Form 3160-5 (June 2015)

## **UNITED STATES** DEPARTMENT OF THE INTERIOR

DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

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

5. Lease Serial No. NMNM05792

6	If Indian	Allottee	or Tribe	Name	

			<u> </u>		
SUBMIT IN T	TRIPLICATE - Other ins	tructions on page 2,01	7. If Unit or CA/Agr	eement, Name and/or No.	
1. Type of Well Gas Well Oth	ner	RE	7. If Unit or CA/Agr 8. Well Name and No ROJO 7811 34-	o. 27 FEDERAL 38H	
2. Name of Operator BTA OIL PRODUCERS LLC	Contact: E-Mail: shajar@bt	SAMMY HAJAR	9. API Well No. 30-025-46147	-00-X1	
3a. Address 104 S. PECOS MIDLAND, TX 79701		3b. Phone No. (include area code) Ph: 432-682-3753		10. Field and Pool or Exploratory Area BOBCAT DRAW-UPR WOLFCAMP	
4. Location of Well (Footage, Sec., T.	., R., M., or Survey Description	)	11. County or Parish	, State	
Sec 34 T25S R33E SWNW 25 32.087372 N Lat, 103.564621			LEA COUNTY	, NM	
12. CHECK THE AF	PPROPRIATE BOX(ES)	TO INDICATE NATURE O	F NOTICE, REPORT, OR OT	HER DATA	
TYPE OF SUBMISSION	TYPE OF SUBMISSION TYPE 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	
☐ Final Abandonment Notice			□ Temporarily Abandon	Change to Original A PD	
			□ Water Disposal		
13. Describe Proposed or Completed Ope If the proposal is to deepen directions Attach the Bond under which the wor following completion of the involved testing has been completed. Final Abdetermined that the site is ready for final AB WELL AS BATCH DRILLING PLEASE SEE ATTACHED.	ally or recomplete horizontally, k will be performed or provide operations. If the operation re pandonment Notices must be fil inal inspection.  RESPECTFULLY REQUE	give subsurface locations and measu the Bond No. on file with BLM/BIA sults in a multiple completion or reco ed only after all requirements, includ	red and true vertical depths of all pert  Required subsequent reports must b impletion in a new interval, a Form 31 ing reclamation, have been completed	inent markers and zones.  The filed within 30 days  60-4 must be filed once  and the operator has	



14. I hereby certify that	at the foregoing is true and correct. Electronic Submission #484031 verifie For BTA OIL PRODUCER Committed to AFMSS for processing by PRI	S LĹC,	sent to the Hobbs	)	
Name (Printed/Type	d) SAMMY HAJAR	Title	REGULATORY ANALYST		
Signature	(Electronic Submission)	Date	09/19/2019		
··	THIS SPACE FOR FEDERA	L OR	STATE OFFICE USE		_
Approved By LQNG	Yo	TitleF	PETROLEUM ENGINEER	Date	10/18/2019
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	e Hobbs		
Title 18 U.S.C. Section 1	001 and Title 43 U.S.C. Section 1212, make it a crime for any pe	rson kno	owingly and willfully to make to any depart	ment or agency of the	United

States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.



# PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: | BTA Oil Producers LLC

**LEASE NO.: | NMNM0005792** 

WELL NAME & NO.: | Rojo 7811 34-27 Federal 38H

**SURFACE HOLE FOOTAGE:** 2510'/N & 1275'/W **BOTTOM HOLE FOOTAGE** 100'/N & 380'/W

LOCATION: Section 34, T.25 S., R.33 E., NMPM

COUNTY: Lea County, New Mexico

#### COA

H2S	← Yes	© No	
Potash	• None	Secretary	← R-111-P
Cave/Karst Potential	€ Low	↑ Medium	↑ High
Variance	None	Flex Hose	Other
Wellhead	Conventional	Multibowl	<b>○</b> Both
Other	☐4 String Area	Capitan Reef	□ WIPP
Other	Fluid Filled	Cement Squeeze	☐ Pilot Hole
Special Requirements		ГСОМ	□ Unit

## All Previous COAs Still Apply

## BTA Oil Producers LLC is approved for batch drilling the 38Hand 39H.

## A. CASING

- 1. The 10-3/4 inch surface casing shall be set at approximately 1100 feet (a minimum of 25 feet (Lea 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.

Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.

2. The minimum required fill of cement behind the 7-5/8 inch intermediate casing is:

## **Option 1 (Single Stage):**

• Cement to surface. If cement does not circulate see B.1.a, c-d above.

## 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, contact the appropriate BLM office.
- 3. The minimum required fill of cement behind the production casing is:
  - Cement should tie-back at least 200 feet into previous casing string. Operator shall provide method of verification.

## **B. PRESSURE CONTROL**

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'

2.

## Option 1:

a. 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.

b. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the intermediate casing shoe shall be 10,000 (10M) psi. Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (5M) psi.

