

Form 3160-3  
(June 2015)FORM APPROVED  
OMB No. 1004-0137  
Expires: January 31, 2018

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
**APPLICATION FOR PERMIT TO DRILL OR REENTER**

1a. Type of work: <input type="checkbox"/> DRILL <input type="checkbox"/> REENTER 1b. Type of Well: <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other 1c. Type of Completion: <input type="checkbox"/> Hydraulic Fracturing <input type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		5. Lease Serial No.  6. If Indian, Allottee or Tribe Name  7. If Unit or CA Agreement, Name and No.  8. Lease Name and Well No.	
2. Name of Operator		9. API Well No. 30-015-49169	
3a. Address		3b. Phone No. (include area code)	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface At proposed prod. zone		10. Field and Pool, or Exploratory  11. Sec., T. R. M. or Blk. and Survey or Area	
14. Distance in miles and direction from nearest town or post office*		12. County or Parish	
13. State			
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)		16. No of acres in lease	
17. Spacing Unit dedicated to this well			
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.		19. Proposed Depth	
20. BLM/BIA Bond No. in file			
21. Elevations (Show whether DF, KDB, RT, GL, etc.)		22. Approximate date work will start*	
23. Estimated duration			
24. Attachments			
The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable)			
1. Well plat certified by a registered surveyor. 2. A Drilling Plan. 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).		4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). 5. Operator certification. 6. Such other site specific information and/or plans as may be requested by the BLM.	
25. Signature		Name (Printed/Typed)	
Title		Date	
Approved by (Signature)		Name (Printed/Typed)	
Title		Office	
Application approval 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. Conditions of approval, if any, are attached.			
Title 18 U.S.C. Section 1001 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.			

(Continued on page 2)

\*(Instructions on page 2)



Approval Date: 11/12/2021

DISTRICT I  
1625 N. French Dr., Hobbs, NM 88240  
Phone (575) 393-6161 Fax: (575) 393-0720

DISTRICT II  
811 S. First St., Artesia, NM 88210  
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DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410  
Phone (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone (505) 476-3460 Fax: (505) 476-3462

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised August 13, 2011

Submit one copy to appropriate  
District Office

# OIL CONSERVATION DIVISION

1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

## WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number <b>30-015-49169</b>	Pool Code <b>96831</b>	Pool Name <b>CEDAR LAKE GLORIETA YESO</b>
Property Code <b>20767</b>	Property Name <b>JACKSON A</b>	Well Number <b>67</b>
OGRID No. <b>03080</b>	Operator Name <b>BURNETT OIL CO., INC.</b>	Elevation <b>3737'</b>

### Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	FEET from the	SOUTH/South line	FEET from the	East/EAST line	County
I	12	17 S	30 E		2310	SOUTH	680	EAST	EDDY

### Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	FEET from the	SOUTH/South line	FEET from the	East/EAST line	County
I	12	17 S	30 E		2310	SOUTH	330	EAST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
<b>10 40</b>			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<p>N.: 675481.9 E.: 663970.4 (NAD 83)</p> <p>N.: 675485.7 E.: 669250.0 (NAD 83)</p> <p>N.: 670192.3 E.: 663987.3 (NAD 83)</p> <p>N.: 670206.2 E.: 669266.2 (NAD 83)</p>	<p><b>SURFACE LOCATION</b> Lat - N 32.848080° Long - W 103.919003° NMSPCE- N 672514.4 E 668579.1 (NAD-83)</p> <p><b>BOTTOM HOLE LOCATION</b> Lat - N 32.848079° Long - W 103.917864° NMSPCE- N 672515.3 E 668929.1 (NAD-83)</p> <p>SL 680' BH 330'</p> <p>2310' 2310'</p>	<p><b>OPERATOR CERTIFICATION</b> I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p><i>Leslie Garvis</i> 10/5/2021 Signature Date</p> <p>Leslie Garvis Printed Name lgarvis@burnettoil.com Email Address</p> <p><b>SURVEYOR CERTIFICATION</b> I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my belief.</p> <p>MAY 17 2021 Date Surveyed</p> <p><i>[Signature]</i> Signature &amp; Seal Professional Surveyor</p> <p>Certificate No. 7977 BASIN SURVEYS</p> <p>0' 500' 1000' 1500' 2000' SCALE: 1" = 1000' WO Num.: 35356</p>
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State of New Mexico  
Energy, Minerals and Natural Resources Department  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Submit Electronically  
Via E-permitting

## NATURAL GAS MANAGEMENT PLAN

This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.

### Section 1 – Plan Description

Effective May 25, 2021

**I. Operator:** Burnett Oil Co., Inc. **OGRID:** 03080 **Date:** 12/8/2021

**II. Type:** ☒ Original ☐ Amendment due to ☐ 19.15.27.9.D(6)(a) NMAC ☐ 19.15.27.9.D(6)(b) NMAC ☐ Other.

If Other, please describe: \_\_\_\_\_

**III. Well(s):** Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	Anticipated Gas MCF/D	Anticipated Produced Water BBL/D
Jackson A 67	TBD	I-12-17S-30E	2310' FSL 680' FEL	130	250	850

**IV. Central Delivery Point Name:** Jackson A 2 Tank Battery [See 19.15.27.9(D)(1) NMAC]

**V. Anticipated Schedule:** Provide the following information for each new or recompleted well or set of wells proposed to be drilled or proposed to be recompleted from a single well pad or connected to a central delivery point.

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
Jackson A 67	TBD	10/3/2022	10/13/2022	10/28/2022	11/4/2022	11/4/2022

**VI. Separation Equipment:** ☒ Attach a complete description of how Operator will size separation equipment to optimize gas capture.

**VII. Operational Practices:** ☒ Attach a complete description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

**VIII. Best Management Practices:** ☒ Attach a complete description of Operator's best management practices to minimize venting during active and planned maintenance.

## **Section 2 – Enhanced Plan**

### **EFFECTIVE APRIL 1, 2022**

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☐ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

#### **IX. Anticipated Natural Gas Production:**

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF

#### **X. Natural Gas Gathering System (NGGS):**

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

**XI. Map.** ☐ Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

**XII. Line Capacity.** The natural gas gathering system ☐ will ☐ will not have capacity to gather 100% of the anticipated natural gas production volume from the well prior to the date of first production.

**XIII. Line Pressure.** Operator ☐ does ☐ does not anticipate that its existing well(s) connected to the same segment, or portion, of the natural gas gathering system(s) described above will continue to meet anticipated increases in line pressure caused by the new well(s).

☐ Attach Operator's plan to manage production in response to the increased line pressure.

**XIV. Confidentiality:** ☐ Operator asserts confidentiality pursuant to Section 71-2-8 NMSA 1978 for the information provided in Section 2 as provided in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and attaches a full description of the specific information for which confidentiality is asserted and the basis for such assertion.



**Section 3 - Certifications****Effective May 25, 2021**

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

☒ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

☐ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system.

*If Operator checks this box, Operator will select one of the following:*

**Well Shut-In.** ☐ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

**Venting and Flaring Plan.** ☐ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- (a) power generation on lease;
- (b) power generation for grid;
- (c) compression on lease;
- (d) liquids removal on lease;
- (e) reinjection for underground storage;
- (f) reinjection for temporary storage;
- (g) reinjection for enhanced oil recovery;
- (h) fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

**Section 4 - Notices**

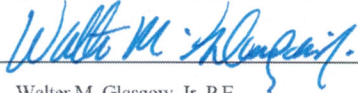
1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:

(a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or

(b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.

2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature:	
Printed Name:	Walter M. Glasgow, Jr. P.E.
Title:	VP of Engineering
E-mail Address:	wglasgow@burnettoil.com
Date:	12.2.2021
Phone:	817-583-8871
<b>OIL CONSERVATION DIVISION</b> (Only applicable when submitted as a standalone form)	
Approved By:	
Title:	
Approval Date:	
Conditions of Approval:	

## NATURAL GAS MANAGEMENT PLAN

### Section 1 – Attachments

Company: Burnett Oil Co. Inc. Well Name: Jackson A 67 API#: TBD

**VI. Separation Equipment:** Description of how Operator will size separation equipment to optimize gas capture.

- A. This well will be added to an existing tank battery.
- B.** The engineered system is designed to handle 3,900 MCF/D. It will produce through the following vessels:
  - 1. 2-phase separator,
  - 2. free-water knockout,
  - 3. heater treater, and then finally a
  - 4. 2-phase gas scrubber.
- C.** Current battery throughput is 1,250 MCF/D.
- D.** The referenced well is anticipated to produce a maximum of 250 MCF/D for a total throughput of 1,500 MCF/D.

