Form 3160-5 (June 2015)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

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

5.	Lease Serial No.
	NMNM25533

Rec'd 04/20/2020 - NMOCD

SUNDRY NOTICES AND REPORTS ON WELLS	NMNM25533
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.	6. If Indian, Allottee or Tribe Name

SUBMIT IN	7. If Unit or CA/Agree 891000303X	ment,	Name and/or No.					
Type of Well	8. Well Name and No. POKER LAKE UNI	8. Well Name and No. POKER LAKE UNIT 18 TWR 128H						
Name of Operator XTO PERMIAN OPERATING	Contact: LLC E-Mail: kelly_kardo	KELLY KARD os@xtoenergy.o			9. API Well No. 30-015-46606-00	0-X1		
3a. Address 6401 HOLIDAY HILL ROAD E MIDLAND, TX 79707	BLDG 5	3b. Phone No Ph: 432-62	(include area code) 0-4374		10. Field and Pool or E PURPLE SAGE-	xplora WOL	itory Area FCAMP (GAS)	
4. Location of Well (Footage, Sec., T	., R., M., or Survey Description	1)			11. County or Parish, State			
Sec 19 T24S R31E NENE 140 32.209682 N Lat, 103.811035					EDDY COUNTY	, NM		
12. CHECK THE AI	PPROPRIATE BOX(ES)	TO INDICA	ΓE NATURE O	F NOTICE,	REPORT, OR OTH	ER I	DATA	
TYPE OF SUBMISSION			TYPE OF	ACTION				
Notice of Intent ■	☐ Acidize	□ Dee _l	oen	☐ Product	ion (Start/Resume)	0.7	Water Shut-Off	
	☐ Alter Casing	☐ Hyd	raulic Fracturing	□ Reclama	ation		Well Integrity	
☐ Subsequent Report	□ Casing Repair	□ New	Construction	□ Recomp	lete	X	Other	
☐ Final Abandonment Notice	☐ Change Plans	☐ Plug	and Abandon	□ Tempor	arily Abandon	Cha PD	ange to Original A	
	☐ Convert to Injection	☐ Plug	Back	■ Water D	Pisposal			
13. Describe Proposed or Completed Ope If the proposal is to deepen direction: Attach the Bond under which the wor following completion of the involved testing has been completed. Final Attach that the site is ready for fix TO Permian Operating, LLC Change the casing/cement deepen Batch drill this well if necessar the well is cemented properly annulus, and the installation of to skid the rig to drill the remain all completed, XTO will begin ONLY test broken pressure see in compliance with API Standard.	ally or recomplete horizontally, rk will be performed or provide a operations. If the operation re bandonment Notices must be fil inal inspection. requests permission to mesign per the attached dril ry. In doing so, XTO will so and the well is static. With fa 10K TA cap as per GE ining wells on the pad. Or drilling the production holeals on the BOP equipmeard 53. API standard 53 so true and correct.	give subsurface the Bond No. or sults in a multiple ded only after all the make the follow ling program. The each casin h floats holding recommend hee surface ar e on each of the notion of the contract of the model of the contract of the contract of the model of the contract of the contract of the model of the contract of the contract of the model of the contract of the contract of the model of the contract of the contract of the model of the contract of the contract of the model of the contract of the contract of the model of the contract of the contract of the model of	locations and measurable with BLM/BIA to completion or recorrequirements, including changes to g string and ensurable g, no pressure of ations, XTO will and intermediate she wells. In a from wellhead pad drilling oper	red and true ve Required sub- impletion in a r ing reclamation the original ure that in the csg contact the strings are d to wellhead ation, movir	rtical depths of all pertine sequent reports must be faew interval, a Form 3160 n, have been completed an APD: BLM d which is	ent mar filed w)-4 mu	rkers and zones. Fithin 30 days st be filed once	
	Electronic Submission #	IAN OPERATII	IG LLC, sent to tl	he Carlsbad	-			
Name(Printed/Typed) KELLY KA	ATORY CO	ORDINATOR						
Signature (Electronic S	Submission)		Date 04/06/20	020				
	THIS SPACE FO	OR FEDERA	L OR STATE	OFFICE U	SE			
_Approved_By_ALLISON MORENC			TitlePETROLE	UM ENGINI	EER		Date 04/20/2020	
Conditions of approval, if any, are attache certify that the applicant holds legal or equ which would entitle the applicant to condu	d. Approval of this notice does uitable title to those rights in the		Office Carlsbac			•		
Title 18 U.S.C. Section 1001 and Title 43 States any false, fictitious or fraudulent:	U.S.C. Section 1212, make it a statements or representations as	crime for any pe	rson knowingly and thin its jurisdiction.	willfully to ma	ake to any department or a	agency	of the United	

