 psi. A 30 feet wide work area will be needed to install the buried pipeline. We will need an extra 10 foot wide area near corners to safely install the pipeline. In areas where blading is allowed, topsoil will be stockpiled and separated from the excavated trench mineral material. Final reclamation procedures will match the procedures in Plans for Surface Reclamation. When the excavated soil is backfilled, it will be compacted to prevent subsidence. No berm over the pipeline will be evident.

- b. Water Gather & Gas Gathering Pipeline R-O-W depicts the proposed Water pipeline route.
- c. Since the proposed pipeline crossess lease boundaries, a right of way grant will be acquired prior to installation of the proposed pipeline.

### Electric Line(s)

a. We plan to install an overhead electric line for the proposed well. The proposed length of the electric line will be 287 feet. Power Line R-O-W depicts the location of the proposed electric line route. The electric line will be construction to provide protection from raptor electrocution.

b. The existing power line route to the proposed project does not cross lease or unit boundaries, so a BLM rightof-way grant will not be acquired for this proposed power route.

### 5. Location and Types of Water

a. The source and location of the water supply are as follows: The water source is from an approved source and a temporary permit to lay the lines will be filed under a separate cover.

## 6. Construction Material

a. Clean caliche will be from a BLM source or a third party provider.

#### 7. Methods for Handling Waste

a. Drilling fluids and produced oil and water from the well during drilling and completion operations will be stored safely and disposed of properly in an NMOCD approved disposal facility.

b. Garbage and trash produced during drilling and completion operations will be collected in a trash container and disposed of properly at a state approved disposal facility. All trash on and around the well site will be collected for disposal.

c. Human waste and grey water will be properly contained and disposed of properly at a state approved disposal facility.

d. After drilling and completion operations, trash, chemicals, salts, frac sand and other waste material will be removed and disposed of properly at a state approved disposal facility.

e. The well will be drilled utilizing a closed loop system. Drill cutting will be properly disposed of into steel tanks and taken to an NMOCD approved disposal facility.

## 8. Ancillary Facilities

a. No ancillary facilities will be needed for this proposed project.

## 9. Well Site Layout

- a. The following information is presented in the well site survey plat or diagram:
  - i. reasonable scale (near 1":50')
  - ii. well pad dimensions
  - iii. well pad orientation
  - iv. . drilling rig components

- v. proposed access road
- vi. elevations of all points
- vii. topsoil stockpile
- viii. serve pit location/dimensions if applicable
- ix. other disturbances needed (flare pit, stinger, frac farm pad, etc.)
- x. existing structures within the 600' x 600' archaeoligical surveyed area (pipelines, electric lines, well pads, etc

b. The proposed drilling pad was staked and surveyed by a professional surveyor. The attached survey plat of the well site depicts the drilling pad layout as staked.

c. The submitted survey plat does depict all the necessary information required by Onshore Order No. 1.

d. Topsoil Salvaging

i. Grass, forbs, and small woody vegetation, such as mesquite will be excavated as the topsoil is removed. Large woody vegetation will be stripped and stored separately and respread evenly on the site following topsoil respreading. Topsoil depth is defined as the top layer of soil that contains 80% of the roots. In areas to be heavily disturbed, the top 6 inches of soil material, will be stripped and stockpiled on the perimeter of the well location and along the perimeter of the access road to control run-on and run-off, to keep topsoil viable, and to make redistribution of topsoil more efficient during interim reclamation. Stockpiled topsoil should include vegetative material. Topsoil will be clearly segregated and stored separately from subsoils. Contaminated soil will not be stockpiled, but properly treated and handled prior to topsoil salvaging.

## 10. Plans for Surface Reclamation

## **Reclamation Objectives**

i. The objective of interim reclamation is to restore vegetative cover and a portion of the landform sufficient to maintain healthy, biologically active topsoil; control erosion; and minimize habitat and forage loss, visual impact, and weed infestation, during the life of the well or facilities.

ii. The long-term objective of final reclamation is to return the land to a condition similar to what existed prior to disturbance. This includes restoration of the landform and natural vegetative community, hydrologic systems, visual resources, and wildlife habitats. To ensure that the long-term objective will be reached through human and natural processes, actions will be taken to ensure standards are met for site stability, visual quality, hydrological functioning, and vegetative productivity.

iii. The BLM will be notified at least 3 days prior to commencement of any reclamation procedures.

iv. If circumstances allow, interim reclamation and/or final reclamation actions will be completed no later than 6 months from when the final well on the location has been completed or plugged. We will gain written permission from the BLM if more time is needed.

v. Interim reclamation will be performed on the well site after the well is drilled and completed. Reclamation Diagram, Figure # 4 depicts the location and dimensions of the planned interim reclamation for the well site.

