

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

RECEIVED

JUN 28 2013

FORM APPROVED  
OMB No. 1004-0137  
Expires: July 31, 2010

**SUNDRY NOTICES AND REPORTS ON WELL SPOTON Filing Office**  
**Do not use this form for proposals to drill or to re-enter and abandon well. Use Form 3160-3 (APD) for such proposals.**

5. Lease Serial No.	SF-080538
6. If Indian, Allottee or Tribe Name	
7. If Unit of CA/Agreement, Name and/or No.	San Juan 30-5 Unit
8. Well Name and No.	San Juan 30-5 Unit 29
9. API Well No.	30-039-07851
10. Field and Pool or Exploratory Area	Blanco Mesaverde
11. Country or Parish, State	Rio Arriba, New Mexico

SUBMIT IN TRIPLICATE - Other instructions on page 2.	
1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other	
2. Name of Operator ConocoPhillips Company	
3a. Address PO Box 4289, Farmington, NM 87499	3b. Phone No. (include area code) (505) 326-9700
4. Location of Well (Footage, Sec., T.R.M., or Survey Description) Surface Unit G (SWNE), 1840' FNL & 1840' FEL, Sec. 14, T30N, R5W	

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION				
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off	
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity	
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other	
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Investigation Wells	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal		

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomple horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once Testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

In August 2012, ConocoPhillips Company (COP) noticed a small amount of water coming from the cathodic well vent pipe adjacent to the SJ 30-5 Unit 29 gas well. Upon investigation of the producing #29 well, COP determined the bradenhead had failed. COP promptly moved on the well and found that there was a casing leak. The leak was repaired, the #29 well was pressure tested after the squeeze to confirm the leak was repaired, and the well was then returned to production. The situation was duly reported to BLM & NMOCD.

Based on the leak, Brandon Powell at the NMOCD in Aztec proposed, and COP has agreed, to drill one/two investigation wells to collect samples and insure that groundwater has not been negatively impacted. If samples collected from the investigation well demonstrate no impact to ground water then the hole will be immediately filled with cement and properly abandoned. If the collected samples indicate an impact to ground water that is related to the leak from the #29 gas well COP, BLM, and NMOCD will discuss next steps, which may include casing the investigation well for the purpose of converting it into a monitoring well. Monitoring will continue until all constituents of concern are below regulatory standards for eight consecutive quarters, appear stable, or reach regional background levels.

ConocoPhillips requests permission to drill two investigation wells per the attached State of New Mexico Office of The State Engineer approved Permit Numbers SJ 4039 and SJ-4039 POD 2 applications. The Permits with Statements and Explanations are attached. ConocoPhillips' drilling procedure, aerial, and site security diagram are also attached.

RCVD JUL 26 '13  
OIL CONS. DIV.  
DIST. 3

14. I hereby certify that the foregoing is true and correct. Name (Printed/Typed) DENISE JOURNEY		Regulatory Technician	
Signature <i>Denise Journey</i>		Date 6/27/2013	

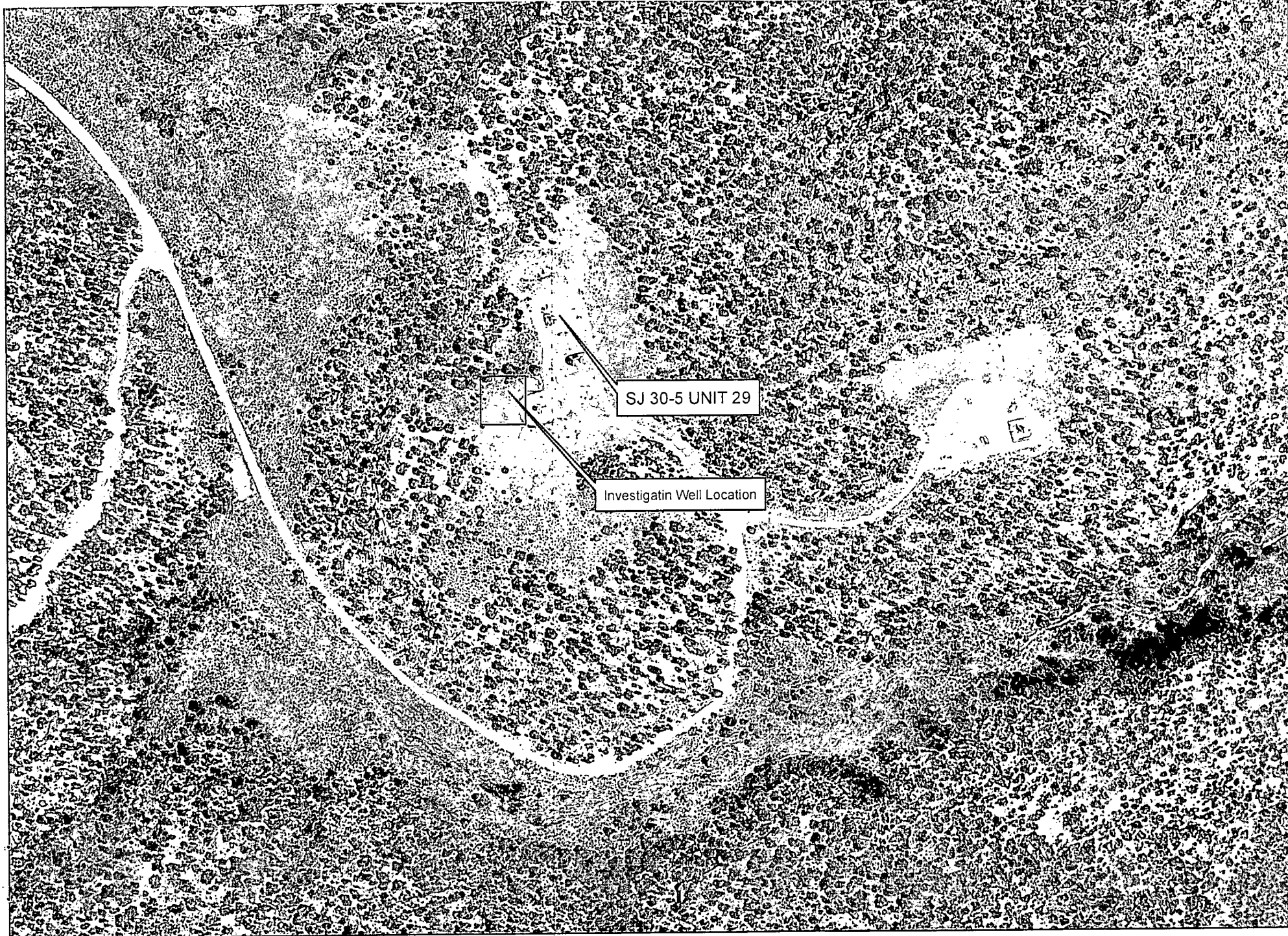
THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by <i>Ambrab</i>	Title Petr. Eng.	Date 7/24/13
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.		

Title 18 U.S.C. Section 1001 and Title 42 U.S.C. Section 1212, make 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.

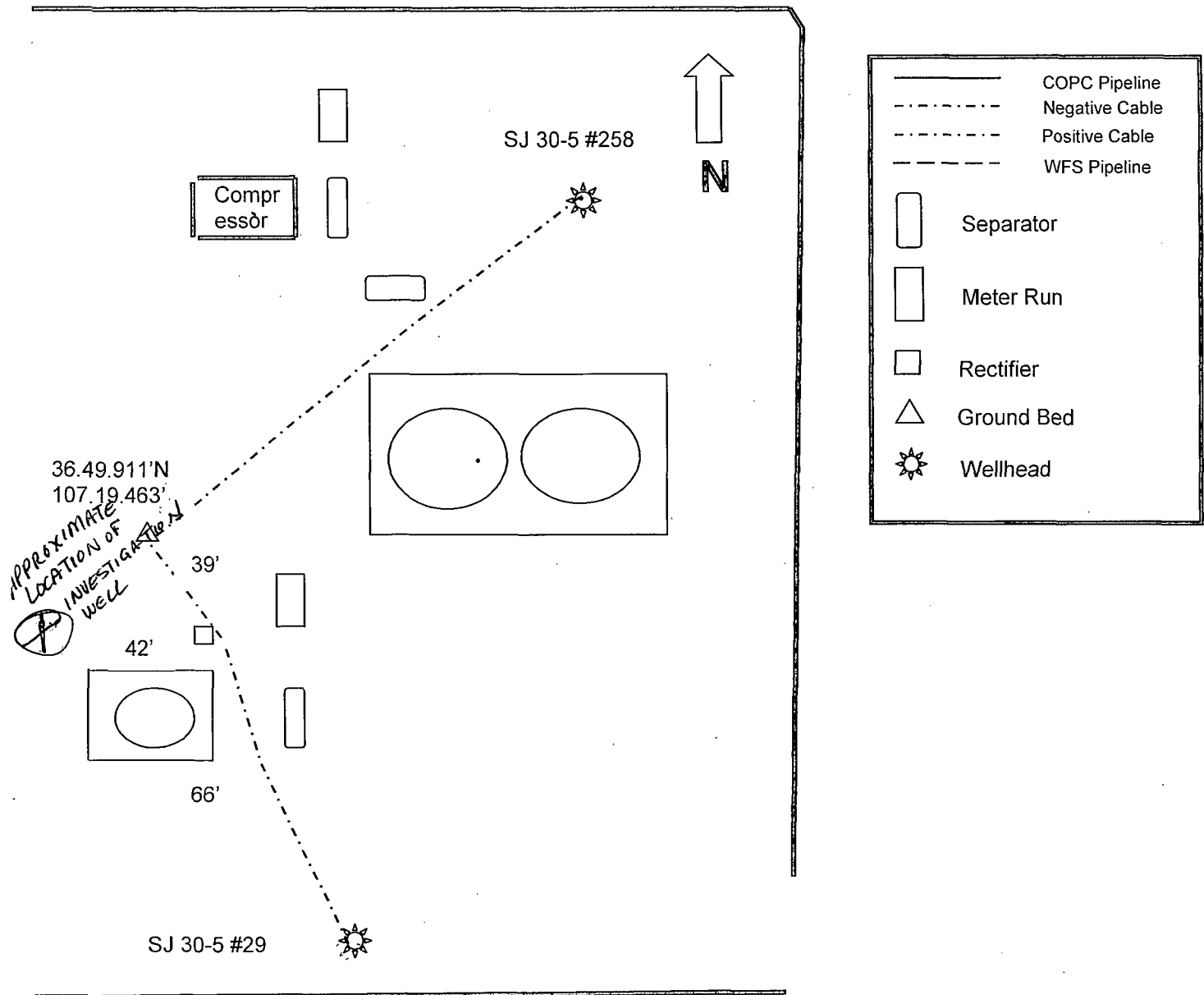
(Instruction on page 2)

