Form 3160-5	UN
(June 2015)	DEPARTME

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB No. 1004-0137 Expires: January 31, 2018

5. Lease Serial No LC-067145

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

1. If Indian. Allottee or Tribe Some

SUBMIT IN TRIPLICATE - Other instructions on page 2		The Unit of CA Agreement, Name and/or No.	17 If Unit of CA Agreement, Name and/or No.		
1. Type of Well Gas V	Nell 🖌 Other		8 Well Name and No. Pronghorn Federal SV		
			Prongnorn Federal Sv	VU #1	
2 Name of Operator Judah Oil, LLC	245872		<sup>9</sup> API Well No. 30-015-20866		
3a. Address P.O. Box 568		3b. Phone No. (include area cod	de) 10 Field and Pool or Exploratory Area		
Artesia, NM 88211-0568 (575) 748-4730		Fenton, NE; Devonian			
4. Location of Well (Footcige, Sec., T.,	R.M., or Survey Description	)	11. Country or Parish, State		
1980' FSL, 660' FEL, Section 12,	T-21-S, R-28-E		Eddy, New Mexico		
12. CHE	CK THE APPROPRIATE B	OX(ES) TO INDICATE NATUR	E OF NOTICE, REPORT OR OTHER DATA	and an and a second second	
TYPE OF SUBMISSION	1	TY	PE OF ACTION		
Notice of Intent	Acidize	Deepen	Production (Start/Resume) Water Shut-Off		
	Alter Casing	Hydraulic Fracturing	Reclamation Well Integrity		
Subsequent Report	Casing Repair	New Construction	Recomplete Other		
	🖌 Change Plans	Plug and Abandon	Temporarily Abandon		
Final Abandonment Notice	Convert to Injection	Plug Back	Water Disposal		

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

Judah Oil, LLC respectfully request to release drilling rig. We have drilled all existing cement plugs from previous P&A in June 1973. The well has been deepened to a current depth of 13,825' and 5 1/2 P-110 20# csg has been set from surface-13,823'. The top of the Devonian formation was mud logged and determined to be 13,765' The casing covers the Wolfcamp, Strawn, Atoka, and Morrow formations. The well is being cemented in 3 stages in order for cement to circulated to surface.

We are asking permission to move a pulling unit onto the well to finish drilling operations and completion of the well. A pulling unit will be moved onto the well on first availability. The well will be secured by the new casing along with cement circulated to surface and the 5K well head will be temporarily installed and closed until a pulling unit is moved onto location.

We are also requesting that we may use a 5K hydraulic BOP and a 5K choke manifold (BOP and Choke Manifold schematic attached) along with a closed loop system to finish the drilling and completion operations of the well.

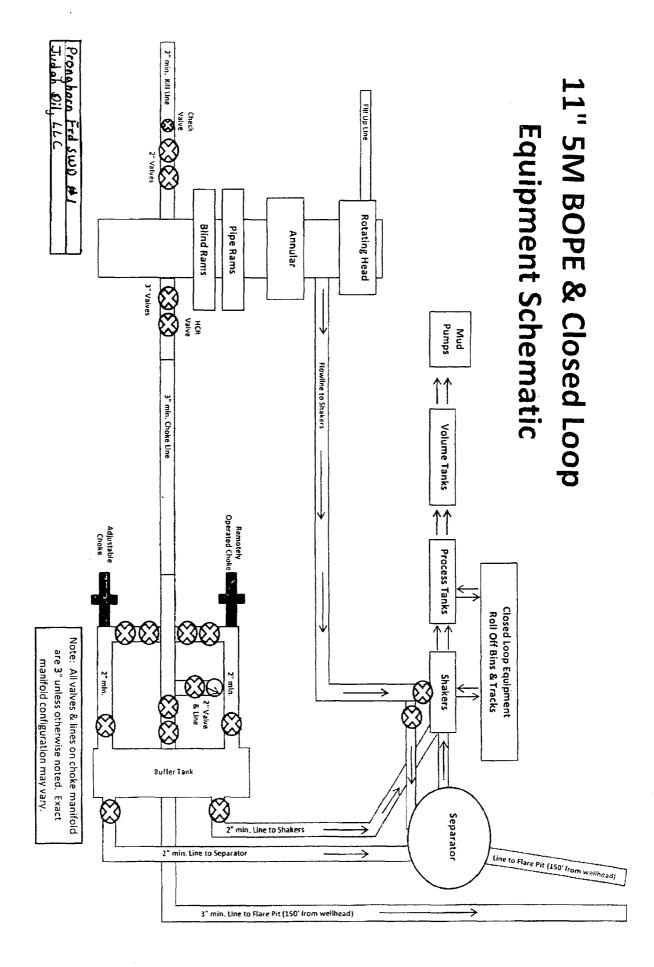
Accepted	for	/2 recor	-6 d.	-/ NM	7 0CD
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SEE ATTACHED FOR	
CONDITIONS OF APPROVAL CONSERVATION	e