**VII. Operational Practices:** Description of the actions Operator will take to comply with the requirements of Subsection A through F of 19.15.27.8 NMAC.

- A. In all circumstances, the operator shall flare rather than vent natural gas except when flaring is technically infeasible or would pose a risk to safe operations or personnel safety, and venting is a safer alternative than flaring.
- B. During drilling operations a mud/gas separator will be on location. If needed, it will be utilized to capture natural gas for purposes of flaring. If flaring is required, a properly-sized flare stack will be at a minimum of 100' from the nearest surface hole location unless otherwise approved by the division.
- C. Venting and flaring during completion or recompletion operations
  - 1. During completion or recompletion, gas is trapped/retained in the wellbore through use of properly weighted "kill" fluids.
  - 2. During the completion phase, the well will be routed directly into an existing battery. With this initial flowback already being connected to the existing battery, all flowback gasses will be routed, if applicable, only to flare. No venting will occur during this initial flowback period. As soon as it is feasible, the existing separation will be utilized.
- D. Equipment redundancies within the system, along with the overall battery design, enables us to service equipment without interruption to gas flow in most scenarios. With the existing battery compression at this facility, in most cases we can avoid flaring during times of elevated transmission line pressures caused by mid-stream maintenance. Additionally, we have gas takeaway with two (2) midstream companies to try and keep gas going to sales in case one of them has a problem.



## E. Performance Standards

1. The existing facility is designed for maximum anticipated throughput and pressure to minimize waste.
2. The existing storage tanks are routed to a combustor.
3. The existing flare stack is properly sized and designed to ensure proper combustion efficiency.
4. The existing flare stack is securely anchored and located at least 100 feet from the storage tanks.
5. AVO inspections are conducted weekly.
6. NA
7. NA
8. We strive to minimize waste and shall resolve emergencies as quickly and safely as possible.

## F. Measurement or estimation of vented and flared natural gas

1. We shall measure or estimate the volume of natural gas that is vented, flared, or beneficially used during drilling, completion and production operations regardless of the reason or authorization for such venting or flaring.
2. The existing flare has a meter to measure the gas going to it.
3. The measurement equipment conforms to an industry standard such as American Petroleum Institute (API) Manual of Petroleum Measurement Standards (MPMS) Chapter 14.10 Measurement of Flow to Flares
4. The measuring equipment is not equipped with a manifold that allows the diversion of natural gas around the metering element except for the sole purpose of inspecting and servicing the measurement equipment.
5. If metering is not practicable due to circumstances such as low flow rate or low pressure venting and flaring, the operator will estimate the volume of vented or flared natural gas using a methodology that can be independently verified.
6. NA
7. The operator shall install measuring equipment whenever the division determines that metering is practicable or the existing measuring equipment or GOR test is not sufficient to measure the volume of vented and flared natural gas.

**VIII. Best Management Practices:** Operator's best management practices to minimize venting during active and planned maintenance.

- A. The existing facility is designed for maximum anticipated throughput and pressure to minimize waste.
- B. Equipment redundancies within the system, along with the overall battery design, enables us to service equipment without interruption to gas flow in most scenarios. With the existing battery compression at this facility, in most cases we can avoid flaring during times of elevated transmission line pressures caused by mid-stream maintenance.
- C. During well maintenance, gas is trapped/retained in the wellbore through use of properly weighted "kill" fluids.
- D. Additionally, we have gas takeaway with two (2) midstream companies to try and keep gas going to sales in case one of them has a problem.





**DRILLING PLAN**  
**Jackson A 67**  
**VERTICAL CEDAR LAKE GLORIETA YESO WELL**

**1. Geological Name of Surface Formation with Estimated Depth:**

<u>Geological Name</u>	<u>Estimate Top</u>	<u>Anticipated Fresh Water, Oil or Gas</u>
a. Alluvium	Surface	Fresh water - None
b. Anhydrite	280'	
c. Salt	446'	
d. Base Salt	1153'	
e. Yates	1336'	
f. Seven Rivers	1618'	Oil
g. Queen	2225'	Oil
h. Grayburg	2619'	Oil
i. San Andres	2965'	Oil
j. Glorieta	4443'	Oil
k. Yeso	4539'	Oil
l. Total Depth	Refer to Form 3160-3	

No other formations are expected to yield oil, gas or fresh water in measurable volumes. We will set 8-5/8" casing @ approx. 305' in the Anhydrite, above the salt and circulate cement to surface.

The oil zones will be isolated by running 5-1/2" casing to total depth and circulating cement to surface.

**2. Casing Program: (ALL CASING WILL BE NEW API APPROVED MATERIAL.)**

**(MW = 10.2 PPG IN DESIGN FACTOR CALCULATIONS.)**

**a. Design Safety Factors:**

<u>Type</u>	<u>Hole Size</u>	<u>Interval</u>	<u>OD Csg</u>	<u>Weight</u>	<u>Collar</u>	<u>Grade</u>	<u>Collapse Design Factor</u>	<u>Burst Design Factor</u>	<u>Tension Design Factor</u>
Conductor	20"	0'-90'	14"	Contractor Discretion			---	---	---
Surface	12-1/4"	0' - +/- 305'	8-5/8"	24.00#	ST & C	J55	1.125	1.00	1.80
Production	7-7/8"	305' - TD	5-1/2"	17.00#	LT & C	J55	1.125	1.00	1.80

## DRILLING PLAN

### VERTICAL LOCO HILLS GLORIETA YESO WELL

#### b. Surface Casing Info

The proposed casing setting depth is +/- 305' based on cross sections which show the estimated top of the rustler and top of salt. Drilling times will be plotted to find the hard section just above the salt. A mud logger will be on location to evaluate drill and cutting samples as long as circulation is maintained. If salt is penetrated, it will be obvious by the sudden increase in water salinity and surface casing will then be set above the top of salt. Our highly experienced drilling personnel have drilled many wells in this area and are able to easily identify the hard streak on the top of the salt.

#### c. Production Casing Info

Production casing will be set to TD with float shoe on bottom, float collar in first collar, centralizers throughout intervals and above and below a DV Tool set at +/-2600'. After drilling out and testing the casing to 2000 PSI, a cement bond log will be run to evaluate the cement job.

### 3. Cementing Program (Note Yields and DV Tool Depth if Multiple Stage.)

**BLM to be notified prior to all cementing and tag operations in order to observe the operation if desired.**

#### a. 8-5/8" Surface Cement to surface

- 330 sx C +2% PF1 (Calcium Chloride) + PF424 (Water Gelling Agent), mixed at 14.8 ppg, Yield 1.34 with 6.3 gal water per sack.
- **Excess cement 100%.**

**If cement does not circulate to surface, BLM will be notified of same, and advised of the plan to bring the cement to surface so BLM may witness tagging and cementing. When circulating cement, if surface pressures indicate cement is low in the annulus, temperature survey results will be reviewed with BLM representative to determine the remediation needed.**

#### b. 5-1/2" Production Casing

**Stage 1:** Lead: 260 sx 35/65 P/C +5 %PF44 (BWOW)(Salt )+6% PF20 (Bentonite Gel) +0.2% PF153 (Anti Settling) +0.3% PF13 (Retarder) +0.1 25#/sx PF29 (Celloflake) +3#/sx PF42 (Kolseal) +0.4#/sx PF45 (Defaomer), mixed at 12.5 ppg, Yield 2.11 with 11.364 gal water per sack.