NMOCD



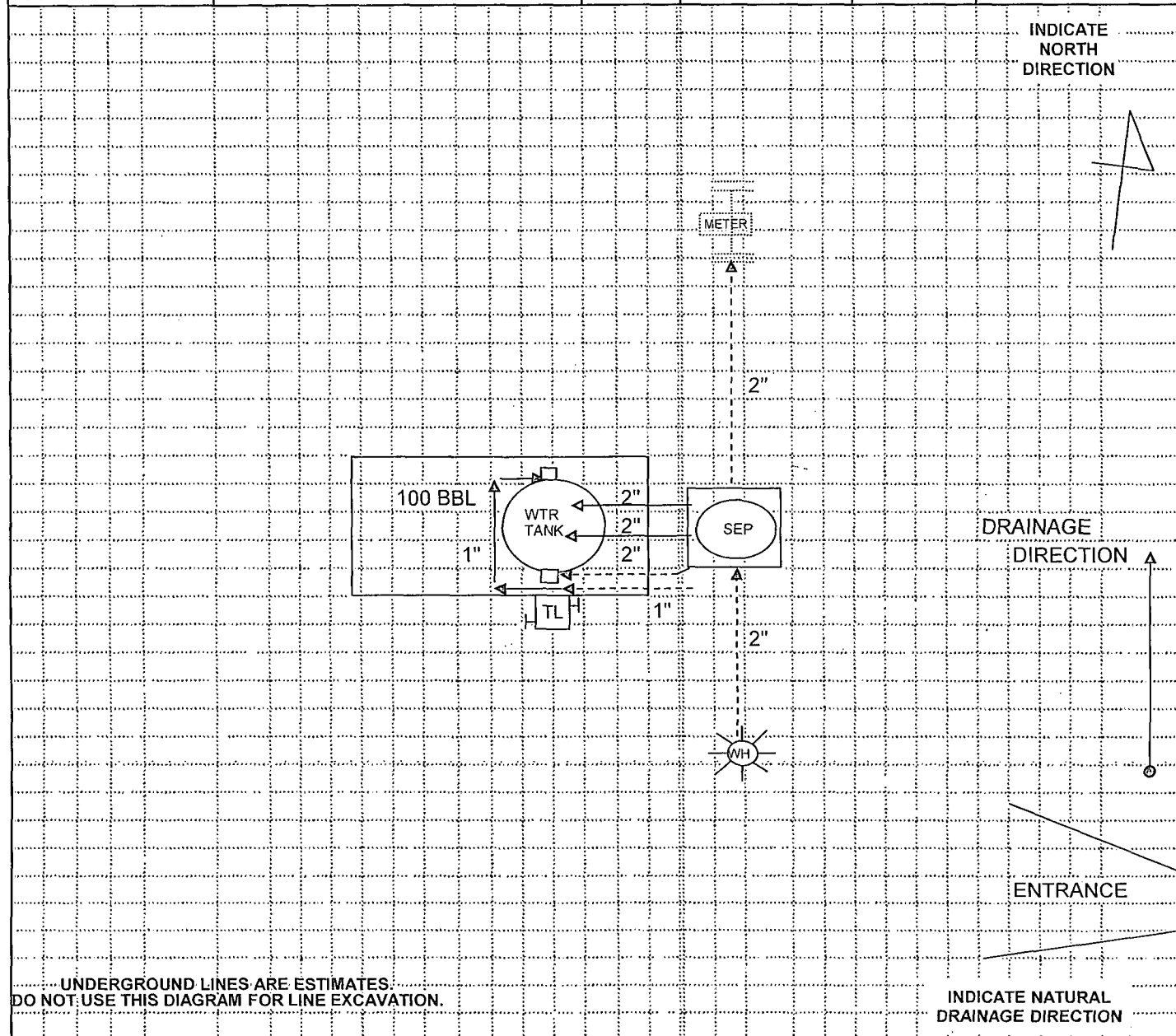
# San Juan 30-5 Unit #29

Section 14, T30N, R5W, N.M.P.M., Rio Arriba County, NM



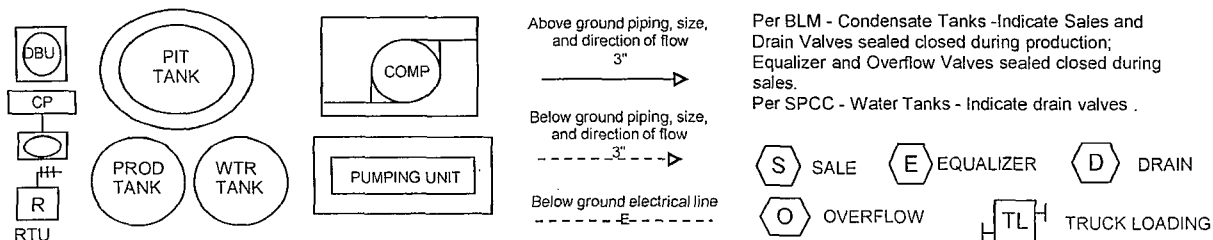
There is plenty of room to drill a test hole anywhere around the #29 well head or tank and south and west of the ground bed. We have 39' from ground bed to the rectifier, 42' from ground bed to fence, 66' from well head to corner of the fence

	<b>BURLINGTON RESOURCES SITE SECURITY PLAN - SITE DIAGRAM</b>			MICHAEL B. SULLIVAN	
<b>X</b>	<b>CONOCOPHILLIPS SITE SECURITY PLAN - SITE DIAGRAM</b>			DATE:	12/1/2010
WELL / SITE NAME:	SAN JUAN 30-5 29	LEGAL DESCR (U-S-T-R):	UL.G, SEC14 T-30 -R-5		
API No.:	30-039-07851	PRODUCING ZONE(S):	MV		
LEASE No.:	SF-080438	LATITUDE:	36.8146706	LONGITUDE:	-107.32340
FOOTAGES.:	1840 FNL & 1840 FEL	COUNTY:	RIO ARRIBA	STATE:	NEW MEXICO



This Site is subject to either -  
The Burlington Resources Site Security Plan and Oil Production Policy, or  
The ConocoPhillips San Juan Site Security Plan for Sale of Oil and Gas.

The Site Security Plans are Located At:  
ConocoPhillips  
3401 E. 30th Street  
Farmington, NM 87402



Drilling Procedure  
San Juan 30-5 Unit 29 Investigation Well

Basic Procedure:

- 1) MIRU MO-TE
- 2) PU 8-3/4" bit & BHA for air drilling
- 3) Drill to 300'. POOH
- 4) After waiting for 1 hour, collect first sample from interval between 250' – 267'
- 5) Perform onsite testing of the water sample for compliance to WQCC standards (pH, Chlorides, and Sulfates) and save a portion of the sample to be analyzed in the lab
  - If the water sample does not comply with WQCC standards for pH, Chlorides, and Sulfates, call Regulatory and Production Engineering Supervisors for plan forward.
- 6) TIH and drill to 450' (TD). POOH
- 7) After waiting 1 hour, collect comingled water sample from interval between 386' – 400'
- 8) Perform onsite testing of the water sample in the field for compliance to WQCC standards (pH, Chlorides, and Sulfates) and save a portion of the sample to be analyzed in the lab.
  - If the water sample does not comply with WQCC standards for pH, Chlorides, and Sulfates, call Regulatory and Production Engineering Supervisors for plan forward.
- 9) Plug back to 275' with cement-and/or bentonite
- 10) RIH with 4" PVC pipe w/ 40' slotted PVC (screen) on bottom and land PVC pipe in first zone. TOOH
- 11) Wait 24 hours
- 12) Measure LEL with a calibrated gas monitor and report reading to Regulatory and Production Engineering Supervisors (note wind conditions)
  - If LEL measurement is acceptable, P&A well to surface
  - If LEL measurement is not acceptable, wait for plan forward
  - Take a water sample and submit it for lab analysis for; B-tex, pH, Chlorides, and Sulfates. Do not plug the well until after the results have been submitted and reviewed.
- 13) RDMO MO-TE

**NOTE:**

- 1) Procedures are subject to change depending on events encountered during the actual drilling operations.
- 2) Presence of H<sub>2</sub>S is possible ~ All personnel will have a calibrated 4 Gas monitor while on location during activity



STATE OF NEW MEXICO  
OFFICE OF THE STATE ENGINEER  
AZTEC

Scott A. Verhines, P.E.  
State Engineer

100 Gossett Drive, Suite A  
Aztec, New Mexico 87410

April 22, 2013

Patsy Clugston  
Senior Regulatory Specialist  
ConocoPhillips Company  
P O Box 4289  
Farmington, NM 87499-4289

File Number SJ-4039

Dear Ms. Clugston:

Enclosed is approved Permit number SJ-4039 to Drill a Well with No Consumptive Use of Water for ConocoPhillips. Specifically it is a permit to Drill an Exploratory and Monitor Well. Please note the page of Conditions of Approval which are with the application. The conditions require the filing of a well log or the permit automatically expires. Upon completion of the use of the well for exploratory and monitoring purposes, the well shall be plugged upon the approval of a plugging plan. The permit will expire in 2 years unless ConocoPhillips makes a written request to extend the expiration date and the State Engineer approves an extension.

Sincerely,

Bill Enenbach  
District V

Enclosure: Permit SJ-4039

C: Aztec Reading  
Aztec File SJ-4039  
WRAB, Albuquerque

## NEW MEXICO OFFICE OF THE STATE ENGINEER

APPLICATION FOR PERMIT TO DRILL A WELL  
WITH NO CONSUMPTIVE USE OF WATER

(check applicable box):

For fees, see State Engineer website: <http://www.ose.state.nm.us/>

Purpose:	<input type="checkbox"/> Pollution Control And / Or Recovery	<input type="checkbox"/> Geo-Thermal
<input checked="" type="checkbox"/> Exploratory	<input type="checkbox"/> Construction Site De-Watering	<input type="checkbox"/> Other (Describe):
<input checked="" type="checkbox"/> Monitoring	<input type="checkbox"/> Mineral De-Watering	
A separate permit will be required to apply water to beneficial use.		
<input type="checkbox"/> Temporary Request - Requested Start Date:		Requested End Date:
Plugging Plan of Operations Submitted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		

STATE ENGINEER OFFICE  
AZ/EC, NEW MEXICO  
2013 APR - 2 AM 10:10

## 1. APPLICANT(S)

Name: ConocoPhillips Company	Name:
Contact or Agent: check here if Agent <input type="checkbox"/> Patsy Clugston, Sr. Regulatory Specialist	Contact or Agent: check here if Agent <input type="checkbox"/>
Mailing Address: P.O. Box 4289	Mailing Address:
City: Farmington,	City:
State: NM Zip Code: 87499-4289	State: Zip Code:
Phone: 505-326-9518 <input type="checkbox"/> Home <input type="checkbox"/> Cell Phone (Work): 505-326-9518	Phone: <input type="checkbox"/> Home <input type="checkbox"/> Cell Phone (Work):
E-mail (optional): Patsy.L.Clugston@conocophillips.com	E-mail (optional):

FOR OSE INTERNAL USE

Application for Permit, Form wr-07, Rev 4/12/12

File Number: SJ-4039	Trn Number:
Trans Description (optional):	
Sub-Basin:	
PCW/LOG Due Date:	

**4. SPECIFIC REQUIREMENTS:** The applicant must include the following, as applicable to each well type. Please check the appropriate boxes, to indicate the information has been included and/or attached to this application:

<b>Exploratory:</b> <input checked="" type="checkbox"/> Include a description of any proposed pump test, if applicable.	<b>Pollution Control and/or Recovery:</b> <input type="checkbox"/> Include a plan for pollution control/recovery, that includes the following: <input type="checkbox"/> A description of the need for the pollution control or recovery operation. <input type="checkbox"/> The estimated maximum period of time for completion of the operation. <input type="checkbox"/> The annual diversion amount. <input type="checkbox"/> The annual consumptive use amount. <input type="checkbox"/> The maximum amount of water to be diverted and injected for the duration of the operation. <input type="checkbox"/> The method and place of discharge.	<b>Construction De-Watering:</b> <input type="checkbox"/> Include a description of the proposed dewatering operation, <input type="checkbox"/> The estimated duration of the operation, <input type="checkbox"/> The maximum amount of water to be diverted, <input type="checkbox"/> A description of the need for the dewatering operation, and, <input type="checkbox"/> A description of how the diverted water will be disposed of.	<b>Mine De-Watering:</b> <input type="checkbox"/> Include a plan for pollution control/recovery, that includes the following: <input type="checkbox"/> A description of the need for mine dewatering. <input type="checkbox"/> The estimated maximum period of time for completion of the operation. <input type="checkbox"/> The source(s) of the water to be diverted. <input type="checkbox"/> The geohydrologic characteristics of the aquifer(s). <input type="checkbox"/> The maximum amount of water to be diverted per annum. <input type="checkbox"/> The maximum amount of water to be diverted for the duration of the operation. <input type="checkbox"/> The quality of the water.
<b>Monitoring:</b> <input checked="" type="checkbox"/> Include the reason for the monitoring well, and, <input type="checkbox"/> The duration of the planned monitoring.	<input type="checkbox"/> The method of measurement of water produced and discharged. <input type="checkbox"/> The source of water to be injected. <input type="checkbox"/> The method of measurement of water injected. <input type="checkbox"/> The characteristics of the aquifer. <input type="checkbox"/> The method of determining the resulting annual consumptive use of water and depletion from any related stream system. <input type="checkbox"/> Proof of any permit required from the New Mexico Environment Department. <input type="checkbox"/> An access agreement if the applicant is not the owner of the land on which the pollution plume control or recovery well is to be located.	<b>Geo-Thermal:</b> <input type="checkbox"/> Include a description of the geothermal heat exchange project, <input type="checkbox"/> The amount of water to be diverted and re-injected for the project, <input type="checkbox"/> The time frame for constructing the geothermal heat exchange project, and, <input type="checkbox"/> The duration of the project. <input type="checkbox"/> Preliminary surveys, design data, and additional information shall be included to provide all essential facts relating to the request.	<input type="checkbox"/> The method of measurement of water diverted. <input type="checkbox"/> The recharge of water to the aquifer. <input type="checkbox"/> Description of the estimated area of hydrologic effect of the project. <input type="checkbox"/> The method and place of discharge. <input type="checkbox"/> An estimation of the effects on surface water rights and underground water rights from the mine dewatering project. <input type="checkbox"/> A description of the methods employed to estimate effects on surface water rights and underground water rights. <input type="checkbox"/> Information on existing wells, rivers, springs, and wetlands within the area of hydrologic effect.

#### ACKNOWLEDGEMENT

I, We (name of applicant(s)), ConocoPhillips Company

Print Name(s)

affirm that the foregoing statements are true to the best of (my, our) knowledge and belief.

[Signature]  
Applicant Signature

[Signature]  
Applicant Signature

#### ACTION OF THE STATE ENGINEER

This application is:

☒ approved ☐ partially approved ☐ denied

provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare and further subject to the attached conditions of approval.

Witness my hand and seal this 22nd day of April 20 13, for the State Engineer,

Scott A. Verhines, P.E., State Engineer

By: [Signature]  
Signature

Bill Enenbach  
Print

Title: Water Rights Division, District V  
Print

FOR USE INTERNAL USE

Application for Permit, Form wr-07

File Number: SJ-4039

Trn Number:



2. WELL(S) Describe the well(s) applicable to this application.

<b>Location Required:</b> Coordinate location must be reported in NM State Plane (NAD 83), UTM (NAD 83), or Latitude/Longitude (Lat/Long - WGS84). District II (Roswell) and District VII (Cimarron) customers, provide a PLSS location in addition to above.			
<div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> NM State Plane (NAD83) (Feet)  <input type="checkbox"/> NM West Zone  <input type="checkbox"/> NM East Zone  <input type="checkbox"/> NM Central Zone         </div> <div> <input type="checkbox"/> UTM (NAD83) (Meters)  <input type="checkbox"/> Zone 12N  <input type="checkbox"/> Zone 13N         </div> <div> <input checked="" type="checkbox"/> Lat/Long (WGS84) (to the nearest 1/10<sup>th</sup> of second)         </div> </div>			
Well Number (if known):	X or Easting or Longitude:	Y or Northing or Latitude:	Provide if known: -Public Land Survey System (PLSS) (Quarters or Halves, Section, Township, Range) OR -Hydrographic Survey Map & Tract; OR -Lot, Block & Subdivision; OR -Land Grant Name
SJ 30-5 UNIT #29	<del>36.814678n</del> 107°19'26.41" West	<del>407.324003w</del> 36°48'52.84" North	NE/4 SW/4 NE/4, Section 14, T30N, R5W
NOTE: If more well locations need to be described, complete form WR-08 (Attachment 1 – POD Descriptions) Additional well descriptions are attached: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, how many _____ Other description relating well to common landmarks, streets, or other: _____			
Well is on land owned by: Bureau Of Land Management			
Well Information: NOTE: If more than one (1) well needs to be described, provide attachment. Attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, how many _____			
Approximate depth of well (feet): 450'		Outside diameter of well casing (inches): 2"	
Driller Name: Mote		Driller License Number: WD733	

3. ADDITIONAL STATEMENTS OR EXPLANATIONS

See Attached statement	STATE ENGINEER OFFICE AZTEC, NEW MEXICO 2013 APR - 2 AM 10:10
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FOR USE INTERNAL USE

Application for Permit, Form wr-07

File Number: SJ-4039	Trn Number:
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NEW MEXICO OFFICE OF THE STATE ENGINEER  
PERMIT TO DRILL AN EXPLORATORY AND MONITOR WELL  
**CONDITIONS OF APPROVAL**

This application is approved provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare of the state; and further subject to the following conditions of approval:

1. This application is approved as follows:

Permittee:	ConocoPhillips Company
Permit Number:	SJ-4039
Priority:	N/A
Source:	San Juan Underground Water Basin
Point of Diversion:	Latitude is 36° 48' 52.84" North; Longitude is 107° 19' 26.41" West; located in the NE ¼ SW ¼ NE ¼, Section 14, T30N, R5W, NMPM; Rio Arriba County, NM
Purposes of Use:	Monitoring, sampling, and testing
Place of Use:	N/A
Amount of Water:	N/A

2. No water shall be appropriated and beneficially used under this permit.

3. Water shall be used from well SJ-4039 for monitoring, sampling and testing purposes only unless and until a permit for a specific use has been issued by the State Engineer.

4. The driller's well record (well log) must be filed with the State Engineer within 20 days after the well is drilled. This permit shall automatically expire if the well record is not filed on or before April 22, 2014.

5. The well shall be plugged in accordance with 19.27.4 NMAC upon completion of the permitted uses, and a plugging report shall be filed with the State Engineer within 20 days.

6. The permittee shall submit to the State Engineer a Plugging Plan of Operations which must be approved before plugging.

7. The well shall be drilled and plugged by a licensed driller in accordance with 19.27.4 NMAC (New Mexico Administrative Code) and Section 72-12-12 NMSA (New Mexico Statutes Annotated).

8. If artesian water is encountered, all rules and regulations pertaining to the drilling and casing of artesian wells shall be complied with.

9. This permit shall expire April 22, 2015. Upon request from the permittee and written approval of the State Engineer, the expiration date can be extended.

Witness my hand and seal this 22<sup>nd</sup> day of April, 2013.

Scott A. Verhines, P.E., State Engineer

By:



Bill Enenbach, Water Rights Division, District V

**ConocoPhillips' Application for Exploratory Water Well**

**San Juan 30-5 #29**

**SW/NE of Section 14, T30N, R5W; Lat/36.814678N L/107.324003W**

**3. ADDITIONAL STATEMENTS AND EXPLANATIONS**

ConocoPhillips Company (COP) noticed a small amount of water coming from the cathodic well vent pipe adjacent to the San Juan 30-5 #29 gas well. Upon investigation of the producing #29 well, COP determined the BH had failed. COP promptly moved on the well and found that there was a casing leak. The leak was repaired, the #29 well was pressure tested after the squeeze to confirm the leak was repaired, and the well was then returned to production. The situation was duly reported to NMOCD.

Based on the leak, Brandon Powell at the NMOCD in Aztec proposed, and COP has agreed, to drill an investigation well to collect samples and insure that groundwater has not been negatively impacted. If samples collected from the investigation well demonstrate no impact to ground water then the hole will be filled with cement and properly abandoned. If the collected samples indicate an impact to ground water that is related to the leak from the #29 gas well, then COP and NMOCD will discuss next steps, which may include casing the investigation well for the purpose of converting it into a monitoring well.

STATE ENGINEER OFFICE  
AZTEC, NEW MEXICO  
2013 APR -2 AM 10:10

Attachment for  
New Mexico State Engineer Office  
Permit SJ-4039



STATE OF NEW MEXICO  
OFFICE OF THE STATE ENGINEER  
AZTEC

Scott A. Verhines, P.E.  
State Engineer

100 Gossett Drive, Suite A  
Aztec, New Mexico 87410

May 23, 2013

Heather McDaniel  
Regulatory Supervisor  
ConocoPhillips Company  
P O Box 4289  
Farmington, NM 87499-4289

File number SJ-4039 POD 2

Dear Ms. McDaniel:

Enclosed is approved Permit Number SJ-4039 POD 2 to Drill a Well with No Consumptive Use of Water for ConocoPhillips. Specifically it is a permit to Drill an Exploratory and Monitor Well. Please note the page of Conditions of Approval which are with the application. The conditions require the filing of a well log or the permit automatically expires. Upon completion of the use of the well for exploratory and monitoring purposes, the well shall be plugged upon the approval of a plugging plan. The permit will expire in 2 years unless ConocoPhillips makes a written request to extend the expiration date, and the State Engineer approves an extension.

Sincerely,

A handwritten signature in cursive script that reads "Bill Enenbach".

Bill Enenbach  
District V

Enclosure: Permit SJ-4309 POD 2

C: Aztec Reading  
Aztec File SJ-4039  
WRAB, Albuquerque

**ConocoPhillips' Application for Exploratory Water Well**

**San Juan 30-5 Unit 29**

**SW/NE of Section 14, T30N, R5W: LAT 36.814678N LONG 107.324003W**

**3. ADDITIONAL STATEMENTS AND EXPLANATIONS**

ConocoPhillips Company (COP) noticed a small amount of water coming from the cathodic well vent pipe adjacent to the San Juan 30-5 Unit 29 gas well. Upon investigation of the producing #29 well, COP determined the bradenhead had failed. COP promptly moved on the well and found that there was a casing leak. The leak was repaired, the #29 well was pressure tested after the squeeze to confirm the leak was repaired, and the well was then returned to production. The situation was duly reported to NMOCD.

Based on the leak, Brandon Powell at the NMOCD in Aztec proposed, and COP has agreed, to drill an investigation well to collect samples and insure that groundwater has not been negatively impacted. If samples collected from the investigation well demonstrate no impact to ground water then the hole will be filled with cement and properly abandoned. If the collected samples indicate an impact to ground water that is related to the leak from the #29 gas well, the COP and NMOCD will discuss next steps, which may include casing the investigation well for the purpose of converting it into a monitoring well.

Attachment for  
New Mexico State Engineer Office  
Permit Number SJ-4039 POD 2

STATE ENGINEER OFFICE  
AZTEC, NEW MEXICO  
2013 MAY 22 PM 2:08

NEW MEXICO OFFICE OF THE STATE ENGINEER  
PERMIT TO DRILL AN EXPLORATORY AND MONITOR WELL  
**CONDITIONS OF APPROVAL**

This application is approved provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare of the state; and further subject to the following conditions of approval:

1. This application is approved as follows:

Permittee:	ConocoPhillips Company
Permit Number:	SJ-4039 POD 2
Priority:	N/A
Source:	San Juan Underground Water Basin
Point of Diversion:	Latitude is 36° 48' 52.84" North; Longitude is 107° 19' 26.41" West; located in the NE ¼ SW ¼ NE ¼, Section 14, T30N, R5W, NMPM; Rio Arriba County, NM
Purposes of Use:	Monitoring, sampling, and testing
Place of Use:	N/A
Amount of Water:	N/A

2. No water shall be appropriated and beneficially used under this permit.

3. Water shall be used from well SJ-4039 POD 2 for monitoring, sampling and testing purposes only unless and until a permit for a specific use has been issued by the State Engineer.