ARTESIA DISTRICT

14. I hereby certify that the foregoing is true and correct. Name (Printed Typed)			DEC 04	2017
James B Campanella Titl		ember/Manager		
Signature and Con Dat	le	11/19/2017	RECEIV	/ED
THE SPACE FOR FEDERA	AL OR STATE OFICE US	∎ <u>APPR</u>	OVED	
Approved by Charles Nimmer	PETROLEUM EN	GINEER		
Unances Minimiel	Title	DAMON 2	2 1017	
Conditions of approval, if any, are attached Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office		,	
		- BUREAU OF LAN	<u>id manageme</u>	<u>NT</u>
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any pe any false, fictitious or fraudulent statements or representations as to any matter within its		ake to any departure BADa	BEDOOFFICEte	d States

(Instructions on page 2)



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# PECOS DISTRICT CONDITIONS OF APPROVAL

<b>OPERATOR'S NAME:</b>	Judah Oil, LLC
	NMLC-067145
	Pronghorn Federal SWD 1
SURFACE HOLE FOOTAGE:	1980' FSL & 0660' FEL
LOCATION:	Section 12, T. 21 S., R 28 E., NMPM
	Eddy County, New Mexico

# I. DRILLING

### A. DRILLING OPERATIONS REQUIREMENTS

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

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

## **Eddy County**

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

- 1. A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the Delaware formation. As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.
- 2. 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. If the drilling rig is removed without approval an Incident of Non-Compliance will be written and will be a "Major" violation.
- 3. 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 is located, this does not include the dog house or stairway area.
- 4. The record of the drilling rate along with the GR/N well log run from TD to surface 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.

### B. CASING

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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.

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

### 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 <u>8 hours</u>. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements.

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.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

Capitan Reef Medium Cave/Karst Possibility of water flows in the Capitan Reef, Salado, and Artesia Group. Possibility of lost circulation in the Rustler, Red Beds, Capitan Reef, and Delaware. High pressure may be encountered within the 3<sup>rd</sup> Bone Spring Sandstone and subsequent formations

- 1. The 11-3/4" surface casing is set at 475 feet with cement circulated to surface.
- 2. The 8-5/8" intermediate casing is set at 2982 feet with cement circulated to surface.

## A CIT is to be performed on the 8-5/8" casing per Onshore Oil and Gas Order 2.III.B.1.h prior to drilling the shoe plug.

3. The minimum required fill of cement behind the 5-1/2 inch production casing is:

Operator has proposed DV tool at depth of 8000', but will adjust cement proportionately if moved. DV tool shall be set a minimum of 50' below previous

# shoe and a minimum of 200' above current shoe. Operator shall submit sundry if DV tool depth cannot be set in this range.

- a. First stage to DV tool:
- Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve circulation on the next stage.
- b. Second stage above DV tool:
- Cement to surface. If cement does not circulate, contact the appropriate BLM office. Excess calculates to 21% Additional cement may be required.
- 4. 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.

### C. 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 53.
- 2. Prior to drilling surface plug, the BOP is to be tested. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 5000 (5M) psi. 5M 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.
- 3. 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. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**.
  - c. 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.
  - d. The results of the test shall be reported to the appropriate BLM office.

- e. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- f. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes 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.
- g. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the **Wolfcamp** formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.

# D. 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.

## E. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

# F. WELL COMPLETION

A NOI sundry with the completion procedure for this well shall be submitted and approved prior to commencing completion work. The procedure will be reviewed to verify that the completion proposal will allow the operator to:

- 1. Properly evaluate the injection zone utilizing (This well is considered a hydrocarbon producer until proven otherwise)
  - a. Swab testing shall be done in all cases.
  - b. In addition to swab testing the operator shall utilize other reservoir evaluation methods (i.e. evaluation of mud logs, petrophysical analysis of open-hole logs and formation water analysis from swab testing) to confirm that hydrocarbons cannot be produced in paying quantities. This evaluation summary report shall be reviewed by the BLM prior to injection commencing.
- 2. Restrict the injection fluid to the approved formation.
- 3. If a step rate test will be run an NOI sundry shall be submitted to the BLM for approval

If off-lease water will be disposed in this well, the operator shall provide proof of right-of-way approval.

### G. 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.

CLN 11/22/2017

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