**Tail:** 330 sx C +0.3%PF13 (Retarder), mixed at 14.8 ppg, Yield 1.33 with 6.298 gal water per sack.

**30% excess cement.**

**Stage 2:** Lead: 340 sx 35/65 P/C + 5% PF44 (BWOW)(Salt) +6% PF20 (Bentonite Gel) +0.2% PF153 (Anti Settling) +0.125#/sx PF29Celloflake) +3#/sx PF42 (Kolseal) +0.4#/sx PF45 (Defaomer), mixed at 12.5 ppg, Yield 2.11 with 11.362 gal water per sack.

**Tail:** 200 sx C Neat, mixed at 14.8 ppg, Yield 1.32 with 6.3 gal water per sack.

**140% excess cement.**

The above cement volumes may be revised pending the caliper measurement from the open hole logs. **Casing/cementing design is to bring cement to the surface.**



## DRILLING PLAN

### VERTICAL LOCO HILLS GLORIETA YESO WELL

#### 4. Pressure Control Equipment:

The blowout prevention equipment (BOPE) shown in **Exhibit L** will consist of a 2000 PSI Hydril Unit (annular) with hydraulic closing equipment. The equipment will comply with Onshore Order #2 and will be tested to 50% of rated working pressure (RWP) and maintained for at least ten (10) minutes. The 8-5/8" drilling head will be installed on the surface casing and in use continuously until total depth is reached. An independent testing company will be used for the testing. Other accessory BOP equipment will include a Kelly cock, floor safety valve, choke lines and choke manifold having 2000 PSI WP rating.

Occasionally, water flows are encountered from formations that have been water flooded including the Grayburg, Metex, Premier, San Andres, Vacuum, Lovington and Jackson formations. To control these water flows and to drill through salt formation(s), our anticipated maximum mud weight is 10.2 ppg. For the producing formation and at TD, the pore pressure in this area is 0.47 psi/ft based on review of drilling histories, mud weights, formation gradients etc. from surrounding wells.

Burnett is requesting to keep the Mud/Gas Separator on location but only connect if/when needed.

#### 5. Auxiliary Well Control and Monitoring Equipment:

- a. A Kelly cock will be in the drill string at all times.
- b. A full opening drill pipe stabbing valve with the appropriate connections on the rig floor at all times.
- c. Hydrogen Sulfide detection and breathing equipment will be installed and in operation at drilling depth of 1800' (which is more than 500' above top of Grayburg) until 5-1/2" casing is cemented.
- d. An H2S compliance package will be on all sites while drilling.

#### 6. Proposed Mud Circulation System

<u>Depth</u>	<u>Mud Wt</u>	<u>Visc</u>	<u>Fluid Loss</u>	<u>Type System</u>	<u>Max Volume</u>
0' - +/-305'	8.6 - 9.5			Fresh Water	
+/- 305' - TD' MD	10.0 max			Brine Water	

**The necessary mud products for weight addition and fluid loss control will be on location at all times.**

**Pason equipment will be used to monitor the mud system.**

#### 7. Logging, Coring and Testing program:

- a. Any drill stem tests will be based on geological sample shows and planned before spudding.
- b. The open hole electrical logging program will be:
  1. Total depth to 1000': Dual Laterolog-Micro Laterolog with Compensated Neutron, Spectral Density log with Spectral Gamma Ray and Caliper.
  2. Total depth to Surface: Compensated Neutron with Spectral Gamma Ray.

## **DRILLING PLAN VERTICAL LOCO HILLS GLORIETA YESO WELL**

3. Coring program will be planned and submitted on a well by well basis.
4. Additional testing will be done after setting the 5-1/2" production casing. The specific intervals will be based on log evaluation, geological sample shows and/or drill stem tests.

### **8. Potential Hazards:**

No abnormal pressures or temperatures are expected. Lost circulation is expected in the surface hole and not expected in production.

Occasionally, water flows are encountered from formations that have been water flooded including the Grayburg, Metex, Premier, San Andres, Vacuum, Lovington and Jackson formations. To control these water flows and to drill through salt formation(s), our anticipated maximum mud weight is 10.2 ppg.

For the producing formation and at TD, the pore pressure in this area is 0.47 psi/ft based on review of drilling histories, mud weights, formation gradients etc. from surrounding wells. Based upon logs of wells in this area, the anticipated bottom hole temperature is 105°F.

There is known H<sub>2</sub>S in this area. In the event that it is necessary to follow the H<sub>2</sub>S plan, a remote choke will be installed as required in Onshore Order 6. Refer to the attached H<sub>2</sub>S plan for details.

### **9. Anticipated Start Date and Duration of Operation**

Road and location construction will begin after BLM has approved the specific APD and has approved the start of the location work. Anticipated spud date will be as soon as the location building work has been completed and the drilling rig is available to move to the location. Move in and drilling is expected to take approximately 11 days. If production casing is run, an additional 60 days would be required to complete the well and install the necessary surface equipment (pumping unit, electricity, flowline and storage facility) to place the well on production.

### **10. Completion Procedure**

Upon completion of drilling operations, this well will be perforated and frac'd in multiple stages. Due to the completion process that Burnett utilizes, we do not anticipate any flowback. Upon completion of stimulation, the well will be put on production.



**Operator Name:** BURNETT OIL COMPANY INCORPORATED**Well Name:** JACKSON A**Well Number:** 67**Choke Diagram Attachment:**

BOP\_2M\_Choke\_Diagram\_20210810091204.pdf

**BOP Diagram Attachment:**

BOP\_2M\_Choke\_Diagram\_20210810091206.pdf

**Section 3 - Casing**

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	CONDUCTOR	20	14.0	NEW	API	N	0	90	0	90	3737	3647	90	OTHER	0	N/A						
2	SURFACE	12.25	8.625	NEW	API	N	0	305	0	305	3737	3432	305	J-55	24	ST&C	1.125	1	DRY	1.8	DRY	1.8
3	PRODUCTION	7.875	5.5	NEW	API	N	0	6229	0	6200	3737	-2463	6229	J-55	17	LT&C	1.125	1	DRY	1.8	DRY	1.8

**Casing Attachments****Casing ID:** 1 **String Type:** CONDUCTOR**Inspection Document:****Spec Document:****Tapered String Spec:****Casing Design Assumptions and Worksheet(s):**

Operator Name: BURNETT OIL COMPANY INCORPORATED

Well Name: JACKSON A

Well Number: 67

## Casing Attachments

Casing ID: 2 String Type: SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Safety\_Factor\_20210810092036.pdf

Casing ID: 3 String Type: PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

Safety\_Factor\_20210810092238.pdf

## Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
CONDUCTOR	Lead		0	90	0	0	0	0		Contractor Discretion	Contractor Discretion

SURFACE	Lead		0	305	330	1.34	14.8	442		Class C	+2% PF1 (Calcium Chloride) + PF424 (Water Gelling Agent),
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PRODUCTION	Lead		0	6229	340	2.11	12.5	717	140	35/65 P/C	+ 5% PF44 (BWOW)(Salt) +6%
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**Operator Name:** BURNETT OIL COMPANY INCORPORATED**Well Name:** JACKSON A**Well Number:** 67

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
											(Bentonite Gel) +0.2% PF153 (Anti Settling) +0.125#/sx PF29Celloflake) +3#/sx PF42 (Kolseal) +0.4#/sx PF45
PRODUCTION	Tail		0	6229	200	1.32	14.8	264	140	C Neat	N/A
PRODUCTION	Lead	2600	0	6229	260	2.11	12.5	549	30	35/65 P/C	+5 %PF44 (BWOW)(Salt )+6% PF20 (Bentonite Gel) +0.2% PF153 (Anti Settling) +0.3% PF13 (Retarder) +0.1 25#/sx PF29 (Celloflake) +3#/sx PF42 (Kolseal) +0.4#/sx PF45
PRODUCTION	Tail		0	6229	330	1.33	14.8	439	30	Class C	+0.3%PF13 (Retarder),

### Section 5 - Circulating Medium

**Mud System Type:** Closed**Will an air or gas system be Used?** NO**Description of the equipment for the circulating system in accordance with Onshore Order #2:****Diagram of the equipment for the circulating system in accordance with Onshore Order #2:****Describe what will be on location to control well or mitigate other conditions:** necessary mud products for weight addition and fluid loss control will be on location at all times.**Describe the mud monitoring system utilized:** Pason equipment will be used to monitor the mud system.