4. The driller's well record (well log) must be filed with the State Engineer within 20 days after the well is drilled. This permit shall automatically expire if the well record is not filed on or before May 23, 2014.

5. The well shall be plugged in accordance with 19.27.4 NMAC upon completion of the permitted uses, and a plugging report shall be filed with the State Engineer within 20 days.

6. The permittee shall submit to the State Engineer a Plugging Plan of Operations which must be approved before plugging.

7. The well shall be drilled and plugged by a licensed driller in accordance with 19.27.4 NMAC (New Mexico Administrative Code) and Section 72-12-12 NMSA (New Mexico Statutes Annotated).

8. If artesian water is encountered, all rules and regulations pertaining to the drilling and casing of artesian wells shall be complied with.

9. This permit shall expire May 23, 2015. Upon request from the permittee and written approval of the State Engineer, the expiration date can be extended.

Witness my hand and seal this 23<sup>rd</sup> day of May, 2013.

Scott A. Verhines, P.E., State Engineer

By: Bill Enenbach  
Bill Enenbach, Water Rights Division, District V

File No. SJ-4039 POD 2

## NEW MEXICO OFFICE OF THE STATE ENGINEER



### APPLICATION FOR PERMIT TO DRILL A WELL WITH NO CONSUMPTIVE USE OF WATER



(check applicable box):

For fees, see State Engineer website: <http://www.ose.state.nm.us/>

Purpose:	<input type="checkbox"/> Pollution Control And / Or Recovery	<input type="checkbox"/> Geo-Thermal
<input checked="" type="checkbox"/> Exploratory	<input type="checkbox"/> Construction Site De-Watering	<input type="checkbox"/> Other (Describe):
<input checked="" type="checkbox"/> Monitoring	<input type="checkbox"/> Mineral De-Watering	
A separate permit will be required to apply water to beneficial use.		
<input type="checkbox"/> Temporary Request - Requested Start Date:		Requested End Date:
Plugging Plan of Operations Submitted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		

#### 1. APPLICANT(S)

Name: ConocoPhillips	Name:
Contact or Agent: check here if Agent <input type="checkbox"/> Heather McDaniel, Regulatory Supervisor	Contact or Agent: check here if Agent <input type="checkbox"/>
Mailing Address: P.O. Box 4289	Mailing Address:
City: Farmington	City:
State: NM Zip Code: 87499-4289	State: Zip Code:
Phone: 505-326-9507 <input type="checkbox"/> Home <input type="checkbox"/> Cell Phone (Work): 505-326-9507	Phone: <input type="checkbox"/> Home <input type="checkbox"/> Cell Phone (Work):
E-mail (optional): Heather.D.McDaniel@cop.com	E-mail (optional):

STATE ENGINEER OFFICE  
AZTEC, NEW MEXICO

2013 MAY 22 PM 2:07

FOR OSE INTERNAL USE

Application for Permit, Form wr-07, Rev 4/12/12

File Number: SJ-4039 POD 2	Trn Number:
Trans Description (optional):	
Sub-Basin:	
PCW/LOG Due Date:	

2. WELL(S) Describe the well(s) applicable to this application.

**Location Required:** Coordinate location must be reported in NM State Plane (NAD 83), UTM (NAD 83), or Latitude/Longitude (Lat/Long - WGS84).  
District II (Roswell) and District VII (Cimarron) customers, provide a PLSS location in addition to above.

☐ NM State Plane (NAD83) (Feet)
☐ UTM (NAD83) (Meters)
☒ Lat/Long (WGS84) (to the nearest 1/10<sup>th</sup> of second)

☐ NM West Zone
☐ Zone 12N

☐ NM East Zone
☐ Zone 13N

☐ NM Central Zone

Well Number (if known):	X or Easting or Longitude:	Y or Northing or Latitude:	Provide if known: -Public Land Survey System (PLSS) (Quarters or Halves, Section, Township, Range) OR - Hydrographic Survey Map & Tract; OR - Lot, Block & Subdivision; OR - Land Grant Name
SJ 30-5 UNIT 29	107d 19' 26.41"w	36d 48' 52.84"n	NE/4 SW/4 NE/4, Section 14, T30N, R5W

NOTE: If more well locations need to be described, complete form WR-08 (Attachment 1 – POD Descriptions)  
Additional well descriptions are attached: ☐ Yes ☒ No If yes, how many \_\_\_\_\_

Other description relating well to common landmarks, streets, or other:

Well is on land owned by: Bureau Of Land Management

Well Information: NOTE: If more than one (1) well needs to be described, provide attachment. Attached? ☐ Yes ☒ No  
If yes, how many \_\_\_\_\_

Approximate depth of well (feet): 450.00 Outside diameter of well casing (inches): 4.00

Driller Name: Mote Driller License Number: WD733

3. ADDITIONAL STATEMENTS OR EXPLANATIONS

See Attached Statement

STATE ENGINEER OFFICE  
AZTEC, NEW MEXICO

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Trn Number:



4. **SPECIFIC REQUIREMENTS:** The applicant must include the following, as applicable to each well type. Please check the appropriate boxes, to indicate the information has been included and/or attached to this application:

<b>Exploratory:</b> <input checked="" type="checkbox"/> Include a description of any proposed pump test, if applicable.	<b>Pollution Control and/or Recovery:</b> <input type="checkbox"/> Include a plan for pollution control/recovery, that includes the following: <input type="checkbox"/> A description of the need for the pollution control or recovery operation. <input type="checkbox"/> The estimated maximum period of time for completion of the operation. <input type="checkbox"/> The annual diversion amount. <input type="checkbox"/> The annual consumptive use amount. <input type="checkbox"/> The maximum amount of water to be diverted and injected for the duration of the operation. <input type="checkbox"/> The method and place of discharge.	<b>Construction De-Watering:</b> <input type="checkbox"/> Include a description of the proposed dewatering operation, <input type="checkbox"/> The estimated duration of the operation, <input type="checkbox"/> The maximum amount of water to be diverted, <input type="checkbox"/> A description of the need for the dewatering operation, and, <input type="checkbox"/> A description of how the diverted water will be disposed of.	<b>Mine De-Watering:</b> <input type="checkbox"/> Include a plan for pollution control/recovery, that includes the following: <input type="checkbox"/> A description of the need for mine dewatering. <input type="checkbox"/> The estimated maximum period of time for completion of the operation. <input type="checkbox"/> The source(s) of the water to be diverted. <input type="checkbox"/> The geohydrologic characteristics of the aquifer(s). <input type="checkbox"/> The maximum amount of water to be diverted per annum. <input type="checkbox"/> The maximum amount of water to be diverted for the duration of the operation. <input type="checkbox"/> The quality of the water, <input type="checkbox"/> The method of measurement of water diverted.
<b>Monitoring:</b> <input checked="" type="checkbox"/> Include the reason for the monitoring well, and, <input type="checkbox"/> The duration of the planned monitoring.	<input type="checkbox"/> The method of measurement of water produced and discharged. <input type="checkbox"/> The source of water to be injected. <input type="checkbox"/> The method of measurement of water injected. <input type="checkbox"/> The characteristics of the aquifer. <input type="checkbox"/> The method of determining the resulting annual consumptive use of water and depletion from any related stream system. <input type="checkbox"/> Proof of any permit required from the New Mexico Environment Department. <input type="checkbox"/> An access agreement if the applicant is not the owner of the land on which the pollution plume control or recovery well is to be located.	<b>Geo-Thermal:</b> <input type="checkbox"/> Include a description of the geothermal heat exchange project, <input type="checkbox"/> The amount of water to be diverted and re-injected for the project, <input type="checkbox"/> The time frame for constructing the geothermal heat exchange project, and, <input type="checkbox"/> The duration of the project. <input type="checkbox"/> Preliminary surveys, design data, and additional information shall be included to provide all essential facts relating to the request.	<input type="checkbox"/> The recharge of water to the aquifer. <input type="checkbox"/> Description of the estimated area of hydrologic effect of the project. <input type="checkbox"/> The method and place of discharge. <input type="checkbox"/> An estimation of the effects on surface water rights and underground water rights from the mine dewatering project. <input type="checkbox"/> A description of the methods employed to estimate effects on surface water rights and underground water rights. <input type="checkbox"/> Information on existing wells, rivers, springs, and wetlands within the area of hydrologic effect.

#### ACKNOWLEDGEMENT

I, We (name of applicant(s)), ConocoPhillips Company

Print Name(s)

affirm that the foregoing statements are true to the best of (my, our) knowledge and belief.

*Heather D. McDaniel*  
 Applicant Signature

Applicant Signature

2013 MAY 22 PM 2:08  
 STATE ENGINEER OFFICE  
 AZTEC, NEW MEXICO

#### ACTION OF THE STATE ENGINEER

This application is:

☒ approved ☐ partially approved ☐ denied

provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare and further subject to the attached conditions of approval.

Witness my hand and seal this 23rd day of May 20 13, for the State Engineer,

Scott A. Verhines, P.E., State Engineer

By: *Bill Enenbach*  
 Signature

Bill Enenbach  
 Print

Title: Water Rights Division, District V  
 Print

FOR OSE INTERNAL USE

Application for Permit, Form wr-07

File Number: SJ-4039 POD 2

Trn Number:

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
OMB No. 1004-0137  
Expires: July 31, 2010

**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.*

SUBMIT IN TRIPLICATE - Other instructions on page 2.

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. <b>SF-080538</b>
2. Name of Operator <b>ConocoPhillips Company</b>		6. If Indian, Allottee or Tribe Name
3a. Address <b>PO Box 4289, Farmington, NM 87499</b>		7. If Unit of CA/Agreement, Name and/or No. <b>San Juan 30-5 Unit</b>
3b. Phone No. (include area code) <b>(505) 326-9700</b>		8. Well Name and No. <b>San Juan 30-5 Unit 29</b>
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) <b>Surface Unit G (SWNE), 1840' FNL &amp; 1840' FEL, Sec. 14, T30N, R5W</b>		9. API Well No. <b>30-039-07851</b>
		10. Field and Pool or Exploratory Area <b>Blanco Mesaverde</b>
		11. Country or Parish, State <b>Rio Arriba, New Mexico</b>

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

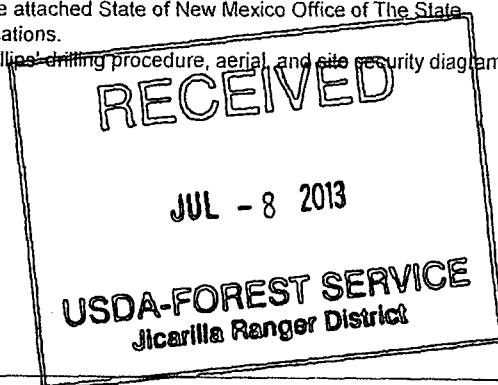
TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	<b>Investigation Wells</b>
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once Testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

In August 2012, ConocoPhillips Company (COP) noticed a small amount of water coming from the cathodic well vent pipe adjacent to the SJ 30-5 Unit 29 gas well. Upon investigation of the producing #29 well, COP determined the bradenhead had failed. COP promptly moved on the well and found that there was a casing leak. The leak was repaired, the #29 well was pressure tested after the squeeze to confirm the leak was repaired, and the well was then returned to production. The situation was duly reported to BLM & NMOCD.

