Form 3160-5 (June 2015)

Rec'd 06/04/2020 - NMOCD

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

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

5. Lease Serial No. NMNM25533

SUNDICT NOTICES AND REPORTS ON WELLS	TAIVITAIVIZOOOO
o not use this form for proposals to drill or to re-enter an	
	6. If Indian, Allottee or Tribe Na
andoned well. Use form 3160-3 (APD) for such proposals.	o. Il llidiali, Allottee oi Tibe Na
and once well. Occionin o loc o (Al B) for oddin propodulo.	

abandoned well. Use form 3160-3 (APD) for such proposals.			6. If Indian, Allottee	or Tribe Name
SUBMIT IN	7. If Unit or CA/Agr 891000303X	reement, Name and/or No.		
1. Type of Well	8. Well Name and No	o. INIT 18 TWR 157H		
Oil Well Gas Well Ott			9. API Well No.	10 1 10 1 10 1 10 10 10 10 10 10 10 10 1
XTO PERMIAN OPERATING	Contact: KE LLC E-Mail: kelly_kardos@	ELLY KARDOS	30-015-46605	-00-X1
3a. Address 6401 HOLIDAY HILL ROAD E MIDLAND, TX 79707		b. Phone No. (include area code) Ph: 432-620-4374		r Exploratory Area E-WOLFCAMP (GAS)
4. Location of Well (Footage, Sec., 7	T., R., M., or Survey Description)		11. County or Parish	, State
Sec 19 T24S R31E NENE 10 32.209778 N Lat, 103.811035			EDDY COUNT	TY, NM
12. CHECK THE A	PPROPRIATE BOX(ES) TO	O INDICATE NATURE O	F NOTICE, REPORT, OR OT	THER DATA
TYPE OF SUBMISSION		TYPE OF	FACTION	
■ 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	☐ Change Plans	□ Plug and Abandon	□ Temporarily Abandon	Change to Original A PD
	☐ Convert to Injection	☐ Plug Back	■ Water Disposal	
Attach the Bond under which the wo following completion of the involved	rk will be performed or provide the doperations. If the operation result bandonment Notices must be filed of inal inspection. Trequests permission to pumple the first stage being pumpe on (6,485') and the second start Shy Canyon to surface. If net + 1% PreMag-M + 6% Bento ement top will be verified by the ter verified fluid top and the on all post-drill sundries on we be volume of fluid (limited to 5 ide cementing procedures.	e Bond No. on file with BLM/BIAs in a multiple completion or recomply after all requirements, including a two stage cement job of ed conventionally with the charge performed as a brader cessary, a top out consistin pointe Gel (2.30 yld, 12.91 per Echo-meter. volume of displacement fluidells utilizing this cement produced by the performance of the perfo	alculated top whead squeeze with g of 1,500 sack bog) will be executed and above the gram. bediate	be filed within 30 days 60-4 must be filed once
	Electronic Submission #517	7324 verified by the BLM Well OPERATING LLC, sent to t sing by PRISCILLA PEREZ of	he Carlsbad	
Name (Printed/Typed) KELLY KA	ARDOS	Title REGUL	ATORY COORDINATOR	
Signature (Electronic	Submission)	Date 06/02/2	020	
	THIS SPACE FOR	FEDERAL OR STATE	OFFICE USE	
Approved By JENNIFER SANCH Conditions of approval, if any, are attache certify that the applicant holds legal or eq which would entitle the applicant to conduct the same conductive to conduct the same conductive that the	ed. Approval of this notice does no uitable title to those rights in the su	t warrant or	UM ENGINEER	Date 06/04/2020

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.

Additional data for EC transaction #517324 that would not fit on the form

32. Additional remarks, continued

Note: Cement volumes based on bit size plus at least 25% excess in the open hole plus 10% excess in the cased-hole overlap section $\frac{100}{100}$

Revisions to Operator-Submitted EC Data for Sundry Notice #517324

Operator Submitted BLM Revised (AFMSS)

APDCH **APDCH** Sundry Type: NOI NOI

NMNM25533 Lease: NMNM25533

Agreement: NMNM71016X 891000303X (NMNM71016X)

XTO PERMIAN OPERATING LLC 6401 HOLIDAY HILL ROAD BLDG 5 MIDLAND, TX 79707 Ph: 432.683 2277 Operator: XTO PERMIAN OPERATING, LLC

6401 HOLIDAY HILL RD BLDG 5 MIDLAND, TX 79707 Ph: 432-620-4374

KELLY KARDOS Admin Contact:

KELLY KARDOS REGULATORY COORDINATOR REGULATORY COORDINATOR E-Mail: kelly_kardos@xtoenergy.com E-Mail: kelly_kardos@xtoenergy.com

Ph: 432-620-4374 Ph: 432-620-4374

Tech Contact:

KELLY KARDOS REGULATORY COORDINATOR KELLY KARDOS REGULATORY COORDINATOR E-Mail: kelly_kardos@xtoenergy.com E-Mail: kelly_kardos@xtoenergy.com

Ph: 432-620-4374 Ph: 432-620-4374

Location:

NM EDDY State: NM County: **EDDY**

Field/Pool: PURPLE SAGE WOLFCAMP PURPLE SAGE-WOLFCAMP (GAS)

POKER LAKE UNIT 18 TWR 157H POKER LAKE UNIT 18 TWR 157H Well/Facility:

Sec 19 T24S R31E Mer NMP NENE 105FNL 816FEL Sec 19 T24S R31E NENE 105FNL 816FEL 32.209778 N Lat, 103.811035 W Lon

PECOS DISTRICT DRILLING DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: LEASE NO.: NMNM-25533
WELL NAME & NO.: Poker Lake Unit 18 TWR 127H
SURFACE HOLE FOOTAGE: 0175' FNL & 0816' FEL
BOTTOM HOLE FOOTAGE 0200' FSL & 0990' FEL Sec. 30, T. 24 S., R 31 E.

LOCATION: Section 19, T. 24 S., R 31 E., NMPM

COUNTY: Eddy County, New Mexico

COA

H2S	• Yes	C No	
Potash	None	© Secretary	© R-111-P
Cave/Karst Potential	• Low	O Medium	C High
Cave/Karst Potential	Critical		
Variance	O None	• Flex Hose	Other Other
Wellhead	Conventional	© Multibowl	O Both
Other	☐4 String Area	☐ Capitan Reef	□WIPP
Other	☐ Fluid Filled	☐ Cement Squeeze	☐ Pilot Hole
Special Requirements	☐ Water Disposal	□ СОМ	✓ Unit

Offline cementing is NOT approved.

Possibility of water flows in the Salado and Castile.

Possibility of lost circulation in the Red Beds, Rustler, and Delaware.

Abnormal pressure may be encountered in the 3rd Bone Spring and all subsequent formations.

A. HYDROGEN SULFIDE

1. Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the Hydrogen Sulfide area shall meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, provide measured values and formations to the BLM.

B. CASING

- 1. The **11-3/4** inch surface casing shall be set at approximately **907** 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 **7-5/8** inch intermediate casing is:
 - Cement as proposed. Report Echo meter results on subsequent sundry.
- 3. The minimum required fill of cement behind the 5-1/2 inch production casing is:
 - Cement should tie-back at least **200 feet** into previous casing string. Operator shall provide method of verification.

C. 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. 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 **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.

BOP Break Testing Variance

- Shelll testing is not approved for any portion of the hole with a MASP of 5000 psi or greater.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer prior to the commencement of any BOP Break Testing operations.
- A full BOP test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOP test will be required.

D. SPECIAL REQUIREMENTS

Unit Wells

The well sign for a unit well shall include the unit number in addition to the surface and bottom hole lease numbers. This also applies to participating area numbers. If a participating area has not been established, the operator can use the general unit designation, but will replace the unit number with the participating area number when the sign is replaced.

Commercial Well Determination

A commercial well determination shall be submitted after production has been established for at least six months.

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 CountyCall the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822
- 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 2nd 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 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 intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 3. 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.
- 4. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- 5. 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.
- 6. 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.

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.
- 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. 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.
- 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.

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.

JAM 06042020

Cement Program

Depth	No. Sacks	Wt.	Yld Ft³/sk	Mx Water Gal/sk	Slurry Description
909' 11-3/4"	280	12.8	1.87	10.13	Lead: Class C
	190	14.8	1.23	6.39	Tail: Class C (TOC @ 609')
11,801' 7-5/8"	1160	15.6	1.23	5.49	1 st Stage (Tail): Class H + 3% MagOx (TOC @ 6,485')
	1690	14.8	1.53	7.31	2 nd Stage (Bradenhead squeeze): Class C + 10% Salt + 5% Gypsum + 3% Microbond
21,931 5-1/2"	20	11.5	2.69	15.00	Lead: Class H (TOC @ 10,780')
	760	13.2	1.51	7.20	Tail: Class H (TOC @ 11,280')