### Circulating Medium Table

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
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**Operator Name:** BURNETT OIL COMPANY INCORPORATED**Well Name:** JACKSON A**Well Number:** 67

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	305	OTHER : Fresh Water	8.6	9.5							
305	6229	OTHER : Brine Water	8.6	10.2							

### Section 6 - Test, Logging, Coring

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

- Any drill stem tests will be based on geological sample shows and planned before spudding.
- The open hole electrical logging program will be:
  - Total depth to 1000: Dual Laterolog-Micro Laterolog with Compensated Neutron, Spectral Density log with Spectral Gamma Ray and Caliper.
  - Total depth to Surface: Compensated Neutron with Spectral Gamma Ray.
  - Coring program will be planned and submitted on a well by well basis.
  - Additional testing will be done after setting the 5-1/2 production casing. The specific Intervals will be based on log evaluation geological sample shows and/or drill stem tests.

**List of open and cased hole logs run in the well:**

DUAL LATERAL LOG/MICRO-SPHERICALLY FOCUSED, GAMMA RAY LOG,

**Coring operation description for the well:**

Coring program will be planned and submitted on a well by well basis.

### Section 7 - Pressure

**Anticipated Bottom Hole Pressure:** 2867

**Anticipated Surface Pressure:** 1502

**Anticipated Bottom Hole Temperature(F):** 105

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

**Describe:**

**Contingency Plans geohazards description:**

**Contingency Plans geohazards attachment:**

**Hydrogen Sulfide drilling operations plan required?** YES

**Hydrogen sulfide drilling operations plan:**

H2S\_Plan\_20210810093322.pdf

**Burnett Oil Co., Inc.**  
801 Cherry Street- Unit #9  
Fort Worth, Texas  
76102-6881

Phone: 817-332-5108

Fax: 817-332-2438

Collapse Safety  
Pressure Factor Min

Burst Safety  
Pressure Factor Min

Tension Safety  
Factor Min

8-5/8" 24# J-55									
ST&C									
1,370									
2,950									
244,000									
211	1.125	237	210.6	1.0	210.6	21,600	1.8	38,880	

5-1/2" 17# J-55									
LT&C									
4,910									
5,320									
247,000									
3,288	1.125	3,700	3,288	1.0	3,288	105,400	1.8	189,720	





## **Burnett Oil Company, Inc.**

**Eddy County, NM NAD 83**

**Sec 12-T17S-R30E**

**Jackson A 67**

**Wellbore #1**

**Plan: Plan #1**

## **Standard Planning Report**

**20 July, 2021**



**Microsoft**  
Planning Report

<b>Database:</b>	EDM 5000.15 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Jackson A 67
<b>Company:</b>	Burnett Oil Company, Inc.	<b>TVD Reference:</b>	3737+17 @ 3754.0usft
<b>Project:</b>	Eddy County, NM NAD 83	<b>MD Reference:</b>	3737+17 @ 3754.0usft
<b>Site:</b>	Sec 12-T17S-R30E	<b>North Reference:</b>	Grid
<b>Well:</b>	Jackson A 67	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1		

<b>Project</b>	Eddy County, NM NAD 83		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	New Mexico Eastern Zone		

Site		Sec 12-T17S-R30E				
Site Position:		Northing:	671,195.10 usft	Latitude:	32° 50' 40.021 N	
From:	Map	Easting:	668,933.20 usft	Longitude:	103° 55' 4.322 W	
Position Uncertainty:		0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.23 °

Well	Jackson A 67					
Well Position	+N/-S	1,319.3 usft	Northing:	672,514.40 usft	Latitude:	32° 50' 53.089 N
	+E/-W	-354.1 usft	Easting:	668,579.10 usft	Longitude:	103° 55' 8.412 W
Position Uncertainty	0.0 usft		Wellhead Elevation:		Ground Level:	3,737.0 usft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2015	07/20/21	6.72	60.52	47,845.07086993

<b>Design</b>	Plan #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	6,200.0	0.0	0.0	90.00

<b>Plan Survey Tool Program</b>	<b>Date</b>	07/20/21		
<b>Depth From (usft)</b>	<b>Depth To (usft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Remarks</b>
1	0.0	6,229.9	Plan #1 (Wellbore #1)	MWD
				OWSG MWD - Standard

<b>Plan Sections</b>										
<b>Measured Depth (usft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>	<b>TFO (°)</b>	<b>Target</b>
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,758.7	11.38	90.00	2,753.8	0.0	75.1	1.50	1.50	0.00	90.00	
3,771.1	11.38	90.00	3,746.2	0.0	274.9	0.00	0.00	0.00	0.00	
4,529.9	0.00	0.00	4,500.0	0.0	350.0	1.50	-1.50	0.00	180.00	
6,229.9	0.00	0.00	6,200.0	0.0	350.0	0.00	0.00	0.00	0.00	BHL Jackson A 67



**Microsoft**  
Planning Report

<b>Database:</b>	EDM 5000.15 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Jackson A 67
<b>Company:</b>	Burnett Oil Company, Inc.	<b>TVD Reference:</b>	3737+17 @ 3754.0usft
<b>Project:</b>	Eddy County, NM NAD 83	<b>MD Reference:</b>	3737+17 @ 3754.0usft
<b>Site:</b>	Sec 12-T17S-R30E	<b>North Reference:</b>	Grid
<b>Well:</b>	Jackson A 67	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	0.00
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	0.00
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	0.00
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	0.00
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	0.00
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	0.00
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>KOP BLD 1.5°/100'</b>									
2,100.0	1.50	90.00	2,100.0	0.0	1.3	1.3	1.50	1.50	0.00
2,200.0	3.00	90.00	2,199.9	0.0	5.2	5.2	1.50	1.50	0.00
2,300.0	4.50	90.00	2,299.7	0.0	11.8	11.8	1.50	1.50	0.00
2,400.0	6.00	90.00	2,399.3	0.0	20.9	20.9	1.50	1.50	0.00
2,500.0	7.50	90.00	2,498.6	0.0	32.7	32.7	1.50	1.50	0.00
2,600.0	9.00	90.00	2,597.5	0.0	47.0	47.0	1.50	1.50	0.00
2,700.0	10.50	90.00	2,696.1	0.0	64.0	64.0	1.50	1.50	0.00
2,758.7	11.38	90.00	2,753.8	0.0	75.1	75.1	1.50	1.50	0.00
<b>EOB HLD 11.38° Inc.</b>									
2,800.0	11.38	90.00	2,794.2	0.0	83.3	83.3	0.00	0.00	0.00
2,900.0	11.38	90.00	2,892.2	0.0	103.0	103.0	0.00	0.00	0.00
3,000.0	11.38	90.00	2,990.3	0.0	122.7	122.7	0.00	0.00	0.00
3,100.0	11.38	90.00	3,088.3	0.0	142.5	142.5	0.00	0.00	0.00
3,200.0	11.38	90.00	3,186.3	0.0	162.2	162.2	0.00	0.00	0.00
3,300.0	11.38	90.00	3,284.4	0.0	181.9	181.9	0.00	0.00	0.00
3,400.0	11.38	90.00	3,382.4	0.0	201.7	201.7	0.00	0.00	0.00
3,500.0	11.38	90.00	3,480.4	0.0	221.4	221.4	0.00	0.00	0.00
3,600.0	11.38	90.00	3,578.5	0.0	241.1	241.1	0.00	0.00	0.00
3,700.0	11.38	90.00	3,676.5	0.0	260.9	260.9	0.00	0.00	0.00
3,771.1	11.38	90.00	3,746.2	0.0	274.9	274.9	0.00	0.00	0.00
<b>DROP 1.5°/100'</b>									
3,800.0	10.95	90.00	3,774.6	0.0	280.5	280.5	1.50	-1.50	0.00
3,900.0	9.45	90.00	3,873.0	0.0	298.2	298.2	1.50	-1.50	0.00
4,000.0	7.95	90.00	3,971.8	0.0	313.3	313.3	1.50	-1.50	0.00
4,100.0	6.45	90.00	4,071.0	0.0	325.8	325.8	1.50	-1.50	0.00
4,200.0	4.95	90.00	4,170.5	0.0	335.8	335.8	1.50	-1.50	0.00
4,300.0	3.45	90.00	4,270.3	0.0	343.1	343.1	1.50	-1.50	0.00
4,400.0	1.95	90.00	4,370.2	0.0	347.8	347.8	1.50	-1.50	0.00
4,500.0	0.45	90.00	4,470.1	0.0	349.9	349.9	1.50	-1.50	0.00
4,529.9	0.00	0.00	4,500.0	0.0	350.0	350.0	1.50	-1.50	0.00
<b>EOD HLD 0° Inc.</b>									