Based on the leak, Brandon Powell at the NMOCD in Aztec proposed, and COP has agreed, to drill one/two investigation wells to collect samples and insure that groundwater has not been negatively impacted. If samples collected from the investigation well demonstrate no impact to ground water then the hole will be immediately filled with cement and properly abandoned. If the collected samples indicate an impact to ground water that is related to the leak from the #29 gas well COP, BLM, and NMOCD will discuss next steps, which may include casing the investigation well for the purpose of converting it into a monitoring well. Monitoring will continue until all constituents of concern are below regulatory standards for eight consecutive quarters, appear stable, or reach regional background levels.

ConocoPhillips requests permission to drill two investigation wells per the attached State of New Mexico Office of The State Engineer approved Permit Numbers SJ 4039 and SJ-4039 POD 2 applications. The Permits with Statements and Explanations are attached. ConocoPhillips' drilling procedure, aerial, and site security diagram are also attached.



14. Thereby certify that the foregoing is true and correct. Name (Printed/Typed) <b>DENISE JOURNEY</b>		Title <b>Regulatory Technician</b>
Signature <i>Denise Journey</i>		Date <b>6/27/2013</b>

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by:	Title	Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office	

Title 18 U.S.C. Section 1601 and Title 43 U.S.C. Section 1212, make 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.  
(Instruction on page 2)

NMOCD - COAs by FS



United States Forest Service  
Carson National Forest, Jicarilla Ranger District  
664 East Broadway  
Bloomfield, NM 87413

### Sundry Review Checklist

Activity Type:

☐ Plug & Abandon (P&A)

☐ Re-entry/Sidetrack

☒ Other: Monitoring Well Installation

Well Name: San Juan 30-5 Unit 29

Legal Location: T 30 N, R 5 W, Section 14

Footages: 1840 'FN L, 1840 'FEL

Specialist Review	Review By (initial)	Review Date	Comments
Conditions of Approval (COAs)	<u>JJM</u>	<u>7/16/2013</u>	<u>See attached COAs</u>
Archeology	<u>RM</u>	<u>7/16/13</u>	<u>Confine all grounddisturbing activities to existing well pad. No vegetation clearing off of pad.</u>
Wildlife			
Construction/Reclamation			
Other:			

Onsite/Fieldcheck Needed?

☐ No ☒ Yes

Date Completed: 7/16/2013

Original COAs apply ☐

New COAs attached ☒

Forest Service Concurrence

Anthony Madrid

Date:

7/18/2013



# CARSON NATIONAL FOREST JICARILLA RANGER DISTRICT

## CONDITIONS OF APPROVAL FOR SUNDRY NOTICE

Date:	7/16/2013
Operator:	ConocoPhillips Company
Well Name:	San Juan 30 5 Unit #029
API Number:	30-039-07851

### Legal Description:

#### Surface Location:

Section: 14 Township: 30N Range: 5W, NMPM.

Footages: 1840 FNL, 1840 FEL

#### Bottom Hole Location (If different):

Section: Township: N Range: W, NMPM.

Footages:

The following conditions of approval will apply to this location on the Jicarilla Ranger District of the Carson National Forest. Conditions of Approval remain in effect until final abandonment and reclamation is accepted by the Forest Service.

## SITE SPECIFIC CONDITIONS OF APPROVAL

### APPLICABLE WHEN MARKED:

#### 1. Pre-Construction:

- ☒ a. The operator or their representative will contact and schedule an on-site pre-construction meeting with the Jicarilla Ranger District, minerals staff, (505) 632-2956 at least 48 hours prior to beginning any construction activities. At the time of the pre-construction meeting all access/pipeline route stakes, location stakes, well bore stake, and any archeological protective barrier(s), if applicable, will be properly located and easily identifiable. It is recommended that, at a minimum, the operator representative and the construction contractor attend the pre-construction meeting.
- ☒ b. The operator will ensure that a complete copy of the Conditions of Approval is posted and readily available at the project area from the time of construction commencement until initial reclamation and seeding is complete

#### 2. Location Construction and Drilling:

- ☐ a. A tree screen will be left between location stakes.
- ☐ b. The corner(s) of the well pad will be rounded off.
- ☐ c. Other:
- ☐ d. Other:

#### 3. Road/Access:

- ☐ a. A locked gate will be required in a location on the access road to this well as determined by the Forest Service. The gate will be constructed of 2" pipe in a design that will prohibit ATV's from driving under or around it. The gate will be painted green, Federal Standard 595a-34127., and incorporate road closed signs and reflectorized barricade signs that meet Forest Service standards. These signs must be installed at the time of gate construction to ensure public safety. A lock box containing enough holes for all necessary operator/permittee locks plus one hole for a FS lock will be constructed. Wing fencing may be needed on either or both sides of the fence to ensure vehicles cannot travel around the gate. Wing fencing must stay within the approved project area. The gate must be constructed before the first big game hunt, approximately August/September, and then left locked or secured with a gate guard to prevent unauthorized motor vehicle travel. The operator shall have routine maintenance responsibility for this gate for the life of the well. This operator will ensure that the gate and any associated wing fencing is functional, all authorized users have access, and all required road closed and reflective/safety signage is present.

☐ b. The existing gate on Forest Road Click here to enter text. will be in functioning condition when drilling and completion are done. The gate may remain unlocked during drilling and completion operations when necessary to accommodate heavy traffic. During periods when the gate is unlocked, a sign will be installed at the gate stating that the road is not open to motorized public travel. The sign will be clearly visible to vehicles approaching the gate and will be secured to prevent easy removal. If unauthorized travel behind the gate becomes a problem, the gate will remain locked at all times or a gate guard will be posted at the gate to regulate traffic. Once big game hunting seasons start the gate will remain locked at all times or a gate guard will be posted to regulate traffic. The gate will remain locked at all times during periods of inactivity during the construction, drilling, and completion phase. The operator shall have routine maintenance responsibility for this gate for the life of the well. This operator will ensure that the gate and any associated wing fencing is functional, all authorized users have access, and all required road closed and reflective/safety signage is present.

☐ c. Other:

#### 4. Wildlife Issues

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☐ a. Current Mexico Spotted Owl (MSO) Protocol states "If habitat modifying or potentially disruptive activities are scheduled for a particular year, the second year of surveys should be conducted either the year before or the year of (but prior to) project implementation. In other words, no more than one year should intervene between the surveys and project implementation. An additional year of surveys is recommended prior to project implementation if more than one breeding season has elapsed since the last complete survey and no owls have been detected. If more than 4 years have elapsed between the end of two years of survey and the initiation of the proposed action, another complete inventory is recommended prior to project implementation." (U.S. Fish and Wildlife Service 2003)

Because ☐ Designated Critical Habitat Unit/☐ Protected Activity Area and/or ☐ potentially suitable MSO habitat exist ☐ within the proposed project area and/or ☐ within ½-mile of the proposed project area, MSO surveys will be required either ☐ the year before or ☐ the year of (but prior to) project implementation.

☐ b. For all construction activities (includes re-drills, re-completions, etc), a pre-construction field inspection will be required to check for nesting activity by goshawks within the project area.

1. If no nesting activity by goshawks is observed within the project area, construction may proceed, with notification by appropriate District personnel.
2. If nesting activity is observed in the project area, Forest Service protocol surveys will be initiated immediately, with seasonal restrictions on construction imposed if nesting is confirmed. This would delay construction activities until late July-August. Construction activities would be resumed based on a determination by the District Biologist.

☐ c. Other:

Cultural Resources:

☐ a. No archeological monitoring or fencing is required; refer to Section D in the event of an inadvertent discovery.

☐ b. Archeological stipulations apply; contact the Jicarilla Ranger District archeologist prior to the scheduled pre-construction meeting for information. Disclosure of site location information to unauthorized personnel is prohibited under 36 CFR 296.18.

☒ c. Other: Confine all ground disturbing activities to existing well pad. No vegetation clearing off of existing pad is authorized.

6. Production Equipment

☐ a. Low profile: production equipment will be no more than 8' tall.

☐ b. The project area is within a noise sensitive area. Operations are required to comply with all applicable BLM NTL's concerning noise abatement.

☐ c. Locate production equipment to protect public safety. Guards will be needed around well heads and production equipment that have to be located near the roadway.

☐ d. Other:

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7. Reclamation

☐ a. The well pad may require fencing to protect or promote reclamation efforts. If reclamation fails due to grazing pressure, the Forest Service may require fencing of the location until reclamation is determined to be successful. This will also require the installation of a gate and/or cattle guard at the location access. All fences must be built and maintained to Forest Service standards.

☐ b. A maximum 10' x 10' covered enclosure, or other approved design, made of wire mesh will be required to monitor level of reclamation versus grazing impacts. The enclosure is to be constructed on an unused portion of the location immediately after initial reclamation/seeding is complete.

☐ c. Other:

## General Conditions of Approval

### Applicable to all Projects

#### A. Construction, Drilling, and Interim Reclamation

##### Location Development

- a. The operator or his contractor will contact the Forest Service (632-2956) approximately 48 hours prior to beginning of pad construction activities and prior to rig movement across Forest lands. The operator will contact the Forest Service and the BLM (564-7600) prior to drilling activity and prior to fluid pumping from the reserve pit.
  - b. Road building, pad construction, drilling, and completion activities are permitted from April 1 through October 31 of each year. Approval of activities between November 1 and March 31 may be granted on a case by case basis by the Jicarilla District Ranger.
- 
- c. Pinion and juniper trees, over 10 inch diameter, will be utilized for erosion control where possible. Trees are to be cut into 8-10 foot sections and stockpiled until reclamation. Upon reclamation they are to be distributed around the location or access road in such a way as to help reduce erosion or create wildlife habitat but not create an unnecessary fire hazard. Trees below 10 inch diameter may be mulched or chipped and stripped with the topsoil. Slash may be chipped, mulched, or stockpiled for placement on seeded areas. Excess wood will be purchased by the operator and removed under commercial wood permit or left stockpiled in an area approved by the Forest Service and accessible to the public by motor vehicle. Trees left for reclamation, in areas behind locked gates, will be protected from theft by means such as fencing or signage. For project areas that are accessible by motor vehicle to the public the Forest Service may require the operator to temporarily stockpile trees behind a locked gate, in an area approved by the Forest Service, to ensure an adequate amount remains for reclamation. Otherwise, the wood can be left stockpiled for the public, in an area approved by the Forest Service.
  - d. Ponderosa Pine trees that are not removed at timber rates will be treated the same as Pinion and Juniper trees in the above section.
  - e. Vegetative ground cover will be stripped with the topsoil.
  - f. Stump burying may be approved upon request. No burning of trees or branches is authorized.
  - g. Willow, cottonwood, aspen, and Douglas fir tree species will be avoided whenever possible.



- h. Noxious weed treatment may be required in the project area prior to any construction activities.
- i. Drilling company signs will be allowed on National Forest System lands during the construction and drilling phase. These signs are not to be attached to any trees by any means.

## 2. Slope Ratios

- a. The final cut slope shall not exceed a 4:1 ratio. The final fill slope shall not exceed a 4:1 ratio. To obtain this ratio, pits and slopes shall be back sloped into the pad upon completion of drilling and prior to setting production equipment. Construction slopes can be much steeper during drilling, but will be contoured to the above final slopes upon pit reclamation. Any final slope that exceeds a 4:1 ratio must be approved by the Forest Service. Steeper slopes may require additional mitigation measures, such as seed matting, to ensure soil stabilization and reclamation. Slopes will be contour ripped, pocked, or water barred to prevent erosion on the location and erosion control will be designed in a manner that excessive erosion does not occur off-site.
- b. The pad will be designed, constructed, and maintained in such a manner that water does not pool in the working area of the location. Location drainage must be designed and maintained in such a manner that rilling, gullying, or excessive erosion does not take place. Mitigation measures such as road surfacing or re-contouring of the location may be required if adequate location drainage is not achieved.

## 3. Topsoil Recovery

- a. ~~Topsoil shall be stripped from the project area (minimum 6 inches deep, or all that is~~ available if less than 6 inches), including access road, and be deposited in storage piles apart from other excavated material. It will be kept separate and protected, either in piles or windrowed. Upon reclamation the stored topsoil shall be evenly spread over all areas outside the working area of the pad. Along access roads it is to be distributed over final cut and fill slopes.
- b. If the ground is saturated and topsoil recovery is not possible all construction is to cease until conditions dry to the point that topsoil can be stripped and recovered. Any snow is to be stripped and stored separately from the topsoil.
- c. When work-over pits and other significant surface disturbance are required during production, topsoil that was previously salvaged and redistributed must be stripped off and salvaged. The topsoil must be kept separate and protected from other spoil or equipment activities. After the work-over or other operation that required the surface disturbance is completed, the stripped topsoil must be evenly spread over the exposed subsoil and the disturbed area shall be promptly reclaimed following the reclamation section requirements.

#### 4. Reserve Pit

- a. Large vegetation such as sagebrush, pinion, juniper, oak, and browse species will not be incorporated into the pit walls. Sagebrush, stumps and other slash must be disposed of or stockpiled until pit reclamation. They may be buried in the reserve pit when it is reclaimed.
- b. The reserve pit will have a minimum of one-half the total depth in cut material. The pit will be designed to prevent the collection of surface water run-off.
- c. All drilling and production pits will be constructed not to break, allow discharge of liquids/solids, and contain the anticipated volume. Pit walls are to be "walked down" by a crawler-type tractor and stabilized prior to usage. All pits will be lined with an impervious material at least 12 mil thick and/or 200 psi resistance. Plastic material used to line pits must be removed to below-ground level before pits are covered.
- d. The fluid level, within the pit, is to be maintained at least two (2) feet below the lowest point of the pit wall. The reserve pit will be backfilled and reclaimed when dry. In addition, stockpiled material will be evenly distributed and landscaped to the surrounding ~~topography over all areas on the pad which are not needed for production. No reserve pit liner is to be visible after pit closure.~~
- e. Trenching of the reserve pit during the pit reclamation phase is prohibited.
- f. All pits will be fenced with woven wire. A top rail or barbed wire will be utilized. The reserve pit will be fenced on three sides during the drilling phase and the fourth side immediately after the rig is removed. Corner "H" bracing must be constructed at all corners. All fence materials are to be removed after pit closure.
- g. Reserve pits will be closed and rehabilitated 90 days after completion or 120 days from the well spud date. The operator should plan to have the reserve pit closed prior to November 1. Any construction activities from November 1, through April 1, require approval by the Jicarilla District Ranger and will be evaluated on a case by case basis. All reserve pits remaining open after 90 days will need written authorization per BLM guidelines.

#### 5. Equipment and Vehicles

- a. All vehicles and equipment will be reasonably free of leaks. Any leaks/spills will be appropriately contained, and the vehicle/equipment repaired or removed from the construction/production area in such a way as to prevent further spills. Any contaminated soil will be removed and disposed of properly in accordance with all applicable laws and regulations. Fluids from routine vehicle/equipment maintenance will be removed and disposed of properly.
- b. All vehicles and equipment should be properly cleaned/inspected prior to entering Forest

Service lands to prevent spills/leaks and/or weed contamination.

- c. All equipment and vehicles must be confined to the designated access road and pad. The Jicarilla Ranger District does not allow off-road vehicle use unless specifically authorized.
- d. All vehicle and equipment use is to cease if the ground is saturated to the point that rutting greater than 6" occurs. The operator is responsible for any road damage caused by wet weather operation.
- e. Driving on Forest Roads will be done in a responsible and safe manner, or be in violation of 36CFR 261.54(f). Vehicles associated with this lease operation will be driven in a safe manner. Speeding and careless driving will not be tolerated.
- f. An approved muffler or spark arrester will be maintained on the exhausts of all trucks, tractors or other internal combustion engines used in connection with this permit.

#### 6. Refuse Disposal

- a. The operator shall dispose of refuse resulting from this use, including waste materials, garbage, and rubbish of all kinds in an approved sanitary landfill or appropriate recycling center. A trash cage must be on location throughout all drilling, testing and completion activities. Burying trash in the reserve pit will not be allowed. Burning of trash will not be allowed.
  - b. If the well is cavitating any coal fines will be immediately washed of contaminated vegetation. Only fresh water may be used.
- 

#### 7. Rat and Mouse Hole

For safety purposes, the rat/mouse hole must be filled and compacted immediately after the rig is removed.

#### 8. Hydrocarbons and Produced Water

Produced hydrocarbons shall be put in tanks on location during completion work, and not allowed into the reserve pit. If produced hydrocarbons or machinery oil enter a reserve pit they shall be immediately removed and disposed of properly. Produced water will be put in onsite tanks or within a lined reserve pit during completion work. No produced water is to be released from the storage tanks or reserve pit, but is to be physically removed from the site, for proper disposal.

#### 9. Well Sites Constructed and not Drilled

If this well is constructed and not drilled the location and access road must be reclaimed, per the standards outlined in the Final Reclamation and Abandonment section at the time of APD expiration. If the well is not drilled before November 1 of the year that initial ground disturbance takes place the Forest Service may require interim mitigation measures such as seeding with a cover crop, the installation of water bars, or other site specific measures to ensure temporary soil stability and prevent erosion. Any archeological protective fencing must be removed and then re-established prior to re-commencement of activities.

## B. Producing Well

### 1. Notification

The operator will contact the Forest Service (632-2956) and the BLM (564-7600) at least 48 hours prior to conducting work-over activities.

### 2. Production Facilities

- 
- a. Production facilities (including dikes) will be placed on cut a minimum of 10 feet from the toe of the cut. If pad location does not allow for facilities to be placed on cut, facilities may be placed, with Forest Service approval, on fill. All facilities including dikes will be located a minimum of 10 feet from the top of the fill.
  - b. Production equipment, including any facilities associated with pipeline construction, will be placed on location as not to interfere with reclaiming the cut and fill slopes to their proper ratio. If equipment is found to interfere with the proper reclamation of the slope, the company will be required to move the equipment so proper re-contouring can occur.
  - c. All open top permanent production or storage tanks, regardless of diameter, made of fiberglass, steel, or other material used for containment of oil, condensate, produced water, or other production waste shall be screened, netted, or otherwise covered to protect migratory birds and other wildlife from access. Exhaust vents/stacks will have devices/screens installed to prevent bird/wildlife access.
  - d. All areas directly adjacent to facilities, tanks, etc. will be kept free of weeds and vegetation. No weeds or vegetation are allowed on or within dikes.
  - e. A "residential style" muffler is required on production engines to reduce noise levels. In noise sensitive areas (NSA) a "hospital grade" muffler is required. Within a noise sensitive area noise levels will comply with BLM guidelines and standards for NSA's.
  - f. Emission Control Standard: Compressor engines 300 horsepower or less used during well production must be rated by the manufacturer as emitting NOx at 2 grams per horsepower hour or less to comply with the New Mexico Environmental Department, Air Quality Bureau's guidance.

- g. The operator will maintain a minimum safe distance between individual production facilities (treater/separator, storage tanks, well head/pumpjack, etc.).
- h. Individual well facilities (oil, gas, injection, etc.) will have a legible and durable location sign until final abandonment. The sign will show the operator's name, lease serial number, unit number, well name/number, and location (quarter quarter, section, township, range and footages from section lines). API number is recommended. The sign will be posted in a conspicuous place. On multiple well locations a sign will be posted for each well.
- i. Production tanks and all bulk storage tanks must be labeled to identify contents. All storage tanks/vessels must be labeled/placarded in accordance with all applicable laws and regulations.
- j. Drilling company signs will be allowed on National Forest System lands during the construction and drilling phase. These signs are not to be attached to any trees by any means.
- k. All other signs must be approved by the Forest Service prior to installation and kept maintained in accordance with the Manual on Uniform Traffic Control Devices.
- l. All butane, propane, or other liquefied petroleum gas equipment shall be installed and operated in accordance with all applicable laws and regulations.
- m. All above ground surface structures and equipment will be painted a non-glare color as follows: Green, Federal Standard 595a-34127 (Juniper Green). The exception being where Occupational Safety and Health Administration rules and regulations require other colors or markings. ~~The operator may request different colors or markings if operator safety policies dictate.~~ All facilities must be painted within six months of installation. Repainting will be required to keep all facilities maintained in a condition satisfactory to the Forest Service.
- n. Compressor units not equipped with a drip pan for containment of fluids shall be placed in a containment berm. The bermed area will be lined with an impervious material at least 8 mils thick. The berm will be a minimum of 12 inches tall and graveled to prevent erosion. The compressor will be painted to the above ground surface structure and equipment standard listed above. When compressor units are washed, or any equipment associated with the location, the fluids (i.e., scrubber cleaners) will be properly disposed of to avoid ground contamination or hazard to livestock or wildlife. Fencing and/or exclusion devices may be required to protect birds, wildlife, or livestock.
- o. It is strongly recommended that public access to oilfield equipment that poses a danger to human health and safety be restricted (well heads, meter runs, pump jacks, etc). Access restriction may be accomplished in a variety of ways including: fencing the well pad perimeter, barricading individual pieces of equipment and/or posting warning signs at the entrance to the location. Future stipulations developed through collaboration with the

Forest Service, BLM and industry concerning public access to oil and gas locations or oilfield equipment may be retroactively applied to this permit.

### 3. Diking/Containment

- a. All storage facilities (including produced water tanks) must be contained in a secondary spill containment structure. All containment dikes, containment walls, drip pans, or equivalent protection structures are to be constructed and maintained around all storage facilities, including tank batteries. All containment measures must be consistent with the Environmental Protection Agency's Spill Prevention, Control, and Countermeasure (SPCC) regulation (40 CFR 112). The containment structure must have sufficient volume to contain, at a minimum, the content of the largest storage tank within the facility/battery and sufficient freeboard to contain precipitation, unless more stringent protective requirements are deemed necessary by the Forest Service. If a rupture could drain more than one tank then the secondary containment must be sufficient in size to contain the storage capacity of all tanks that could be drained. All chemical and equipment oil/fluid/fuel storage vessels, whether the vessels are permanent or temporary, must be fully contained within a secondary spill containment structure. Secondary containment capacity will be calculated at the lowest point on the structure.
- b. All well facilities, tanks, and storage facilities/vessels will prevent birds, wildlife (including wild horses) and livestock from having access to all produced fluids and any other onsite fluids or solids that could be harmful. This may include fencing all production pits/tanks (48 inch height, braced corners, top rail or barbed top wire, and 4 strand wire or woven wire fence.), compressors, tank batteries, and containment troughs. Screens, covered troughs, and drip pan covers may be used where suitable and constructed in such a way that wildlife/birds can not access the contents at its highest level. Self closing gates or walk-overs will be needed in conjunction with any fencing. All gates need to be kept closed and fences should not be affected by hard lines. Fences should be located and maintained to keep all animals a safe distance from any hazardous materials.
- c. Gravel or another sufficiently impervious material will be placed on dikes to prevent erosion. The dike will be maintained so that it does not erode and ensures adequate containment.
- d. A "walk-over" stair-step is required over containment dikes.
- e. All tank battery vent lines must terminate within the diked area and be designed so that no liquids can flow out of the vent lines or outside the dike.
- f. Load-out lines must terminate within the diked area unless otherwise approved by the Forest Service. This does not apply to below grade pits where the load out line slopes back to the tank.
- g. For crude oil, condensate, or produced water lines, either a trucker supplied mobile or

permanent catch basin will be installed at the point of hook-up. No pipes, cables, or gas lines are to be routed through the dike itself. An exception may be made by the Forest Service on a case by case basis.

#### 4. Roads/Access

- a. All Forest Roads damaged by construction activities will be returned to their original or better condition. This includes, but is not limited to restoring original ditch lines, replacing or repairing any damaged culverts, re-establishing road surfacing where surfacing was lost or contaminated, and restoring effective road drainage. Upon project completion the road will be left in a condition satisfactory to the Forest Service.
- b. Unless otherwise approved, all roads on Forest Service lands shall be designed, constructed, and maintained to Gold Book Standards (United States Department of the Interior and United States Department of Agriculture. 2006. Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development. BLM/WO/ST-06/021+3071. Bureau of Land Management. Denver, Colorado. 84pp. and any revisions thereto) for FS local roads. The driving surface on all access roads will be limited to 14 feet in width, and total disturbance will be limited to 24 feet not including cuts and fills or turnouts. Any access road constructed will be crowned and ditched, in-sloped, or out-sloped where appropriate. This will require installation of culverts and/or armored water bars per Gold Book standards. Additional cross drainage may be required depending upon site specific circumstances. Culvert size will be a minimum of 18", larger culverts will be required where appropriate. Rip-rapping, velocity breaks or other drainage/erosion control measures may be required. Adequate and effective drainage will be constructed and maintained in good working order. Topsoil will be stockpiled and redistributed for reclamation on cut and fill slopes and the cut and fill slopes shall be re-vegetated to the same standard as the well pad. If road reconstruction or relocation becomes necessary the Forest Service reserves the right to adopt standards, designs, and specifications as specified in Forest Service handbooks and manuals.
- c. If, upon abandonment of a well, the retention of the access road is not considered necessary for the management and multiple use of the natural resources, it will be re-contoured to as near natural as possible. The access road and well location will be closed to vehicular travel. Re-vegetation of the affected area will be required. Alternatively, the Forest service may request the road be lightly ripped to eliminate compaction. The road will be water barred, pocked, or contoured ripped where necessary to ensure soil stability and prevent erosion. Construction of a barricade at the entrance to these areas may be required. Re-vegetation of the affected area will be required.
- d. If, upon abandonment of the well, the retention of the access road is considered necessary for the management and multiple-use of the natural resources, then the gate, if any, will remain in place, and it is to be converted by the operator to a single Forest Service locking system.
- e. No gravel or other related minerals from new or existing pits on Federal land will be used

in construction of roads, well sites, etc., without prior approval from the Forest Service.

- f. Water dips and culverts will be constructed and maintained in working condition on the access road to the well location. The Gold Book standard for maximum recommended culvert spacing will be utilized. Additional cross drainage may be required depending on site specific conditions.
  - g. When the access road is graded, water bars will be left in the road or replaced immediately upon completion of grading. The access road will be maintained to Gold Book standard. No new unauthorized road(s) (short cut roads) are authorized.
  - h. Any cut fence openings will be protected as necessary during construction to prevent the escape of livestock. A temporary closure will be installed on all cut fences the same day the fence is cut.
  - i. Produced water will either be piped or trucked. If trucked, operator will be responsible for road maintenance and/or surfacing from the well location to forest boundary. Maintenance will consist of maintaining cattle guards, fences, culverts and the actual road surface. The time of day for water hauling may be limited.
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- j. Controlled access roads are to be used by the operators and their contractors for the sole purpose of servicing wells and equipment. Activities not associated with oil and gas production are not allowed. Unauthorized use is in violation of 36 CFR 261.10k, which carries a maximum penalty of \$5000.00 and/or six months in jail.
  - k. No mud plowing or the use of equipment to drag/assist other equipment will be allowed. If access is needed during wet weather conditions such that mud plowing is needed, the operator should surface the access road and all Forest Service roads leading to this well so that mud plowing is not necessary.
  - l. The Forest Service may restrict vehicle access during wet weather periods to protect roads and resources. The operator is responsible for all road damage caused by wet weather operations. The operator is encouraged to upgrade and maintain roads to an all weather standard.
5. Interim Reclamation Requirements
- a. The operator will contact the Forest Service, Jicarilla Ranger District minerals staff (632-2956), at least 48 hours prior to any reclamation efforts associated with this project.
  - b. All areas of the well pad and access road not needed for production facilities will be re-contoured to blend as nearly as possible with the natural topography. All areas outside the anchor points, not directly adjacent to facilities, or on the designated vehicle route will be reclaimed. These areas will be top soiled, mulched (certified weed free straw mulch crimped in at 2 tons per acre or excelsior mats or equivalent will be used), and seeded with the required seed mix. Slopes will be contour ripped, pocked, or water barred to



prevent erosion on the location and designed in a manner that excessive erosion does not occur off-site. Cut and fill slopes will be top soiled and mulched, as specified above, and revegetated.

- c. Recommended seeding dates are between September 15 and October 31. Seeding shall be completed prior to November 1 of the year the well is drilled unless waived by the Forest Service. Seeding will be done with a disc-type drill with two boxes for various seed sizes. The drill rows will be eight (8) to ten (10) inches apart. The seed will be planted between one-half (1/2) and three-fourths (3/4) of an inch deep. The seeder will be followed with a drag, packer or roller to insure uniform coverage of the seed, and adequate compaction. Drilling of the seed will be done on the contour where possible. Where slopes are too steep for contour drilling a "cyclone" hand-seeder or similar broadcast seeder will be used, using twice the recommended seed per acre. Seed will then be covered to a depth described above by whatever means is practical. Alternative seeding methods may be authorized with approval of the Forest Service.

#### Forest Service Required Seed Mixture

Species to be planted in pounds pure-live-seed per acre: Pure Live Seed = Germination x Purity

<u>Species</u>	<u>Variety</u>	<u>Pounds/Acre</u>
Indian ricegrass	Paloma	1.0
Western wheatgrass	Arriba	2.0
Blue Gramma	Hacheta or Alma	1.0
Antelope Bitterbrush	Unknown	0.10
Four-wing saltbush	Unknown	0.25
Pubescent wheatgrass	Luna	2.0
Intermediate wheatgrass	Oahe	2.0
Small burnet	Delar	1.0

- d. In order for revegetation to be accepted, it must meet current Forest Service Standards. Reclamation will be approved (minimum timeframe of two growing seasons) when the established vegetative cover is equal to 70% of the adjacent areas and the soil is stabilized. There should be no indicators of active erosion including rills and gullies. Seeding should be repeated annually after two growing seasons until reclamation is accepted by the Forest Service. Where vegetation is re-disturbed after establishment it shall be reseeded annually until vegetation is re-established.
- e. To maintain purity and quality, certified seed is required.
- f. All disturbed areas will be mulched at the rate of 2 tons/acre of certified weed free grass hay/straw. The mulch must be crimped into the surface.
- g. The operator will provide verification of seed mixture and weed free mulch certification within 30 days of completion.

- h. The operator is required to re-seed any previously seeded areas that have been disturbed from any production, work-over, or maintenance related activities.
- i. The operator is responsible for successful reclamation regardless of weather or other natural factors.

#### 6. Gates/Cattle guards/Fences

- a. Fencing of individual facilities, such as the pump jack (including well head), treater, and tank battery with cattle proof fencing may be required. The fence around any fluid storage facilities must be constructed on the outside perimeter of the dikes to protect them from deterioration due to animals walking over them.
- b. All cattle guards must have wings installed on both sides to prevent livestock from stepping around the ends. The cattle guard design and installation must meet all Forest Service standards and specifications and a "Cattle guard Ahead" sign may be required. A 12 foot gate must be installed between the cattle guard and brace assemblies on whichever side of the cattle guard is most convenient. ~~If the gate is made of wire, it must have at least four horizontal strands of barbed wire, with at least four 3 inch diameter vertical wood stays evenly spaced.~~ When the gate is closed the wires must be taut. The operator is responsible for the maintenance of the cattle guard for the life of the project.
- c. Prior to crossing any fence located on federal land, or any fence between Federal land and private land, the operator shall contact the Forest Service. All cut fences are to be tied to braces prior to cutting. The operator is responsible for repairing any fence damage resulting from their activities. All fences are to be constructed and maintained to Forest Service standards.
- d. Gates may remain unlocked and open during drilling and completion operations when necessary to accommodate heavy traffic. During periods when the gate is unlocked, a sign will be installed at the gate stating that the road is not open to motorized public travel. The sign will be clearly visible to vehicles approaching the gate and will be secured to prevent easy removal. If unauthorized travel behind the gate becomes a problem, the gate will remain locked at all times or a gate guard will be posted at the gate to regulate traffic. Once big game hunting seasons start the gate will remain locked at all times or a gate guard will be posted to regulate traffic. The gate will remain locked at all times during periods of inactivity during the construction, drilling, and completion phase. During production activities gates will remain locked at all times.

#### 7. Noxious Weed Control

- a. Control of noxious weeds, that invade the project area or lease operations, is required. Noxious weeds are those listed on the New Mexico Noxious Weed List.
- b. Pesticides/herbicides may be used to control undesirable woody and herbaceous

vegetation, insects, rodents, etc., with prior written notification and approval of the Forest Service.

- c. A listing of all pesticides/herbicides being used or are planning on being used, will be submitted annually by the operator. The report will cover a 12-month period of planned use and will be due on the last day of the calendar year. Exceptions to this schedule may be allowed, subject to emergency request and approval, only when unexpected outbreaks of pests/weeds require control measures which were not anticipated at the time an annual report was submitted.
- d. Only those materials registered by the U.S. Environmental Protection Agency for the specific purposes planned will be considered for use on National Forest System lands. Label instructions will be strictly followed in the application of pesticides/herbicides and the proper disposal of excess materials and containers is required. Pesticides/herbicides will only be applied by a qualified person. Any containers of chemicals or fluids will not be stored on site or on Forest Service lands.

## C. Final Abandonment and Reclamation

- a. Prior to abandonment, the operator shall notify the Forest Service of the need for abandonment and shall provide an Abandonment Plan, for Forest Service approval, which specifies how the operator intends to reclaim the well pad and access road. The Abandonment Plan will address, but not be limited to:
  - 1. Type and design of well bore marker
  - 2. Removal of all surface facilities
  - 3. Flushing/purging and capping/sealing pipelines if applicable
  - 4. Protecting/salvaging topsoil during location/access re-contouring
  - 5. Re-contouring of the pad and access road to natural slope
  - 6. Removal of culverts, gates, and cattle guards if applicable
  - 7. Soil stabilization
  - 8. Erosion control
  - 9. Reseeding/revegetation.
  - 10. Noxious weed control
  - 11. Vehicle barriers
  - 12. Monitoring schedule to ensure adequate reclamation
  - 13. Any other site specific issues
- b. In order for reclamation to be accepted, it must be approved by the Forest Service. Reclamation will be approved (minimum timeframe of two growing seasons) when the established vegetative cover is equal to 70% of the adjacent areas, the soil has been stabilized, no excessive erosion exists, and there is no noxious weed infestation.
- c. The Abandonment Plan shall be approved by the Forest Service prior to any abandonment work. The operator will contact the Forest Service (632-2956) and the BLM (564-7600) at least 48 hours prior to conducting any abandonment activities.

- d. The operator is responsible for successful final reclamation regardless of weather or other natural factors.
- e. The operator's performance bond, if applicable, will not be released until the area has been successfully reclaimed.

#### D. Natural/Cultural Resources

##### 1. Threatened, Endangered or Sensitive Species

- a. A survey for threatened, endangered or sensitive species shall be conducted by the Forest Service or by an approved surveyor, prior to any construction activities. The Forest Service will indicate which species require surveys. Additional measures may be required to mitigate threatened, endangered, or sensitive species concerns.
- b. If, during operations the operator discovers any T&E or Sensitive species, all work in the vicinity of the discovery will be suspended and the discovery promptly reported to the Forest Service. ~~The Forest Service will then specify what action is to be taken. Failure to~~ notify the Forest Service about a discovery may result in civil or criminal penalties in accordance with the Endangered Species Act (as amended).

##### 2. Cultural and Paleontological Resources

- a. The operator will employ an archeologist permitted by the Forest Service to conduct an archeological survey on any lands which may be disturbed.
- b. The operator will not commence construction until an approved archeological clearance has been received by the Jicarilla Ranger District office in Bloomfield. The operator and all subcontractors will abide by all of the conditions contained in the Inventory Standards and Accounting Form (IS & A) and Archeological Record or Review (ROR).
- c. The operator will inform all of their employees, contractors, and subcontractors that cultural resources are to be avoided by all personnel, vehicles, and equipment. The operator will notify all of their employees, contractors, and subcontractors that it is illegal to collect, damage, or disturb cultural resources.
- d. The operator shall be responsible for the protection of all identified cultural resources within the area which may be affected by their actions. In addition, the operator shall be liable for all damage or injury to the identified cultural resources caused by their actions. Protection of identified cultural resources extends for the life of the well and through final reclamation.
- e. If, prior to or during excavation/construction work or related activities, items of archeological, paleontological, or historic value are reported or discovered, or an unknown deposit of such items is disturbed, the operator will immediately cease

excavation. The operator will then notify the Forest Service immediately and will not resume excavation until written approval is given by the authorized officer.

- f. If it is deemed necessary, the Forest Service may require the operator to perform recovery, excavation, or preservation of the site and its artifacts at the operator's expense. At the option of the Forest Service, this authorization may be terminated with no liability by the United States when such termination is deemed necessary to preserve or protect archeological, paleontological, or historic sites and artifacts.
- g. The conditions of clearance shown on the approved IS & A and ROR will be followed. This includes any requirements for archeological fencing and monitoring.
- h. If monitoring is required, the following apply:
  - 1. No changes may be made to the conditions of the archeological clearance.
  - 2. No construction activities, including vegetation removal, may begin before the arrival of the archeological monitor.
  - 3. A monitoring report shall be submitted to the Forest Service within 30 days of completion of the monitoring.
- i. If fencing is required, the following apply:
  - 1. Fencing placement will be directed, in person at the project area or erected by, a permitted archeologist prior to any vegetation removal and/or construction.
  - 2. Fencing will consist of upright T-posts spaced no more than 10 feet apart and clearly marked with blue flagging or blue paint, unless otherwise stipulated by the Forest Service.
  - 3. There will be no construction activities or vehicle traffic past the fence.
  - 4. If any vehicle/equipment activity or damage occurs behind the fence, in the protected area, ~~all activities are to stop until the Forest Service is notified and a damage assessment is conducted. Work can only resume with Forest Service approval.~~
    - i. Emergency containment or emergency measures are allowed; however the Forest Service must be contacted as soon as reasonably possible. The operator will be responsible for any damages to resources from emergency measures.
  - 5. The fence will remain in place and undisturbed through reclamation and reseeding, and will be promptly removed upon completion of all interim reclamation activities, unless otherwise stipulated by the Forest Service.
- j. Ground disturbances will be limited to the approved project area. Under no conditions, will disturbance occur in areas which are not included in the archeological survey for the project.
- k. **Disclosure of site location information to unauthorized personnel is prohibited under 36 CFR 296.18.**

## E. Health and Safety

- a. The Forest Service must be notified immediately of any condition that may result in a public health and/or safety concern, Forest Service road closure or blockage, or potential natural resource damage. Contact the Forest Service Office in Bloomfield at 505-632-2956, or Four Corners Interagency Dispatch at 505-632-1963.
- b. The operator will maintain structures, facilities, improvements, and equipment in a safe and orderly manner and will take all appropriate and reasonable measures to protect the public, wildlife, and livestock from hazardous sites, equipment, materials, or conditions resulting from their operations.
- c. The operator will take all necessary measures to protect the health and safety of all persons affected by its activities performed in connection with the construction, operation, maintenance, or abandonment of this project, and shall promptly abate as completely as possible any physical or mechanical procedure, activity, event, or condition, existing or occurring at any time that is susceptible to abatement by the operator, which arises out of, or could adversely affect the construction, operation, maintenance, or termination of all or any part of the project operations, and that causes or threatens to cause a hazard to the safety of workers or the public health or safety, or serious and irreparable harm or damage to the environment (including but not limited to areas of vegetative or timber, fish or other wildlife populations, or their habitats, or any other natural resource).
- d. The operator will immediately notify the authorized officer of all serious accidents which occur in connection with such activities.
- e. The operator will dispose of all garbage, refuse and waste in a place and manner specified by applicable laws and regulations. Burying trash will not be allowed. Burning of trash will not be allowed. Citations may be issued if employees are found to be littering or dumping. Feeding wildlife or allowing wildlife access to food, garbage, refuse, waste, and/or stored materials, etc. is prohibited.
- f. Sewage will be confined to a chemically treated portable unit on location and disposed of in a manner and place specified by applicable laws and regulations. Burying of sewage will not be allowed.
- g. Work sites must be kept clear of litter and debris, and left hazard free at the end of every work shift. Any hazards must be clearly identified and isolated with reflective and protective barriers.
- h. Permanent protective barriers may be required around any facilities located near a roadway that could possibly become a public safety issue or hazard.
- i. The well location will be maintained in a clean, neat, and orderly manner. Trash, debris, unused machinery/equipment, excess equipment/parts, etc., will be removed.

immediately. No unused items will be stockpiled or stored on a well location or other National Forest System Lands without approval of the Forest Service.

- j. The operator will provide signs warning of the dangers of hydrogen sulfide (H<sub>2</sub>S) around developed sites that have the potential to produce H<sub>2</sub>S. The operator will abide by all applicable laws and regulations concerning H<sub>2</sub>S.
- k. Any proposed use of pesticide, herbicide or other possible hazardous chemical, on Forest Service lands and roads, shall be approved for use by the Forest Service prior to application.
- l. The operator will abide by all Forest Service stage level requirements during periods of fire restrictions. The Forest Service will make available information concerning current fire restriction levels and specific requirements. The operator is responsible for all damage and costs resulting from fires caused by their operations and activities. The operator will maintain all facilities in a manner that reduces fire hazards.

## F. Environmental Protection

- a. The operator shall conduct all activities associated with this lease operation in a manner that will avoid or minimize degradation of air, land, and water quality.
  - b. In the construction, operation, maintenance, and termination of this lease operation, the operator shall perform its activities in accordance with applicable air and water quality standards, related facility siting standards, and related plans of implementation, including but not limited to standards adopted pursuant to the Clean Air Act, as amended (42 USC 1857) and the Federal Water Pollution Control Act, as amended (33 USC 1321).
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- c. No waste or byproduct will be discharged onto the ground, or near a stream/erosional course or channel.
  - d. Storage facilities for materials capable of causing water pollution, if accidentally discharged, shall be located so as to prevent any spillage into waters or channels leading into water that would result in harm to fish and wildlife or to human water supplies.
  - e. The operator will take reasonable precautions to prevent pollution of or deterioration of lands or waters which may result from the exercise of the privileges extended by this permit. In particular, the operator shall at all times comply with all applicable local, state, and federal requirements for pollution abatement. Failure of the operator to comply may result in termination or suspension of this authorization.
  - f. All applicable state permits are required prior to hauling water. All applicable local, state, and federal laws and regulations concerning disposal of produced water will be followed.

## 8. Esthetics

The operator shall protect the scenic esthetic values of the area under this permit, and the adjacent land, as far as possible with the authorized use, during construction, operation, and maintenance of the improvements.

#### 9. Sanitation

The operation and maintenance of all sanitation, food service, and water-supply methods, systems, and facilities shall comply with all applicable local, state, and federal laws and regulations.

### G. Surveys and Land Corners

- a. The operator will protect, in place, all public land survey monuments, private property corners, and Forest boundary markers. In the event that any such land markers or monuments are destroyed in the exercise of the privileges authorized by this permit, depending on the type of monument destroyed, the operator shall see that they are reestablished or referenced in accordance with: the procedures outlined in the "Manual of Instructions for the Survey of the Public Land of the United States," the specification of ~~the county surveyor, or the specification of the Forest Service.~~
- b. Further, the operator will ensure any official survey records affected by this activity will be amended as provided by law.
- c. Nothing in these stipulations will relieve the operator's liability for the willful destruction or modification of any Government survey marker as provided at 18 U.S.C. 1858.
- d. Avoid removal of any bearing trees. If any must be removed they must be replaced according to Forest Service specifications.

### H. Other Conditions of Approval

#### 1. Explosives

Should the use of explosives be required during construction, the operator shall comply with all applicable local, state, and federal laws, regulations and requirements involving the storage, handling, preparation, and use thereof. Prior to any blasting, the operator will prepare a blasting plan for Forest Service approval.

#### 2. Vandalism

The operator will take reasonable measures to prevent and discourage vandalism or disorderly conduct, and when necessary, call in the appropriate law enforcement agency.

#### 3. Area Access



The operator agrees to permit the free and unrestricted access to and upon the premises at all times for all lawful and proper purposes not inconsistent with the intent of the permit or with the reasonable exercise and enjoyment by the operator of the privileges thereof.

#### 4. Subleasing Requirements

The operator, in the exercise of the privileges granted by this permit, shall require that employees, sub-lessees, contractors, subcontractors, or renters and their employees comply with all applicable conditions of this permit and that the conditions of this permit be made a part of all subleases, contracts, subcontracts, or rental agreements. This clause shall not be construed as authorizing such subleases, contracts, subcontracts, or rental agreements unless specifically authorized elsewhere in the permit.

#### 5. Improvements

- a. Prior to crossing, using, or paralleling any improvement on Forest Service System lands, the operator shall contact the owner of the improvement to obtain mitigation measures to prevent damage to the improvements.
- b. Any improvements, developments, facilities, activities, and/or infrastructure not specifically addressed in these Conditions of Approval or the approved operator's Surface Use Plan of Operations are prohibited without Forest Service approval.

#### 6. Future Mitigation Requirements

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The operator shall comply with mitigation requirements for air quality and noise abatement as determined by the Jicarilla Ranger District Environmental Impact Statement for Surface Management of Gas Leasing and Development.

#### 7. Changes in Operator, Company Name, or Address

The operator must notify the Forest Service in writing no later than 30 days after a sale or transfer of facilities, a company name change, well name change, or a change in address.

## I. Inspection, Enforcement, and Compliance

- a. All operations on National Forest System lands may be inspected periodically by the Forest Service or BLM. Inspections of leasehold operations are made to ensure compliance with applicable laws, regulations, lease terms, the APD and its conditions of approval, Onshore Oil and Gas Orders, NTLs, and other written orders of the authorized officer. Operators are expected to initiate their own inspection programs, identify noncompliance, and take appropriate corrective actions, rather than relying on Federal inspections to identify problems.
  - b. The operator will abide by all applicable federal, state, and local laws and regulations while conducting activities and operations authorized under these Conditions of Approval. It is the responsibility of the operator to obtain any required permit, license, or certificate required to conduct activities or operations authorized under these Conditions of Approval.
-