Additional data for EC transaction #509771 that would not fit on the form

32. Additional remarks, continued

from one wellhead to another within 21 days, pressure testing is required for pressure-containing and pressure-controlling connections when the integrity of a pressure seal is broken. Based on discussions with the BLM on February 27th 2020, we will request permission to ONLY retest broken pressure seals if the following conditions are met: 1. After a full BOP test is conducted on the first well on the pad (First well will be the deepest Intermediate) 2. When skidding to drill an intermediate section does not penetrate into the Wolfcamp 3. Full BOP test will be required prior to drilling the production hole.

A variance is requested to cement offline for the surface and intermediate casing strings.

Attachments: Casing/Cement Design 5MBOP/5MCM

Revisions to Operator-Submitted EC Data for Sundry Notice #509771

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 128H POKER LAKE UNIT 18 TWR 128H Well/Facility:

Sec 19 T24S R31E Mer NMP NENE 140FNL 566FEL Sec 19 T24S R31E NENE 140FNL 566FEL

32.209682 N Lat, 103.811035 W Lon

Kardos, Kelly

From: amorency@blm.gov

Sent: Monday, April 20, 2020 9:05 AM

To: Kardos, Kelly

Subject: Well POKER LAKE UNIT 18 TWR 128H

Attachments: EC509771.pdf

Categories: External Sender

External Email - Think Before You Click

The sundry for Change to Original APD you submitted has been approved by the BLM. Your original Electronic Commerce (EC) transmission was assigned ID 509771. Please be sure to open and save all attachments to this message, since they contain important information.

04/20/20 - AM

Same COAs apply. Offline cementing and shell testing not approved.

Poker Lake Unit 18 TWR 128H

Projected TD: 22138' MD / 11758' TVD SHL: 140' FNL & 566' FEL , Section 19, T24S, R31E BHL: 200' FSL & 330' FEL, Section 30, T24S, R31E Eddy County, NM

Casing Design

The surface fresh water sands will be protected by setting 13-3/8 inch casing @ 800' (150' above the salt) and circulating cement back to surface. A 12-1/4 inch vertical hole will be drilled to 10961' and 9-5/8 inch casing ran and cemented 200' into the 13-3/8 inch casing. An 8-3/4 inch curve and lateral hole will be drilled to MD/TD and 5-1/2 casing will be set at TD and cemented back 300' into the 9-5/8 inch casing shoe.

Hole Size	Depth	OD Csg	Weight	Collar	Grade	New/Used	SF Burst	SF Collapse	SF Tension
17-1/2"	0' - 800'	13-3/8"	68	втс	J-55	New	1.27	5.39	19.65
12-1/4"	0' – 10961'	9-5/8"	40	втс	HCL-80	New	1.39	1.40	2.09
8-3/4-8-1/2"	0' – 22138'	5-1/2"	20	втс	P-110	New	1.03	1.65	2.05

XTO requests to utilize centralizers after KOP and only a minimum of one every other joint.

9-5/8" Collapse analyzed using 50% evacuation based on regional experience.