## Option 2:

- 1. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 10,000 (10M) psi. Variance is approved to use a 5000 (5M) Annular which shall be tested to 5000 (5M) 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)
  - Chaves and Roosevelt Counties
    Call the Roswell Field Office, 2909 West Second St., Roswell NM 88201.
    During office hours call (575) 627-0272.
    After office hours call (575)
  - Eddy County
     Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822
  - ✓ Lea CountyCall 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.
- 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.
- 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: 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.
- 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.

## **BATCH DRILLING SEQUENCE OF THE 38H and 39H:**

- -SPUD Rojo #38H drill 14-3/4" hole and set 10-3/4" csg
- -Walk to Rojo #39H, SPUD 14-3/4" hole and set 10-3/4" csg test BOP, drill 9-7/8" hole and set 7-5/8" csg
- -Walk to Rojo #38H, test BOP, drill 9-7/8" hole and set 7-5/8" csg, drill 6-3/4" hole and set 5-1/2" x 5" casing.
- -Walk to Rojo #39H, test BOP, drill 6-3/4" hole and set 5-1/2" x 5" casing.
- -Rig release

## **Mud Program 38H:**

#### Original Permit

- -Surface Section Fresh water 8.4 ppg
- -Intermediate Brine 10.0 10.2 ppg
- -2nd Intermediate Cut brine 8.6 9.2 ppg
- -Production OBM 11.5 12.0 ppg

#### **Proposed Change**

- -Surface Section Fresh water 8.3 8.4 ppg
- -Intermediate DBE 9.0 9.4 ppg
- -Production OBM 11.5 12.0 ppg

## **Casing Programs**

#### Casing Program 38H

#### Original APD

-Surface

13-3/8" 54.5# J-55 STC set at 1025' in a 17-1/2" hole

-Intermediate

9-5/8" 40# J-55 @ 4890' in a 12-1/4" hole

-2<sup>nd</sup> Intermediate

7" 29# P-110 @ 12665' in a 8-3/4" hole

-Liner

4-1/2" 11.6# P-110 liner from 12040' - 20208' in a 6-1/8" hole

## **Proposed Change**

-Surface

10-3/4" 40.5# J-55 STC set at 1100' in a 14-3/4" hole

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-Intermediate

9-7/8" hole from 1060' to 8000' and 8-3/4" hole from 8000' – 12398'. 7-5/8" 29.7# P-110 BTC from 0 - 7700' and 7-5/8" 29.7# P-110 Stinger HC from 7700' – 11838' and DV tool at 4952'

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-Production

11638' of 5-1/2" 23# P-110 BTC and 8377' of 5" 18# P-110 BTC set at 20015' (12302' TVD) in a 6-3/4" hole

6K

4 get data sheet

# **Cement Programs**

#### Rojo #38H

#### Original

-Surface Cement

Lead 655 sx; 1.8 cfs; 13.5 ppg; 100% Class C; 100% excess Tail 200 sx; 1.34 cfs; 14.8 ppg; 100% Class C; 100% excess

-Intermediate Cement

Lead 1400 sx; 2.18 cfs; 12.9 ppg 100% Class C; 100% excess Tail 250 sx; 1.33 cfs; 14.8 ppg; 100% Class C; 25% excess

#### -2<sup>nd</sup> Intermediate Cement

Lead 455 sx; 2.99 cfs; 10.5 ppg 100% TXL; 40% excess Tail 200 sx; 1.19 cfs; 15.6 ppg; 100% Class H; 15% excess

#### -Liner Cement

Lead 455 sx; 1.86 cfs; 14.4 ppg; 50:50 Class H; 10% excess

#### **Proposed Change**

#### -Surface Cement

Lead 565 sx; 1.74 cfs; 13.5 ppg; 100% Class C; 100% excess Tail 270 sx; 1.35 cfs; 14.8 ppg; 100% Class C; 100% excess

# No

#### -Intermediate Cement

Stage 1 Lead 1410 sx; 2.64 cfs; 10.5 ppg; 50:50 Class H; 15% excess Stage 1 Tail 115 sx; 1.27 cfs; 15.6 ppg; 100% Class H; 15% excess Stage 2 Lead 810 sx; 2.68 cfs; 12.7 ppg 100% Class C; 50% excess Stage 2 Tail 60 sx; 1.33 cfs; 14.8 ppg; 100% Class C; 25% excess



#### -Production Cement

Lead 765 sx; 1.35 cfs; 13.5 ppg; 50% POZ 50% Class H; 0% excess Tail 910 sx; 1.24 cfs; 14.2 ppg; 50% POZ 50% Class H; 10% excess



## Variances:

- -5M BOP on 9-7/8" hole
- -10M BOP with 5M annular for 6-3/4" hole
- -Wave the centralizer requirements for the 5-1/2" and 5" casing in the 6-3/4" hole size. An expansion additive will be utilized in the cement slurry for the entire length of the 6-3/4" hole interval to maximize cement bond and zonal isolation.