**Microsoft**  
Planning Report

<b>Database:</b>	EDM 5000.15 Single User Db	<b>Local Co-ordinate Reference:</b>	Well Jackson A 67
<b>Company:</b>	Burnett Oil Company, Inc.	<b>TVD Reference:</b>	3737+17 @ 3754.0usft
<b>Project:</b>	Eddy County, NM NAD 83	<b>MD Reference:</b>	3737+17 @ 3754.0usft
<b>Site:</b>	Sec 12-T17S-R30E	<b>North Reference:</b>	Grid
<b>Well:</b>	Jackson A 67	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,600.0	0.00	0.00	4,570.1	0.0	350.0	350.0	0.00	0.00	0.00
4,700.0	0.00	0.00	4,670.1	0.0	350.0	350.0	0.00	0.00	0.00
4,800.0	0.00	0.00	4,770.1	0.0	350.0	350.0	0.00	0.00	0.00
4,900.0	0.00	0.00	4,870.1	0.0	350.0	350.0	0.00	0.00	0.00
5,000.0	0.00	0.00	4,970.1	0.0	350.0	350.0	0.00	0.00	0.00
5,100.0	0.00	0.00	5,070.1	0.0	350.0	350.0	0.00	0.00	0.00
5,200.0	0.00	0.00	5,170.1	0.0	350.0	350.0	0.00	0.00	0.00
5,300.0	0.00	0.00	5,270.1	0.0	350.0	350.0	0.00	0.00	0.00
5,400.0	0.00	0.00	5,370.1	0.0	350.0	350.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,470.1	0.0	350.0	350.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,570.1	0.0	350.0	350.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,670.1	0.0	350.0	350.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,770.1	0.0	350.0	350.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,870.1	0.0	350.0	350.0	0.00	0.00	0.00
6,000.0	0.00	0.00	5,970.1	0.0	350.0	350.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,070.1	0.0	350.0	350.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,170.1	0.0	350.0	350.0	0.00	0.00	0.00
6,229.9	0.00	0.00	6,200.0	0.0	350.0	350.0	0.00	0.00	0.00
TD at 6229.9									

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
BHL Jackson A 67 - plan hits target center - Circle (radius 20.0)	0.00	0.00	6,200.0	0.0	350.0	672,514.40	668,929.10	32° 50' 53.076 N	103° 55' 4.309 W

Plan Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
2,000.0	2,000.0	0.0	0.0	KOP BLD 1.5°/100'
2,758.7	2,753.8	0.0	75.1	EOB HLD 11.38° Inc.
3,771.1	3,746.2	0.0	274.9	DROP 1.5°/100'
4,529.9	4,500.0	0.0	350.0	EOD HLD 0° Inc.
6,229.9	6,200.0	0.0	350.0	TD at 6229.9

**PECOS DISTRICT  
SURFACE USE  
CONDITIONS OF APPROVAL**

OPERATOR'S NAME:	Burnett Oil Company Inc.
LEASE NO.:	NMLC029339A
COUNTY:	Eddy

**Wells:**

Jackson A 67

Surface Hole Location: 2310' FSL &amp; 680' FEL, Section 12, T. 17 S, R. 30 E.

Bottom Hole Location: 2310' FSL &amp; 330' FEL, Section 12, T. 17 S, R 30 E.

**TABLE OF CONTENTS**

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

- ☐ **General Provisions**
- ☐ **Permit Expiration**
- ☐ **Archaeology, Paleontology, and Historical Sites**
- ☐ **Noxious Weeds**
- ☒ **Special Requirements**
  - Watershed
  - Lesser Prairie Chicken
- ☐ **Construction**
  - Notification
  - Topsoil
  - Closed Loop System
  - Federal Mineral Material Pits
  - Well Pads
  - Roads
- ☐ **Road Section Diagram**
- ☒ **Production (Post Drilling)**
  - Well Structures & Facilities
  - Pipelines
  - Electric Lines
- ☐ **Interim Reclamation**
- ☐ **Final Abandonment & Reclamation**

## **I. GENERAL PROVISIONS**

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

## **II. PERMIT EXPIRATION**

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

## **III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES**

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

OR

If the entire project is covered under the Permian Basin Programmatic Agreement (cultural resources only):

The proponent has contributed funds commensurate to the undertaking into an account for offsite mitigation. Participation in the PA serves as mitigation for the effects of this project on cultural resources. If any human skeletal remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered at any time during construction, all construction activities shall halt and the BLM will be notified as soon as possible within 24 hours. Work shall not resume until a Notice to Proceed is issued by the BLM. See information below discussing NAGPRA.

If the proposed project is split between a Class III inventory and a Permian Basin Programmatic Agreement contribution, the portion of the project covered under Class III inventory should default to the first paragraph stipulations.

The holder is hereby obligated to comply with procedures established in the Native American Graves Protection and Repatriation Act (NAGPRA) to protect such cultural items as human remains, associated funerary objects, sacred objects, and objects of cultural patrimony discovered inadvertently during the course of project implementation. In the event that any of the cultural items listed above are discovered during the course of project work, the proponent shall immediately halt the disturbance and contact the BLM within 24 hours for instructions. The proponent or initiator of any project shall be held responsible for protecting, evaluating, reporting, excavating, treating, and disposing of these cultural items according to the procedures established by the BLM in consultation with Indian Tribes."



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

#### IV. NOXIOUS WEEDS

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

#### V. SPECIAL REQUIREMENT(S)

##### **Watershed:**

The entire well pad(s) will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad. The compacted berm shall be constructed at a minimum of 12 inches with impermeable mineral material (e.g. caliche). Topsoil shall not be used to construct the berm. No water flow from the uphill side(s) of the pad shall be allowed to enter the well pad. The integrity of the berm shall be maintained around the surfaced pad throughout the life of the well and around the downsized pad after interim reclamation has been completed. Any water erosion that may occur due to the construction of the well pad during the life of the well will be quickly corrected and proper measures will be taken to prevent future erosion. Stockpiling of topsoil is required. The topsoil shall be stockpiled in an appropriate location to prevent loss of soil due to water or wind erosion and not used for berming or erosion control. If fluid collects within the bermed area, the fluid must be vacuumed into a safe container and disposed of properly at a state approved facility.

##### **SURFACE LINE(S):**

Prior to pipeline installation/construction a leak detection plan will be developed. The method(s) could incorporate gauges to detect pressure drops, situating valves and lines so they can be visually inspected periodically or installing electronic sensors to alarm when a leak is present. The leak detection plan will incorporate an automatic shut off system that will be installed for proposed pipelines to minimize the effects of an undesirable event.

##### **Timing Limitation Stipulation/Condition of Approval for Lesser Prairie-Chicken:**

Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad **Lesser Prairie Chicken:**

construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 ft. from the source of the noise.

**Timing Limitation Exceptions:**

The Carlsbad Field Office will publish an annual map of where the LPC timing and noise stipulations and conditions of approval (Limitations) will apply for the identified year (between March 1 and June 15) based on the latest survey information. The LPC Timing Area map will identify areas which are Habitat Areas (HA), Isolated Population Area (IPA), and Primary Population Area (PPA). The LPC Timing Area map will also have an area in red crosshatch. The red crosshatch area is the only area where an operator is required to submit a request for exception to the LPC Limitations. If an operator is operating outside the red crosshatch area, the LPC Limitations do not apply for that year and an exception to LPC Limitations is not required.