5-1/2" tension calculated using vertical hanging weight plus the lateral weight multiplied by a friction factor of 0.35

Wellhead:

Permanent Wellhead - Multibowl System

- A. Starting Head (RSH System): 13-3/8" SOW bottom x 13-5/8" 5M top flange
- B. Tubing Head: 13-5/8" 5M bottom flange x 7-1/16" 10M top flange

Wellhead will be installed by manufacturer's representatives.

Manufacturer will monitor welding process to ensure appropriate temperature of seal.

Operator will test the 9-5/8" casing per Onshore Order 2.

Wellhead manufacturer representative may not be present for BOP test plug installation

Cement Program

Surface Casing:

Lead: 370 sxs Halcem-C + 2% CaCl (mixed at 12.8 ppg, 1.87 ft3/sx, 10.13 gal/sx water) Tail: 300 sxs Halcem-C + 2% CaCl (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water) Compressives: 12-hr = 900 psi 24 hr = 1500 psi

Intermediate Casing:

ECP/DV Tool to be set at 4770'

1st Stage

Lead: 940 sxs Halcem-C + 2% CaCl (mixed at 11.0 ppg, 3.45 ft3/sx, 21.14 gal/sx water) Tail: 470 sxs Halcem-C + 2% CaCl (mixed at 14.8 ppg, 1.32 ft3/sx, 6.39 gal/sx water) Compressives: 12-hr =

500 psi 24 hr = 1151 psi

2nd Stage

Lead: 690 sxs Halcem-C + 2% CaCl (mixed at 11.0 ppg, 3.45 ft3/sx, 21.14 gal/sx water) Tail: 450 sxs Halcem-C + 2% CaCl (mixed at 14.8 ppg, 1.32 ft3/sx, 6.39 gal/sx water) Compressives: 12-hr = 24 hr = 1151 psi

Production Casing:

Tail: 2610 sxs VersaCem (mixed at 13.2 ppg, 1.33 ft3/sx, 8.38 gal/sx water) 24 hr = 2285 psi Compressives: 12-hr = 1375 psi

Mud Circulation Program

INTERVAL	Hole Size	Mud Type	MW (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)
0' to 800'	17-1/2"	FW/Native	8.4-8.8	35-40	NC
800' to 10961'	12-1/4"	FW / Cut Brine / Direct Emulsion	8.5-9.5	29-32	NC - 20
10961' to 22138'	8-3/4-8-1/2"	FW / Cut Brine / Polymer/ OBM	10.7-11.5	32-50	NC - 20

DRILLING PLAN: BLM COMPLIANCE (Supplement to BLM 3160-3)

XTO Energy Inc. PLU 18 TWR 128H

Projected TD: 22138' MD / 11758' TVD

SHL: 140' FNL & 566' FEL , Section 19, T24S, R31E BHL: 200' FSL & 330' FEL , Section 30, T24S, R31E Eddy County, NM

1. Geologic Name of Surface Formation

A. Permian

2. Estimated Tops of Geological Markers & Depths of Anticipated Fresh Water, Oil or Gas:

Formation	Well Depth (TVD)	Water/Oil/Gas
Rustler	605'	Water
Top of Salt	950'	Water
Base of Salt	4070'	Water
Delaware	4270'	Water
Bone Spring	8145'	Water/Oil/Gas
1st Bone Spring Ss	9135'	Water/Oil/Gas
2nd Bone Spring Ss	9935'	Water/Oil/Gas
3rd Bone Spring Ss	11098'	Water/Oil/Gas
Wolfcamp Shale	11500'	Water/Oil/Gas
Target/Land Curve	11758'	Water/Oil/Gas

^{***} Hydrocarbons @ Brushy Canyon

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 13-3/8 inch casing @ 800' (150' above the salt) and circulating cement back to surface. A 12-1/4 inch vertical hole will be drilled to 10961' and 9-5/8 inch casing ran and cemented 200' into the 13-3/8 inch casing. An 8-3/4 inch curve and lateral hole will be drilled to MD/TD and 5-1/2 casing will be set at TD and cemented back 300' into the 9-5/8 inch casing shoe.