#### **Interim Reclamation Procedures (If performed)**

1. Within 30 days of well completion, the well location and surrounding areas will be cleared of, and maintained free of, all materials, trash, and equipment not required for production.

2. In areas planned for interim reclamation, all the surfacing material will be removed and returned to the original mineral pit or recycled to repair or build roads and well pads.

3. The areas planned for interim reclamation will then be recontoured to the original contour if feasible, or if not feasible, to an interim contour that blends with the surrounding topography as much as possible. Where applicable, the fill material of the well pad will be backfilled into the cut to bring the area back to the original contour. The interim cut and fill slopes prior to re-seeding will not be steeper than a 3:1 ratio, unless the adjacent native topography is steeper. Note: Constructed slopes may be much steeper during drilling, but will be recontoured to the above ratios during interim reclamation.

4. Topsoil will be evenly respread and aggressively revegetated over the entire disturbed area not needed for all-weather operations including cuts & fills. To seed the area, the proper BLM seed mixture, free of noxious weeds, will be used. Final seedbed preparation will consist of contour cultivating to a depth of 4 to 6 inches within 24 hours prior to seeding, dozer tracking, or other imprinting in order to break the soil crust and create seed germination micro-sites.

5. Proper erosion control methods will be used on the area to control erosion, runoff and siltation of the surrounding area.

6. The interim reclamation will be monitored periodically to ensure that vegetation has reestablished and that erosion is controlled.

#### Final Reclamation (well pad, buried pipelines, etc.)

1. Prior to final reclamation procedures, the well pad, road, and surrounding area will be cleared of material, trash, and equipment.

2. All surfacing material will be removed and returned to the original mineral pit or recycled to repair or build roads and well pads.

3. All disturbed areas, including roads, pipelines, pads, production facilities, and interim reclaimed areas will be recontoured to the contour existing prior to initial construction or a contour that blends indistinguishably with the surrounding landscape. Topsoil that was spread over the interim reclamation areas will be stockpiled prior to recontouring. The topsoil will be redistributed evenly over the entire disturbed site to ensure successful revegetation.

4. After all the disturbed areas have been properly prepared, the areas will be seeded with the proper BLM seed mixture, free of noxious weeds. Final seedbed preparation will consist of contour cultivating to a depth of 4 to 6 inches within 24 hours prior to seeding, dozer tracking, or other imprinting in order to break the soil crust and create seed germination micro-sites.

5. Proper erosion control methods will be used on the entire area to control erosion, runoff and siltation of the surrounding area.

6. All unused equipment and structures including pipelines, electric line poles, tanks, etc. that serviced the well will be removed.

7. All reclaimed areas will be monitored periodically to ensure that revegetation occurs, that the area is not redisturbed, and that erosion is controlled.

## 11. Surface Ownership

a. The surface ownership of the proposed project is Federal.

۱.	Surface Owner:	David Kirk
	Phone Number:	(432) 853-2242
	Address:	2713 Racquet Club Drive Midland, TX 79705

a. ConocoPhillips Company is currently working on obtaining the surface use agreement from the private surface owner regarding the proposed project. Once completed ConocoPhillips will submit a letter confirming an agreement was made.

## 12. Other Information

a. The following well pad and facility location was staked with Vance Wolf on December 7th, 2016. Please review this application with the Revolver 24 Federal COM 2H, Revolver 24 Federal COM 3H & Revolver 24 Federal COM 4H. All ROW's will be filed separately. The Surface Use and Compensation Agreement will be filed under separate cover for the small portion of pipeline (97.34') that will be used to tie into the proposed Red Hills Trunk line at a later date. A small portion of the power line (12') will be on Section 19 but a ROW is not required given that it is right on the section line.