**Ground-level Abandoned Well Marker to avoid raptor perching:**

Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well. For more installation details, contact the Carlsbad Field Office at 575-234-5972.

**VI. CONSTRUCTION****A. NOTIFICATION**

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

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

**B. TOPSOIL**

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

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

**C. CLOSED LOOP SYSTEM**

Tanks are required for drilling operations: No Pits.

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

**D. FEDERAL MINERAL MATERIALS PIT**

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

**E. WELL PAD SURFACING**

Surfacing of the well pad is not required.

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

#### **F. EXCLOSURE FENCING (CELLARS & PITS)**

##### **Exclosure Fencing**

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

#### **G. ON LEASE ACCESS ROADS**

##### **Road Width**

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty-five (25) feet.

##### **Surfacing**

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

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

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

##### **Crowning**

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

##### **Ditching**

Ditching shall be required on both sides of the road.

##### **Turnouts**

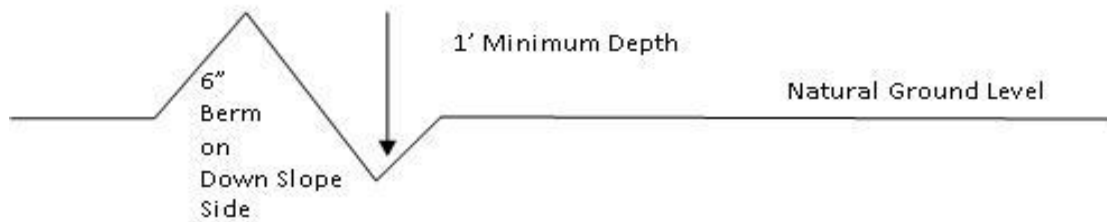
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall conform to Figure 1; cross section and plans for typical road construction.

##### **Drainage**

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

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

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



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

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

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

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

### Cattle guards

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

### Fence Requirement

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

### Public Access

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

**Construction Steps**

1. Salvage topsoil
2. Construct road

3. Redistribute topsoil
4. Revegetate slopes



Figure 1. Cross-sections and plans for typical road sections representative of BLM resource or FS local and higher-class roads.



## VII. PRODUCTION (POST DRILLING)

### A. WELL STRUCTURES & FACILITIES

#### Placement of Production Facilities

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

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

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

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

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

#### Open-Vent Exhaust Stack Exclosures

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

#### Containment Structures

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

#### Painting Requirement

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

### B. PIPELINES

- The BLM, Carlsbad Field Office, will be informed immediately if any subsurface drainage

- channels, passages, or voids are intersected by trenching, and no pipe will be laid in the trench at that point until clearance has been issued by the Authorized Officer.
- If a void is encountered alignments may be rerouted to avoid the karst feature and lessen; the potential of subsidence or collapse of karst features, buildup of toxic or combustible gas, or other possible impacts to cave and karst resources from the buried pipeline.
  - Special restoration stipulations or realignment may be required at such intersections, if any.
  - A leak detection plan **will be submitted to the BLM Carlsbad Field Office for approval** prior to pipeline installation. The method could incorporate gauges to detect pressure drops, siting valves and lines so they can be visually inspected periodically or installing electronic sensors to alarm when a leak is present. The leak detection plan will incorporate an automatic shut off system that will be installed for proposed pipelines to minimize the effects of an undesirable event.
  - Regular monitoring is required to quickly identify leaks for their immediate and proper treatment.
  - All spills or leaks will be reported to the BLM immediately for their immediate and proper treatment.

#### STANDARD STIPULATIONS FOR SURFACE INSTALLED PIPELINES

**A copy of the Grant and attachments, including stipulations, survey plat(s) and/or map(s), shall be on location during construction. BLM personnel may request to review a copy of your permit during construction to ensure compliance with all stipulations.**

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

1. Holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
2. Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, Holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC § 2601 *et seq.* (1982) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant (see 40 CFR, Part 702-799 and in particular, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193). Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved Federal agency or State government.
3. Holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. § 9601, *et seq.* or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, *et seq.*) on the Right-of-Way (unless the release or threatened release is wholly unrelated to activity of the Right-of-Way Holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way Holder on the Right-of-Way. This provision applies without regard to whether a release is caused by Holder, its agent, or unrelated third parties.
4. Holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. Holder shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the right-of-way or permit area:

- a. Activities of Holder including, but not limited to: construction, operation, maintenance, and termination of the facility;
- b. Activities of other parties including, but not limited to:
  - (1) Land clearing
  - (2) Earth-disturbing and earth-moving work
  - (3) Blasting
  - (4) Vandalism and sabotage;
- c. Acts of God.

The maximum limitation for such strict liability damages shall not exceed one million dollars (\$1,000,000) for any one event, and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction in which the damage or injury occurred.

This section shall not impose strict liability for damage or injury resulting primarily from an act of war or from the negligent acts or omissions of the United States.

5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, or other pollutant, wherever found, shall be the responsibility of Holder, regardless of fault. Upon failure of Holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he/she deems necessary to control and clean up the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of Holder. Such action by the Authorized Officer shall not relieve Holder of any responsibility as provided herein.

6. All construction and maintenance activity shall be confined to the authorized right-of-way width of 30 feet. If the pipeline route follows an existing road or buried pipeline right-of-way, the surface pipeline shall be installed no farther than 10 feet from the edge of the road or buried pipeline right-of-way. If existing surface pipelines prevent this distance, the proposed surface pipeline shall be installed immediately adjacent to the outer surface pipeline. All construction and maintenance activity shall be confined to existing roads or right-of-ways.

7. No blading or clearing of any vegetation shall be allowed unless approved in writing by the Authorized Officer.

8. Holder shall install the pipeline on the surface in such a manner that will minimize suspension of the pipeline across low areas in the terrain. In hummocky or dune areas, the pipeline shall be "snaked" around hummocks and dunes rather than suspended across these features.

9. The pipeline shall be buried with a minimum of 6 inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.

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

11. In those areas where erosion control structures are required to stabilize soil conditions, the

holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.

12. Excluding the pipe, all above-ground structures not subject to safety requirement shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2; designated by the Rocky Mountain Five State Interagency Committee.

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

14. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.

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

OR

If the entire project is covered under the Permian Basin Programmatic Agreement (cultural resources only):

The proponent has contributed funds commensurate to the undertaking into an account for offsite mitigation. Participation in the PA serves as mitigation for the effects of this project on cultural resources. If any human skeletal remains, funerary objects, sacred objects, or objects of cultural patrimony are discovered at any time during construction, all construction activities shall halt and the BLM will be notified as soon as possible within 24 hours. Work shall not resume until a Notice to Proceed is issued by the BLM. See Stipulation 16 for more information.

If the proposed project is split between a Class III inventory and a Permian Basin Programmatic Agreement contribution, the portion of the project covered under Class III inventory should default to the first paragraph stipulations.

16. The holder is hereby obligated to comply with procedures established in the Native American Graves Protection and Repatriation Act (NAGPRA) to protect such cultural items as human remains, associated funerary objects, sacred objects, and objects of cultural patrimony discovered inadvertently during the course of project implementation. In the event that any of the cultural items listed above are discovered during the course of project work, the proponent shall immediately halt the disturbance and contact the BLM within 24 hours for instructions. The proponent or initiator of any project shall be held responsible for protecting, evaluating, reporting, excavating, treating, and disposing of these cultural items according to the procedures established by the BLM in consultation with Indian Tribes."

17. Any paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the Authorized Officer. The holder shall suspend all operations in the immediate area of such

discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

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

19. Surface pipelines shall be less than or equal to 4 inches and a working pressure below 125 psi.

## **VIII. INTERIM RECLAMATION**

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

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

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

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

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

## **IX. FINAL ABANDONMENT & RECLAMATION**

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

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

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour



whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

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

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well.

**Seed Mixture for LPC Sand/Shinnery Sites**

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

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

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

<u>Species</u>	<u>lb/acre</u>
Plains Bristlegrass	5lbs/A
Sand Bluestem	5lbs/A
Little Bluestem	3lbs/A
Big Bluestem	6lbs/A
Plains Coreopsis	2lbs/A
Sand Dropseed	1lbs/A

\*Pounds of pure live seed:

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

## PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

<b>OPERATOR'S NAME:</b>	<b>Mewbourne Oil Company</b>
<b>LEASE NO.:</b>	<b>NMNM029339A</b>
<b>WELL NAME &amp; NO.:</b>	<b>JACKSON A 67</b>
<b>SURFACE HOLE FOOTAGE:</b>	<b>2310'S &amp; 680'E</b>
<b>BOTTOM HOLE FOOTAGE:</b>	<b>2310'S &amp; 330'E</b>
<b>LOCATION:</b>	<b>Section 12, T.17 S., R.30 E., NMPM</b>
<b>COUNTY:</b>	<b>Eddy County, New Mexico</b>

COA

H2S	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Potash	<input checked="" type="radio"/> None	<input type="radio"/> Secretary	<input type="radio"/> R-111-P
Cave/Karst Potential	<input checked="" type="radio"/> Low	<input type="radio"/> Medium	<input type="radio"/> High
Cave/Karst Potential	<input type="radio"/> Critical		
Variance	<input checked="" type="radio"/> None	<input type="radio"/> Flex Hose	<input type="radio"/> Other
Wellhead	<input checked="" type="radio"/> Conventional	<input type="radio"/> Multibowl	<input type="radio"/> Both
Other	<input type="checkbox"/> 4 String Area	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> WIPP
Other	<input type="checkbox"/> Fluid Filled	<input type="checkbox"/> Cement Squeeze	<input type="checkbox"/> Pilot Hole
Special Requirements	<input type="checkbox"/> Water Disposal	<input type="checkbox"/> COM	<input type="checkbox"/> Unit

### A. HYDROGEN SULFIDE

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

### B. CASING

#### Casing Design:

1. The **8 5/8** inch surface casing shall be set at approximately **305** feet (a minimum of **70 feet (Eddy County)** into the Rustler Anhydrite and above the salt) and cemented to the surface.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.

- b. Wait on cement (WOC) time for a primary cement job will be a minimum of **8 hours** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
  - d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The minimum required fill of cement behind the **5-1/2** inch production casing is:

**Option 1 (Single Stage):**

- Cement to surface. If cement does not circulate see B.1.a, c-d above.  
**Excess cement calculates to -9%, additional cement might be required.**

**Option 2:**

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

- a. First stage to DV tool: Cement to circulate. If cement does not circulate off the DV tool, contact the appropriate BLM office before proceeding with second stage cement job.
- b. Second stage above DV tool:
  - Cement to surface. If cement does not circulate see B.1.a, c-d above.

**C. PRESSURE CONTROL**

1. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M)** psi.
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.

- e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

## GENERAL REQUIREMENTS

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

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

☒ Eddy County

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,  
(575) 361-2822

☒ Lea County

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575)  
393-3612

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



digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

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

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

**B. PRESSURE CONTROL**

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

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

- b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time, except the casing pressure test can be initiated immediately after bumping the plug (only applies to single stage cement jobs).
- c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore

Order No. 2.

C. DRILLING MUD

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

D. WASTE MATERIAL AND FLUIDS

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

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

**OTA10062021**



## HYDROGEN SULFIDE (H<sub>2</sub>S) PLAN & TRAINING

This plan was developed in accordance with 43 CFR 3162.3-1, section III.C, Onshore Oil and Gas Operations Order No. 6.

Based on our area testing H<sub>2</sub>S at 100 PPM has a radius of 139' and does not get off our well sites. There are no schools, residences, churches, parks, public buildings, recreation area or public within 2+ miles of our area.

### A. Training

#### 1. Training of Personnel

**All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in accordance with 43 CFR 3162.3-1, section III.C.3.a. Training will be given in the following areas prior to commencing drilling operations on each well:**

- a. The hazards and characteristics of Hydrogen Sulfide (H<sub>2</sub>S).
- b. The proper use and maintenance of personal protective equipment and life support systems.
- c. The proper use of H<sub>2</sub>S detectors, alarms, warning systems, briefing areas, evacuation procedures and the prevailing wind.
- d. The proper techniques for first aid and rescue procedures.
- e. **ATTACHED HYDROGEN SULFIDE (H<sub>2</sub>S) CONTINGENCY PLAN DRILLING EXHIBIT L.**
- f. **ATTACHED EMERGENCY CALL LIST FOR ANY ON SITE EMERGENCY DRILLING EXHIBIT M.**

#### 2. Training of Supervisory Personnel

**In addition to the training above, supervisory personnel will also be trained in the following areas:**

- a. The effects of H<sub>2</sub>S on metal components. If high tensile tubulars are to be used, personnel will be trained in special maintenance requirements.
- b. Corrective action and shut-in procedures when drilling or reworking a well, blowout prevention and well control procedures.
- c. The contents and requirements of the H<sub>2</sub>S Drilling Operations Plan and the Public Protection Plan (if applicable.)

#### 3. Initial and Ongoing Training

There will be an initial training session just prior to encountering a known or probable H<sub>2</sub>S zone (within 3 days or 500 feet) and weekly H<sub>2</sub>S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H<sub>2</sub>S Drilling Operations Plan and the Public Protection Plan (if applicable). This plan shall be available at the well site. All personnel will be required to carry documentation that they have received the proper training.



**B. H2S Drilling Operations Plan**

1. Well Control Equipment
  - a. Flare line(s) and means of ignition
  - b. Remote control choke
  - c. Flare gun/flares
  - d. Mud-gas separator
2. **Protective equipment for essential personnel:**
  - a. Mark II Surviveair (or equivalent) 30 minute units located in the dog house and at the primary briefing area (to be determined.)
  - b. Means of communication when using protective breathing apparatus.
3. **H2S detection and monitoring equipment:**
  - a. Three (3) portable H2S monitors positioned on location for best coverage and response. These units have warning lights at 10 PPM and warning lights and audible sirens when H2S levels of 15 PPM is reached. A digital display inside the doghouse shows current H2S levels at all three (3) locations.
  - b. An H2S Safety compliance set up is on location during all operations.
  - c. We will monitor and start fans at 1- ppm or less, an increase over 10 ppm results in the shutdown and installation of the mud/gas separator.
  - d. Portable H2S and SO2 monitor(s).
4. **Visual warning systems:**
  - a. Wind direction indicators will be positioned for maximum visibility.
  - b. Caution/Danger signs will be posted on roads providing direct access to location. Signs will be painted a high visibility yellow with black lettering of sufficient size to be readable at reasonable distance from the immediate location. Bilingual signs will be used when appropriate.
5. **Mud program:**
  - a. The mud program has been designed to minimize the volume of H2S circulated to the surface Proper mud weight, safe drilling practices and the use of H2S scavengers will minimize hazards when penetrating H2S bearing zones.
6. **Metallurgy:**
  - a. All drill strings, casings, tubing, wellheads, Hydril BOPS, drilling spools, kill lines, choke manifold, valves and lines will be suitable for H2S service.
  - b. All elastomers used for packing and seals shall be H2S trim.

**7. Communication:**

- a. Cellular Telephone and/or 2-way radio will be provided at well site.
- b. Landline telephone is located in our field office.



BURNETT OIL CO., INC.

**EXHIBIT M - EMERGENCY NOTIFICATION LIST****BURNETT CONTACTS****Burnett's New Mexico Office****817.332.5108 x202**

87 Square Lake Road (CR #220) Loco Hills, New Mexico 88255

**Directions: Loco Hills, NM – 2 miles east of Loco Hills on US Hwy 82 to CR#220. Then North on CR #220 approximately one (1) mile to office.****Burnett Oil Home Office****817.332.5108**

Burnett Plaza – Suite 1500 | 801 Cherry Street – Unit #9| Fort Worth, Texas 76102

Walter Glasgow

**Office - 817.583.8871**

VP of Operations – Permian Basin/New Mexico

**Cell - 817.343.5567**

Tyler Deans

**Office – 575.677.2313**

Engineering Manager

**Cell – 432.553.4699**

Leslie Garvis

**Office – 817.583.8730**

Regulatory &amp; Government Affairs Manager

**Cell – 713.819.4371****SHERIFF/POLICE CONTACTS**

Eddy County Sheriff

911 or 575.677.2313

New Mexico State Police

575.746.2701

**FIRE DEPARTMENT**

Loco Hills Fire Department (VOLUNTEER ONLY)

911 or 575.677.2349

For Medical and Fire (Artesia)

575.746.2701

**AIR AMBULANCE**

Flight for Life Air Ambulance

(Lubbock)

806.743.9911

Aerocare Air Ambulance

(Lubbock)

806.747.8923

Med Flight Air Ambulance

(Albuq)

505.842.4433

S B Med Svc Air Ambulance

(Albuq)

505.842.4949

**FEDERAL AND STATE**

US Bureau of Land Management (Carlsbad)

575.361.2822

575.234.5972

New Mexico Oil Conservation Division (Artesia)

575.748.1283

New Mexico Emergency Response Commission (24 hour)

575.827.9126

Local Emergency Planning Operation Center (Artesia)

505.842.4949

National Emergency Response Center (Washington, DC)

800.424.8802

**OTHER IMPORTANT NUMBERS**

Boots &amp; Coots IWC

800.256.9688

Cudd Pressure Control

432.570.5300

Halliburton Services

575.746.2757

BJ Service

575.746.2293

**THIS MUST BE POSTED AT THE RIG WHILE ON LOCATION**



BURNETT OIL CO., INC.

**EXHIBIT L - HYDROGEN SULFIDE (H2S) CONTINGENCY PLAN****A. Emergency Procedures**

In the event of a release of gas containing H2S, the first responder(s) must

1. Isolate the area and prevent entry by other persons into the 100 PPM ROE. Assumed 100PPM ROE = 3000’.
2. Evacuate any public places encompassed by 100 PPM ROE.
3. Be equipped with H2S monitors and air packs in order to control release.
4. Use the “buddy system” to ensure no injuries occur during the response.
5. Take precautions to avoid personal injury during this operation.
6. Have received training in the following:
  - a. H2S detection
  - b. Measures for protection against this gas
  - c. Equipment used for protection and emergency response.

**B. Ignition of Gas Source**

Should control of the well be considered lost and ignition considered, care will be taken to protect against exposure to Sulfur Dioxide (SO2). Intentional ignition will be coordinated with the NMOCD and local officials. Additionally, the New Mexico State Police may become involved. NM State Police shall be the incident command on scene of any major release. Care will be taken to protect downwind whenever there is an ignition of gas.

**C. Characteristics of H2S and SO2**

<u>Common Name</u>	<u>Chemical Formula</u>	<u>Specific Gravity</u>	<u>Threshold Limit</u>	<u>Hazardous Limit</u>	<u>Lethal Concentration</u>
Hydrogen Sulfide	H2S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO2	2.21 Air = 1	2 ppm	NA	1000 ppm

#### **D. Contacting Authorities**

Burnett Oil Co., Inc. personnel will liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD will be notified of the release as soon as possible but no later than four (4) hours after the incident. Agencies will ask for information such as type and volume of release, wind and direction, location of release, etc. Be sure all is written down and ready to give to contact list attached. Burnett's response must be in coordination with the State of New Mexico's Hazardous Materials Emergency Response Plan.

Directions to the site are as follows:

Burnett Office  
87 Square Lake Road (CR #220)  
Loco Hills, NM 88255

Loco Hills, New Mexico (2 miles East of Loco Hills on US Hwy 82 to C #220. Then North on CR #220 approximately one (1) mile to office.



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

# Drilling Plan Data Report

12/08/2021

APD ID: 10400077788

Submission Date: 08/10/2021

Highlighted data  
reflects the most  
recent changes

Operator Name: BURNETT OIL COMPANY INCORPORATED

Well Name: JACKSON A

Well Number: 67

[Show Final Text](#)

Well Type: OIL WELL

Well Work Type: Drill

## Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
6849261	RUSTLER	3737	280	280	ANHYDRITE, SHALE	NONE	N
6849262	SALADO	3291	446	446	SALT	NONE	N
6849263	BASE OF SALT	2584	1153	1153	ANHYDRITE	NONE	N
6849409	YATES	2401	1336	1336	ANHYDRITE, SHALE	NONE	N
6849410	SEVEN RIVERS	2119	1618	1618	ANHYDRITE, DOLOMITE	OIL	N
6849411	QUEEN	1513	2224	2225	ANHYDRITE, SANDSTONE	OIL	N
6849412	GRAYBURG	1120	2617	2619	DOLOMITE	OIL	N
6849413	SAN ANDRES	774	2963	2965	DOLOMITE	OIL	N
6849414	GLORIETA	-702	4439	4443	SANDSTONE, SHALE	NATURAL GAS, OIL	Y
6849415	YESO	-798	4535	4539	DOLOMITE	NATURAL GAS, OIL	N

## Section 2 - Blowout Prevention

Pressure Rating (PSI): 2M

Rating Depth: 8000

**Equipment:** The blowout prevention equipment (BOPE) will consist of a 2000 PSI Hydril Unit (annular) with hydraulic closing equipment. The 8-5/8 drilling head will be installed on the surface casing and in use continuously until total depth is reached. Other accessory BOP equipment will include a Kelly cock, floor safety valve, choke lines and choke manifold having 2000PSI WP rating. Occasionally, water flows are encountered from formations that have been water flooded including the Grayburg, Metex, Premier, San Andres, Vacuum, Lovington and Jackson formations. To control these water flows and to drill through salt formation(s), our anticipated maximum mud weight is 10.2 ppg. For the producing formation and at TD, the pore pressure in this area is 0.47 psi/ft based on review of drilling histories, mud weights, formation gradients etc. from surrounding wells. Burnett is requesting to keep the Mud/Gas Separator on location but only connect if/when needed.

**Requesting Variance?** NO

**Variance request:**

**Testing Procedure:** The equipment will comply with Onshore Order #2 and will be tested to 50% of rated working pressure (RWP) and maintained for at least ten (10) minutes. An independent testing company will be used for the testing.





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

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## Section 2 - Blowout Prevention

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**Requesting Variance?** NO

**Variance request:**

**Testing Procedure:** The equipment will comply with Onshore Order #2 and will be tested to 50% of rated working pressure (RWP) and maintained for at least ten (10) minutes. An independent testing company will be used for the testing.

NOTE: ALL VALVES AND  
PIPE ON CHOKE MANIFOLD  
ARE TO BE 2"



EPS PROJECT NUMBER = 10-028  
DATE: JANUARY 29, 2010  
REVISION DATE (LG): OCTOBER 15, 2014  
FILE NAME: 14.10.15 2MCHOKEMANIFOLD DRILLING

**District I**

1625 N. French Dr., Hobbs, NM 88240  
 Phone:(575) 393-6161 Fax:(575) 393-0720

**District II**

811 S. First St., Artesia, NM 88210  
 Phone:(575) 748-1283 Fax:(575) 748-9720

**District III**

1000 Rio Brazos Rd., Aztec, NM 87410  
 Phone:(505) 334-6178 Fax:(505) 334-6170

**District IV**

1220 S. St Francis Dr., Santa Fe, NM 87505  
 Phone:(505) 476-3470 Fax:(505) 476-3462

**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

CONDITIONS

Action 67208

**CONDITIONS**

Operator: BURNETT OIL CO INC 801 Cherry Street Unit #9 Fort Worth, TX 76102	OGRID:
	3080
	Action Number: 67208
	Action Type: [C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

**CONDITIONS**

Created By	Condition	Condition Date
kpickford	Notify OCD 24 hours prior to casing & cement	12/20/2021
kpickford	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string	12/20/2021
kpickford	Cement is required to circulate on both surface and intermediate1 strings of casing	12/20/2021
kpickford	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system	12/20/2021