3. Casing Design

Hole Size	Depth	OD Csg	Weight	Collar	Grade	New/Used	SF Burst	SF Collapse	SF Tension
17-1/2"	0' - 800'	13-3/8"	68	BTC	J-55	New	1.27	5.39	19.65
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8-3/4-8-1/2"	0' – 22138'	5-1/2"	20	BTC	P-110	New	1.03	1.65	2.05

XTO requests to utilize centralizers after KOP and only a minimum of one every other joint.

- 9-5/8" Collapse analyzed using 50% evacuation based on regional experience.
- 5-1/2" tension calculated using vertical hanging weight plus the lateral weight multiplied by a friction factor of 0.35

WELLHEAD:

Permanent Wellhead - GE RSH Multibowl System

- A. Starting Head (RSH System): 13-3/8" SOW bottom x 13-5/8" 5M top flange
- B. Tubing Head: 13-5/8" 5M bottom flange x 7-1/16" 10M top flange
 - Wellhead will be installed by manufacturer's representatives.
 - Manufacturer will monitor welding process to ensure appropriate temperature of seal.
 - Operator will test the 9-5/8" casing per Onshore Order 2.
 - Wellhead manufacturer representative may not be present for BOP test plug installation

^{***} Groundwater depth 40' (per NM State Engineers Office).

4. Cement Program

Surface Casing: 13-3/8", 68 New J-55, BTC casing to be set at +/- 800'

Lead: 370 sxs Halcem-C + 2% CaCl (mixed at 12.8 ppg, 1.87 ft3/sx, 10.13 gal/sx water)
Tail: 300 sxs Halcem-C + 2% CaCl (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)
Compressives: 12-hr = 900 psi 24 hr = 1500 psi

Top of Cement: Surface

2nd Intermediate Casing (Stage 2): 9-5/8", 40 New HCL-80, BTC casing to be set at +/- 10961' ECP/DV Tool to be set at 4770'

1st Stage

Lead: 940 sxs Halcem-C + 2% CaCl (mixed at 11.0 ppg, 3.45 ft3/sx, 21.14 gal/sx water)

Tail: 470 sxs Halcem-C + 2% CaCl (mixed at 14.8 ppg, 1.32 ft3/sx, 6.39 gal/sx water)

Compressives: 12-hr = 500 psi 24 hr = 1151 psi

2nd Stage

Lead: 690 sxs Halcem-C + 2% CaCl (mixed at 11.0 ppg, 3.45 ft3/sx, 21.14 gal/sx water)

Tail: 450 sxs Halcem-C + 2% CaCl (mixed at 14.8 ppg, 1.32 ft3/sx, 6.39 gal/sx water)

Compressives: 12-hr = 500 psi 24 hr = 1151 psi

Top of Cement: 200' inside previous casing shoe

Production Casing: 5-1/2", 20 New P-110, BTC casing to be set at +/- 22138'

Lead: 0 sxs Halcem-C + 2% CaCl (mixed at 11.5 ppg, 1.88 ft3/sx, 9.61 gal/sx water)

Tail: 2610 sxs VersaCem (mixed at 13.2 ppg, 1.33 ft3/sx, 8.38 gal/sx water)

Compressives: 12-hr = 1375 psi 24 hr = 2285 psi

Top of Cement: 300' inside previous casing shoe

5. Pressure Control Equipment

Once the permanent WH is installed on the 13-3/8 casing, the blow out preventer equipment (BOP) will consist of a 13-5/8" minimum 5M Hydril and a 13-5/8" minimum 5M 3-Ram BOP. MASP should not exceed 4139 psi. In any instance where 10M BOP is required by BLM, XTO requests a variance to utilize 5M annular with 10M ram preventers (a common BOP configuration, which allows use of 10M rams in unlikely event that pressures exceed 5M). Also a variance is requested to test the 5M annular to 70% of working pressure at 3500 psi.