## 13. Maps and Diagrams

Access Road Map, TOPO A & Access Road Map TOPO B - Existing Road Well Proximity Map, TOPO C - Wells Within One Mile Location Layout, Figure #1 & Reclamation Diagram, Figure #4 - Production Facilities Diagram Preliminary Plot Plan - Additional Production Facilities Diagram Water Gather & Gas Gathering Pipeline R-O-W (3 pages) - Gas Pipeline Water Gather & Gas Gathering Pipeline R-O-W - Water Pipeline Power Line R-O-W - Electric Line Reclamation Diagram, Figure #4 - Interim Reclamation









Section 1 - General

Would you like to address long-term produced water disposal? NO

## Section 2 - Lined Pits

Would you like to utilize Lined Pit PWD options? NO Produced Water Disposal (PWD) Location: PWD surface owner: Lined pit PWD on or off channel: Lined pit PWD discharge volume (bbl/day): Lined pit specifications: Pit liner description: Pit liner manufacturers information: Precipitated solids disposal: Decribe precipitated solids disposal: Precipitated solids disposal permit: Lined pit precipitated solids disposal schedule: Lined pit precipitated solids disposal schedule attachment: Lined pit reclamation description: Lined pit reclamation attachment: Leak detection system description: Leak detection system attachment: Lined pit Monitor description: Lined pit Monitor attachment: Lined pit: do you have a reclamation bond for the pit? Is the reclamation bond a rider under the BLM bond? Lined pit bond number: Lined pit bond amount: Additional bond information attachment:

PWD disturbance (acres):

## Section 3 - Unlined Pits

Would you like to utilize Unlined Pit PWD options? NO **Produced Water Disposal (PWD) Location:** PWD surface owner: Unlined pit PWD on or off channel: Unlined pit PWD discharge volume (bbl/day): Unlined pit specifications: Precipitated solids disposal: Decribe precipitated solids disposal: Precipitated solids disposal permit: Unlined pit precipitated solids disposal schedule: Unlined pit precipitated solids disposal schedule attachment: Unlined pit reclamation description: Unlined pit reclamation attachment: Unlined pit Monitor description: **Unlined pit Monitor attachment:** Do you propose to put the produced water to beneficial use? Beneficial use user confirmation: Estimated depth of the shallowest aquifer (feet): Does the produced water have an annual average Total Dissolved Solids (TDS) concentration equal to or less than that of the existing water to be protected? TDS lab results: Geologic and hydrologic evidence: State authorization: **Unlined Produced Water Pit Estimated percolation:** Unlined pit: do you have a reclamation bond for the pit? Is the reclamation bond a rider under the BLM bond? Unlined pit bond number: Unlined pit bond amount:

Additional bond information attachment:

#### Section 4 - Injection

Would you like to utilize Injection PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

**PWD disturbance (acres):** 

**PWD** disturbance (acres):

Injection well type: Injection well number: Assigned injection well API number? Injection well new surface disturbance (acres): Minerals protection information: Mineral protection attachment: Underground Injection Control (UIC) Permit? UIC Permit attachment:

## Section 5 - Surface Discharge

Would you like to utilize Surface Discharge PWD options? NO

Produced Water Disposal (PWD) Location:PWD surface owner:PWD disturbance (acres):Surface discharge PWD discharge volume (bbl/day):Surface Discharge NPDES Permit?Surface Discharge NPDES Permit attachment:Surface Discharge site facilities information:Surface discharge site facilities map:Surface discharge site facilities map:

#### Section 6 - Other

Would you like to utilize Other PWD options? NO

Produced Water Disposal (PWD) Location: PWD surface owner: Other PWD discharge volume (bbl/day): Other PWD type description: Other PWD type attachment: Have other regulatory requirements been met? Other regulatory requirements attachment:

PWD disturbance (acres):

Injection well name: Injection well API number:

## AFMSS

U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

## **Bond Information**

Federal/Indian APD: FED

BLM Bond number: ES0085

**BIA Bond number:** 

Do you have a reclamation bond? NO

Is the reclamation bond a rider under the BLM bond?

Is the reclamation bond BLM or Forest Service?

BLM reclamation bond number:

Forest Service reclamation bond number:

Forest Service reclamation bond attachment:

**Reclamation bond number:** 

**Reclamation bond amount:** 

Reclamation bond rider amount:

Additional reclamation bond information attachment:

