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Form 3160-5 (August 2007) D	UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT				FORM APPROVED OMB NO. 1004-0135 Expires: July 31, 2010		
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals. HOBBS OCC					5. Lease Serial No. NMNM14492		
				6. If Indian, Allottee or Tribe Name			
SUBMIT IN TR	IPLICATE - Other instruc	ctions on re	^{verse side:} JUL	0 7 2015	7. If Unit or CA/Agre	ement, Name and/	or No.
 Type of Well Oil Well Gas Well Other 			D	CEIVED	8. Well Name and No. 8105 JV-P MESA	ЗН	
2. Name of Operator BTA OIL PRODUCERS	Contact: E-Mail: pinskeep@	PAM INSK btaoil.com	EEP •••		9. API Well No. 30-025-41290-0	00-X1	
3a. Address 3b. Phone No. (include area code) 104 SOUTH PECOS STREET Ph: 432-682-3753 Ext: 139 MIDLAND, TX 79701 Fx: 432-683-0325)	10. Field and Pool, or Exploratory JENNINGS		
4. Location of Well (Footage, Sec., 7	F., R., M., or Survey Description)			11. County or Parish,	and State	,
Sec 1 T26S R32E SWSW 265FSL 205FWL			K		LEA COUNTY, NM		
12. CHECK APP	ROPRIATE BOX(ES) TO) INDICAT	E NATURE OF N	NOTICE, RI	EPORT, OR OTHE	R DATA	
TYPE OF SUBMISSION			TYPE O	F ACTION	······		
Notice of Intent		De De	epen	Product	ion (Start/Resume)	U Water Shu	-Off
□ Subsequent Report	Alter Casing		cture Treat		ation	U Well Integr	iity
Final Abandonment Notice	Change Plans		g and Abandon		Dilling Operations		ations
	Convert to Injection		g Back	□ Vater E	Disposal		
BTA respectfully request the f Original: Prod Csg 5-1/2" 20# Change to: Prod Csg 5-1/2" 1 Original: 5000 BOP	ollowing changes to the o P-110 LTC 7# P-110 LTC	riginal APD,	as approved:	e atta	CHED FOR		
Change to: 3000 BOP			CO	NDITI	ONS OF APP	PROVAL	
Amended Drilling Program pg	1-2 and BOP schematics	are attache	1.				
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14. I hereby certify that the foregoing is Comm Name(Printed/Typed) PAM INS	true and correct. Electronic Submission #3 For BTA C nitted to AFMSS for process KEEP	05163 verifie DL PRODUCI sing by JENN	d by the BLM Wel RS, sent to the H IFER SANCHEZ o Title REGUL	I Information lobbs n 07/01/2015 ATORY ADN	Systém (15JAS0067SE) MINISTRATOR	v	
Signature (Electronic Submission)			Date 06/16/20 5 APPROVED				
	THIS SPACE FO	R FEDER	L OR STATE		SÉ 7015		
Approved By			Title		mAn	Milline	
conditions of approval, if any, are attached ertify that the applicant holds legal or equ hich would entitle the applicant to condu	 Approval of this notice does not itable title to those rights in the ct operations thereon. 	not warrant or subject lease	Office	BUREA	U OF LAND MUNAGER RLSBAD/FIELD OFFIC	MÉNT	Xa
itle 18 U.S.C. Section 1001 and Title 43 States any false, fictitious or fraudulent s	U.S.C. Section 1212, make it a c tatements or representations as t	crime for any po to any matter w	erson knowingly and ithin its jurisdiction.	willfully/to ma	ke to any department or a	agency of the Unite	, (
** BLM REVI	SED ** BLM REVISED	** BLM RI	EVISED ** BLM	REVISED	** BLM REVISED) **	_
				JUL	1 4 2015		fu

APPLICATION FOR DRILLING

BTA OIL PRODUCERS, LLC 8105 JV-P Mesa #3H 265' FSL & 205' FWL UL –M–, Sec. 1, T26S, R32E Surface 330' FNL & 430' FWL UL –D–, Sec. 1, T26S, R32E Bottom Lea County, New Mexico

In conjunction with Form 3160-3, Application for Permit to Drill, BTA Oil Producers submits the following 10 items for pertinent information in accordance with BLM requirements:

1. Geologic surface formation is Quaternary.

2. Top of geologic markers & depths of anticipated fresh water, oil or gas:

Anhydrite	708'	
Top of Salt	1,348'	
Base of Salt	4,438'	
Delaware	4,698'	Oil
Bell Canyon	4,738'	Oil
Cherry Canyon	5,958'	Oil
Brushy Canyon	7,248'	Oil
Bone Spring	8,913'	Öil.
Avalon Target 1	9,618'	Oil

No other formations are expected to yield oil, gas, or fresh water in measurable volumes. Depth to fresh water, in this area, is 175'. The surface fresh water sands will be protected by setting 13-3/8" csg at 750', cemented back to surface.

All shows of fresh water and minerals will be reported and protected. A sample will be taken of any water flows and furnished to the BLM, Division of Minerals. All oil and gas shows will be adequately tested for commercial possibilities, reported and protected.

3. Proposed Casing and Cementing Program:

Hole	OD ·	Setting	Depth			
<u>Size</u>	Casing	<u>From</u>	<u>to</u>	<u>Weight</u>	<u>Grade</u>	<u>Joint</u>
17-1/2"	13-3/8"	0'	780'`	54.5#	J55	. STC
12-1/4"	9-5/8"	0'	4,650'	40#	J55	LTC
8-3/4"	5-1/2"	0'	14,119'	17#	P110	LTC

Minimum Casing Design Factors:

Collapse	1.125
Burst	_. 1.0
Tensile	1.8

Depending upon availability at the time that the casing is run, equivalent weights and grades may be substituted. All casing will be new.

- 4. Cement Program:
- I. Surface Casing:
 - Lead: 500 sx ExtendaCem-CZ.
 - Yield 1.68 ft³/sk
 - Tail: 340 sx HalCem C with 2% Calcium Chloride.
 - Yield 1.35 ft³/sk
 - Cement circulated to surface. 100% Excess.
- II. Intermediate Casing:
 - Lead: 1,320 sx EconoCem HCL with 5 lbm/sk Kol-Seal and 5% Salt.
 Yield 1.89 ft³/sk
 - <u>Tail</u>: 250 sx HalCem C.
 - Yield 1.33 ft³/sk
 - Cement circulated to surface. 100% excess.
- III. Production Casing:
 - <u>Lead</u>: 1,730 sx VersaCem PBSH2 with 0.5% Halad (R)-344, 0.3% CFR-3, 1 lbm/sk Salt, 0.4% HR-601.
 - Yield 1.61 ft³/sk
 - Tail: 485 sx SoluCem H with 0.25 lbm/sk D-Air 5000, 0.75% HR-601.
 - Yield 2.63 ft³/sk.
 - Weight 15.0 lbm/gal.
 - Top of Tail Cement: 9,574' MD.
 - Cement calculated to tie back 500 ft into intermediate casing. 50% Excess above KOP, 10% excess TD to KOP.

Note: All casing strings will be pressure tested to 0.22 psi/ft. of setting depth or 1500 psi (whichever is greater) after cementing and prior to drillout.

5. Pressure Control Equipment:

The 13-5/8" blowout preventer equipment (BOP) shown in Exhibit A will consist of a (3M system) double ram type (3000 psi WP) preventor and a bag-type (Hydril) preventor (3000 psi WP). Will be hydraulically operated and the ram type preventor will be equipped with blind rams on top and $4-\frac{1}{2}$ " drill pipe rams on bottom. The BOP's will be installed on the 13-3/8" casing and utilized continuously until TD is reached. All BOP's and associated equipment will be tested as per BLM drilling Operations Order No. 2.

Pipe rams will be operated and checked each 24-hour period and each time the drill pipe is out of the hole. These functional tests will be documented on the daily driller's log. A 2" kill line and 3" choke line will be incorporated in the drilling spool below the ram-type BOP. Other accessory BOP equipment will include a Kelly cock, floor safety valve, choke lines, and choke manifold having a 3000 psi WP rating.

The 13-5/8" blowout preventer equipment (BOP) shown in exhibit A will consist of a (3M system) double ram type (3000 psi WP) preventer and a bag type (Hydril) preventer (3000 psi WP). Will be hydraulically operated and the ram type preventer will be equipped with blind rams on top and 4-1/2" drill pipe rams on bottom. The BOP's will be installed on the 13-3/8" casing and utilized continuously until TD is reached. All BOP's and associated equipment will be tested as per BLM drilling operations order No 2.

Pipe rams will be operated and checked each 24 hour period and each time the drill pipe is out of the hole. These functional tests will be documented on the daily drillers log. A 2" kill line and 3" choke line will be incorporated in the drilling spool below the ram type BOP. Other accessory BOP equipment will include a Kelly cock, floor safety valve, choke lines and choke manifold having a 3000 psi WP rating.

3,000 psi BOP Schematic







3M choke manifold design

Exhibit A1

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	BTA Oil Producers, LLC
LEASE NO.:	NMNM-14492
WELL NAME & NO.:	8105 JV-P Mesa 3H
SURFACE HOLE FOOTAGE:	0265' FSL & 0205' FWL
BOTTOM HOLE FOOTAGE	0330' FNL & 0430' FWL
LOCATION:	Section 1, T. 26 S., R 32 E., NMPM
COUNTY:	Lea County, New Mexico
API:	30-025-41290

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)

Lea County

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

- 1. Although Hydrogen Sulfide has not been reported in the area, it is always a potential hazard. If Hydrogen Sulfide is encountered, report measured amounts 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 (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.

B. CASING

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.

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

Medium Cave/Karst

Possible water and brine flows in the Salado, Castile, Delaware, and Bone Springs Formations.

Possible lost circulation in the Red Beds, Delaware, and Bone Springs Formations. Recent research revealed that the Bone Springs may be over pressured in the 1st and 3rd sand units near NM-TX borders. Be cautious and notify BLM if any abnormal pressures are encountered in this interval.

- 1. The 13-3/8 inch surface casing shall be set at approximately 780 feet (in a competent bed below the Magenta Dolomite, which is a Member of the Rustler, and if salt is encountered, set casing at least 25 feet 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 is to include the lead cement slurry.

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 shall be kept fluid filled while running into hole to meet BLM minimum collapse requirements.

- 2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:
 - Cement to surface. If cement does not circulate see B.1.a, c-d above. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst.

Centralizers required on horizontal leg, must be type for horizontal service and a minimum of one every other joint.

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

Cement should tie-back at least 500 feet into previous casing string. Operator shall provide method of verification.

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 RP 53 Sec. 17.
- 2. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **3000 (3M)** psi.
 - a. For surface casing only: If the BOP/BOPE is to be tested against casing, the wait on cement (WOC) time for that casing is to be met (see WOC statement at start of casing section). Independent service company required.
- 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. 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).
 - 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.

D. DRILL STEM TEST

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

E. 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.

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