All BOP testing will be done by an independent service company. Annular pressure tests will be limited to 70% of the working pressure. When nippling up on the 13-3/8", 5M bradenhead and flange, the BOP test will be limited to 5000 psi. All BOP tests will include a low pressure test as per BLM regulations. The 5M BOP diagrams are attached. Blind rams will be functioned tested each trip, pipe rams will be functioned tested each day.

A variance is requested to allow use of a flex hose as the choke line from the BOP to the Choke Manifold. If this hose is used, a copy of the manufacturer's certification and pressure test chart will be kept on the rig. Attached is an example of a certification and pressure test chart. The manufacturer does not require anchors.

XTO requests a variance to be able to batch drill this well if necessary. In doing so, XTO will set each casing string and ensure that the well is cemented properly and the well is static. With floats holding, no pressure on the csg annulus, and the installation of a 10K TA cap as per wellhead manf. recommendations, XTO will contact the BLM to skid the rig to drill

the remaining wells on the pad. Once surface and intermediate strings are all completed, XTO will begin drilling the production hole on each of the wells.

A variance is requested to ONLY test broken pressure seals on the BOP equipment when moving from wellhead to wellhead which is in compliance with API Standard 53. API standard 53 states, that for pad drilling operation, moving from one wellhead to another within 21 days, pressure testing is required for pressure-containing and pressure-controlling connections when the integrity of a pressure seal is broken. Based on discussions with the BLM on February 27th 2020, we will request permission to ONLY retest broken pressure seals if the following conditions are met: 1. After a full BOP test is conducted on the first well on the pad (First well will be the deepest Intermediate) 2. When skidding to drill an intermediate section does not penetrate into the Wolfcamp 3. Full BOP test will be required prior to drilling the production hole.

A variance is requested to cement offline for the surface and intermediate casing strings.

6. Proposed Mud Circulation System

INTERVAL	Hole Size	Mud Type	MW (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)
0' to 800'	17-1/2"	FW/Native	8.4-8.8	35-40	NC
800' to 10961'	12-1/4"	FW / Cut Brine / Direct Emulsion	8.5-9.5	29-32	NC - 20
10961' to 22138'	8-3/4-8-1/2"	FW / Cut Brine / Polymer/ OBM	10.7-11.5	32-50	NC - 20

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

Spud with fresh water/native mud. Drill out from under 13-3/8" surface casing with brine / oil direct emulsion mud. Use fibrous materials as needed to control seepage and lost circulation. Pump viscous sweeps as needed for hole cleaning. Pump speed will be recorded on a daily drilling report after mudding up. A Pason or Totco will be used to detect changes in loss or gain of mud volume. A mud test will be performed every 24 hours to determine: density, viscosity, strength, filtration and pH as necessary. Use available solids controls equipment to help keep mud weight down after mud up. Rig up solids control equipment to operate as a closed loop system.

7. 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 having appropriate connections will be on the rig floor at all times.
- C. H2S monitors will be on location when drilling below the 13-3/8" casing.

8. Logging, Coring and Testing Program

Mud Logger: Mud Logging Unit (2 man) below 1st intermediate casing.

Open hole logging will not be done on this well.

9. Abnormal Pressures and Temperatures / Potential Hazards

None Anticipated. BHT of 155 to 175 F is anticipated. No H2S is expected but monitors will be in place to detect any H2S occurrences. Should these circumstances be encountered the operator and drilling contractor are prepared to take all necessary steps to ensure safety of all personnel and environment. Lost circulation could occur but is not expected to be a serious problem in this area and hole seepage will be compensated for by additions of small amounts of LCM in the drilling fluid. The maximum anticipated bottom hole pressure for this well is 6726 psi.

10. Anticipated Starting Date and Duration of Operations

Road and location construction will begin after Santa Fe and BLM have approved the APD. Anticipated spud date will be as soon after Santa Fe and BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 40 days. If production casing is run, an additional 30 days will be needed to complete well and construct surface facilities and/or lay flow lines in order to place well on production.



