Rec'd 05/15/2020 - NMOCD

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

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.

SUBMIT IN TRIPLICATE - Other instructions on page 2

5. Lease Serial No.
NMLC061705B

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
891000303X

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

8. Well Name and No.
POKER LAKE UNIT 17 TWR 106H

2. Name of Operator
XTO PERMIAN OPERATING LLC
Contact: KELLY KARDOS
E-Mail: kelly_kardos@xtoenergy.com

9. API Well No.
30-015-46655-00-X1

3a. Address
6401 HOLIDAY HILL ROAD BLDG 5
MIDLAND, TX 79707

3b. Phone No. (include area code)
Ph: 432-620-4374

10. Field and Pool or Exploratory Area
PURPLE SAGE-WOLFCAMP (GAS)

4. Location of Well *(Footage, Sec., T., R., M., or Survey Description)*
Sec 20 T24S R31E NWNE 40FNL 1613FEL
32.209969 N Lat, 103.796509 W Lon

11. County or Parish, State
EDDY COUNTY, NM

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other Change to Original APD
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ 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 determined that the site is ready for final inspection.

XTO Permian Operating, LLC requests permission to make the following changes to the original APD:

Change the casing/cement design per the attached drilling program.

XTO requests the following variances:

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 GE 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.

Accepted 05/15/2020 - KMS NMOCD

14. I hereby certify that the foregoing is true and correct.

Electronic Submission #513150 verified by the BLM Well Information System
For XTO PERMIAN OPERATING LLC, sent to the Carlsbad
Committed to AFMSS for processing by PRISCILLA PEREZ on 04/29/2020 (20PP2492SE)

Name *(Printed/Typed)* KELLY KARDOS — Title REGULATORY COORDINATOR

Signature (Electronic Submission) — Date 04/28/2020

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By JENNIFER SANCHEZ — Title PETROLEUM ENGINEER — Date 05/14/2020

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 Carlsbad

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.

(Instructions on page 2)

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****

PECOS DISTRICT DRILLING
DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:	**XTO Permian Operating, LLC.**
LEASE NO.:	**NMLC-0061705B**
WELL NAME & NO.:	**Poker Lake Unit 17 TWR 106H**
SURFACE HOLE FOOTAGE:	**0040' FNL & 1613' FEL**
BOTTOM HOLE FOOTAGE	**0220' FSL & 1650' FEL Sec. 29, T. 24 S., R 31 E.**
LOCATION:	**Section 20, T. 24 S., R 31 E., NMPM**
COUNTY:	**Eddy County, New Mexico**

COA

H2S	(•) Yes	( ) No	
Potash	(•) None	( ) Secretary	( ) R-111-P
Cave/Karst Potential	(•) Low	( ) Medium	( ) High
Cave/Karst Potential	( ) Critical		
Variance	( ) None	(•) Flex Hose	( ) Other
Wellhead	( ) Conventional	( ) Multibowl	(•) Both
Other	[ ] 4 String Area	[ ] Capitan Reef	[ ] WIPP
Other	[ ] Fluid Filled	[ ] Cement Squeeze	[ ] Pilot Hole
Special Requirements	[ ] Water Disposal	[ ] COM	[x] 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 **867**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:

    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 **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 County
Call 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 05142020

Poker Lake Unit 17 TWR 106H
Projected TD: 21918' MD / 11934' TVD
SHL: 65' FNL & 1613' FEL , Section 20, T24S, R31E
BHL: 220' FSL & 1650' FEL , Section 29, T24S, R31E
Eddy County, NM

Casing Design

The surface fresh water sands will be protected by setting 11-3/4" casing @ 867' (100' above the salt) and circulating cement back to surface. The 7-5/8" intermediate casing will be set at 11009' and bring TOC back to surface. A 6-3/4 inch curve and lateral hole will be drilled to MD/TD and 5-1/2" x 5-1/2" semi-flush casing will be set at TD and cemented back 300' into the 7-5/8" casing shoe.

Hole Size	Depth	OD Csg	Weight	Collar	Grade	New/Used	SF Burst	SF Collapse	SF Tension
14-3/4"	0' – 867'	11-3/4"	54	BTC	J-55	New	1.23	5.28	18.16
9-7-8"	0' – 11009'	7-5/8"	29.7	BTC	HCL-80	New	1.57	1.96	2.09
6-3/4"	0' – 10909'	5-1/2"	23	Freedom	P-110	New	1.21	2.07	2.03
6-3/4"	10909' - 21918'	5-1/2"	23	TCSF - semi flush	P-110	New	1.21	2.07	1.72

XTO requests to not utilize centralizers in the curve and lateral
7-5/8" 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
Test on Casing will be limited to 70% burst of the casing or 1500 psi, whichever is less
5-1/2" 23 ppf casing will be run from surface to 10,763' and crossed over to 5-1/2" 23 ppf semi-flush casing from 10,763' to TD.
Request to use 5" BTC Float equipment for the the production casing

WELLHEAD:

Permanent Wellhead – GE RSH Multibowl System

A. Starting Head: 13-5/8" 10M top flange x 11-3/4" Hanger
B. Tubing Head: 13-5/8" 10M bottom flange x 7-1/16" 15M 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 7-5/8" casing per Onshore Order 2.
Wellhead manufacturer representative may not be present for BOP test plug installation

Cement Program

Surface Casing:

Lead: 260 sxs Halcem-C + 2% CaCl (mixed at 12.8 ppg, 1.87 ft3/sx, 10.13 gal/sx water)
Tail: 190 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 4297'

1st Stage

Lead: 1310 sxs Halcem - Class C (mixed at 11.0 ppg, 1.87 ft3/sx, 15.10 gal/sx water)
Tail: 310 sxs Halcem - Class C (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)
Compressives: 12-hr = 900 psi 24 hr = 1150 psi

2nd Stage

Lead: 750 sxs Halcem - Class C (mixed at 11.0 ppg, 1.88 ft3/sx, 10.13 gal/sx water)
Tail: 320 sxs Halcem-Class C (mixed at 14.8 ppg, 1.33 ft3/sx, 5.29 gal/sx water)
Compressives: 12-hr = 900 psi 24 hr = 1150 psi

Production Casing:

Lead: 20 sxs VersaCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water)
Tail: 750 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 7.20 gal/sx water)
Compressives: 12-hr = 800 psi 24 hr = 1500psi

Mud Circulation Program

INTERVAL	Hole Size	Mud Type	MW (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)
0' - 867'	14-3/4"	FW / Native	8.4-8.8	35-40	NC
867' - 11009'	9-7/8"	Brine / Cut Brine / Direct Emuslion	8.6-9.8	30-32	NC
11009' to 21918'	6-3/4"	Cut Brine / WBM / OBM	10.8-11.8	32-36	NC

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

XTO Energy Inc.
Poker Lake Unit 17 TWR 106H
Projected TD: 21918' MD / 11934' TVD
SHL: 65' FNL & 1613' FEL , Section 20, T24S, R31E
BHL: 220' FSL & 1650' FEL , Section 29, 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	557'	Water
Top of Salt	967'	Water
Base of Salt	4077'	Water
Delaware	4297'	Water
Bone Spring	8157'	Water
1st Bone Spring Ss	9117'	Water/Oil/Gas
2nd Bone Spring Ss	9917'	Water/Oil/Gas
3rd Bone Spring Ss	11097'	Water/Oil/Gas
Wolfcamp	11497'	Water/Oil/Gas
Wolfcamp A	11707'	Water/Oil/Gas
Target/Land Curve	11934'	Water/Oil/Gas

*** Hydrocarbons @ Brushy Canyon
*** Groundwater depth 40' (per NM State Engineers Office).

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 11-3/4" casing @ 867' (100' above the salt) and circulating cement back to surface. The 7-5/8" intermediate casing will be set at 11009' and bring TOC back to surface. A 6-3/4 inch curve and lateral hole will be drilled to MD/TD and 5-1/2" x 5-1/2" semi-flush casing will be set at TD and cemented back 300' into the 7-5/8" casing shoe.

3. Casing Design

Hole Size	Depth	OD Csg	Weight	Collar	Grade	New/Used	SF Burst	SF Collapse	SF Tension
14-3/4"	0' – 867'	11-3/4"	54	BTC	J-55	New	1.23	5.28	18.16
9-7-8"	0' – 11009'	7-5/8"	29.7	BTC	HCL-80	New	1.57	1.96	2.09
6-3/4"	0' – 10909'	5-1/2"	23	Freedom	P-110	New	1.21	2.07	2.03
6-3/4"	10909' - 21918'	5-1/2"	23	TCSF - semi flush	P-110	New	1.21	2.07	1.72

· XTO requests to not utilize centralizers in the curve and lateral
·7-5/8" 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
· Test on Casing will be limited to 70% burst of the casing or 1500 psi, whichever is less
· 5-1/2" 23 ppf casing will be run from surface to 10,909' and crossed over to 5-1/2" 23 ppf semi-flush casing from 10,909' to TD.
·Request to use 5" BTC Float equipment for the the production casing

Wellhead:

Permanent Wellhead – Multibowl System

A. Starting Head: 13-5/8" 10M top flange x 11-3/4" Hanger
B. Tubing Head: 13-5/8" 10M bottom flange x 7-1/16" 15M 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 7-5/8" casing per BLM Onshore Order 2
· Wellhead Manufacturer representative will not be present for BOP test plug installation

4. Cement Program

Surface Casing: 11-3/4", 54 New J-55, BTC casing to be set at +/- 867'

Lead: 260 sxs Halcem-C + 2% CaCl (mixed at 12.8 ppg, 1.87 ft3/sx, 10.13 gal/sx water)

Tail: 190 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
TOC: Surface

Intermediate Casing: 7-5/8", 29.7 New HCL-80, BTC casing to be set at +/- 11009'
ECP/DV Tool to be set at 4297'
1st Stage
Lead: 1310 sxs Halcem - Class C (mixed at 11.0 ppg, 1.87 ft3/sx, 15.10 gal/sx water)

Tail: 310 sxs Halcem - Class C (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)
Compressives: 12-hr = 900 psi 24 hr = 1150psi

2nd Stage
Lead: 750 sxs Halcem - Class C (mixed at 11.0 ppg, 1.88 ft3/sx, 10.13 gal/sx water)

Tail: 320 sxs Halcem-Class C (mixed at 14.8 ppg, 1.33 ft3/sx, 5.29 gal/sx water)
Compressives: 12-hr = 900 psi 24 hr = 1150 psi
TOC: Surface

Production Casing: 5-1/2", 23 New P-110, TCSF - semi flush casing to be set at +/- 21918'
Lead: 20 sxs VersaCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water)

Tail: 750 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 7.20 gal/sx water)
Compressives 12-hr = 800 psi 24 hr = 1500 psi
TOC: 300' inside previous shoe

5. Pressure Control Equipment

Once the permanent WH is installed on the 11-3/4" 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 4387 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 11-3/4", 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 company recommendations, XTO will contact the BLM on each rig skid 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 and the supporting documentation submitted to the BLM, 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.
2. The first intermediate hole section drilled on the pad will be the deepest. All of the remaining hole sections will be the same

2. The first intermediate hole section drilled on the pad will be the deepest. All of the remaining hole sections will be the same depth or shallower.
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' - 867'	14-3/4"	FW / Native	8.4-8.8	35-40	NC
867' - 11009'	9-7/8"	Brine / Cut Brine / Direct Emuslion	8.6-9.8	30-32	NC
11009' to 21918'	6-3/4"	Cut Brine / WBM / OBM	10.8-11.8	32-36	NC

The necessary mud products for weight addition and fluid loss control will be on location at all times.
Spud with fresh water/native mud and set 11-3/4" surface casing, isolating the fresh water aquifer. Drill out from under 11-3/4" surface casing with a brine/oil direct emulsion mud system. 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 11-3/4" casing.

8. Logging, Coring and Testing Program

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

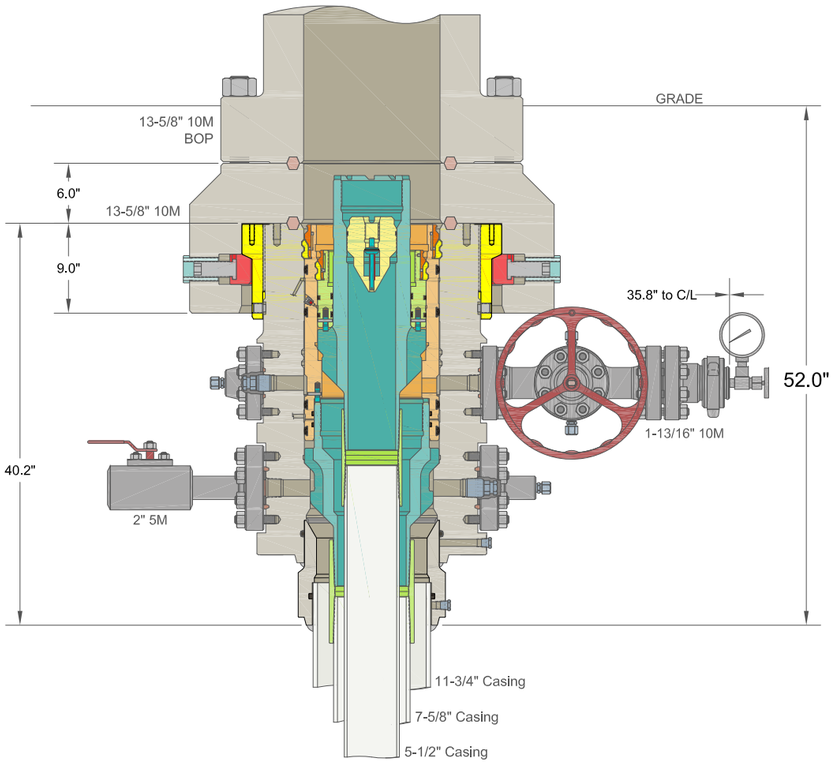
Open hole logging will not be done on this well.

9. Abnormal Pressures and Temperatures / Potential Hazards

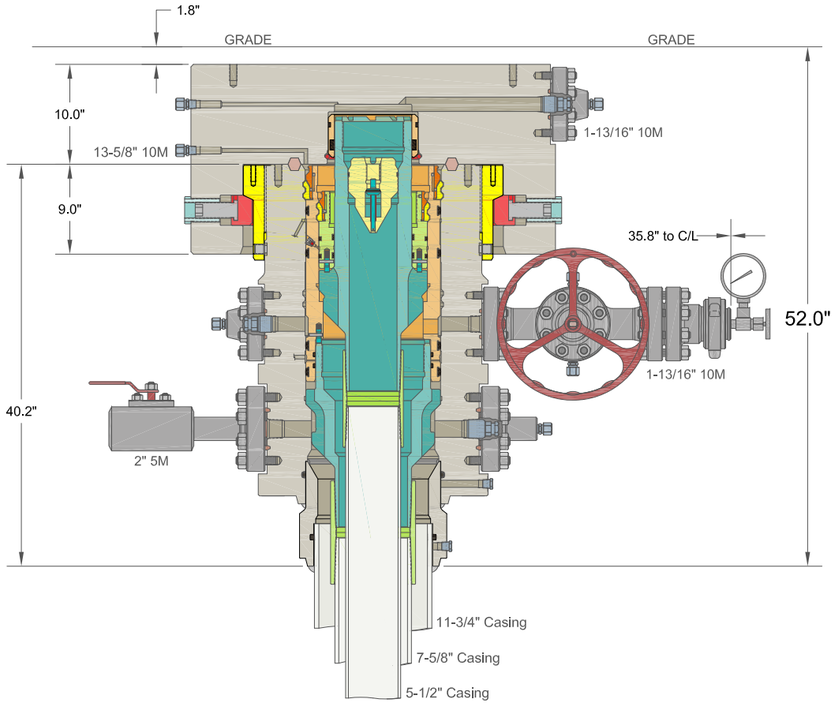
None Anticipated. BHT of 155 to 175 F is anticipated. No H2S is expected but monitors will be in place to detect any H2S occurrences. Should these circumstances be encountered the operator and drilling contractor are prepared to take all necessary steps to ensure safety of all personnel and environment. 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 7012 psi.

10. Anticipated Starting Date and Duration of Operations

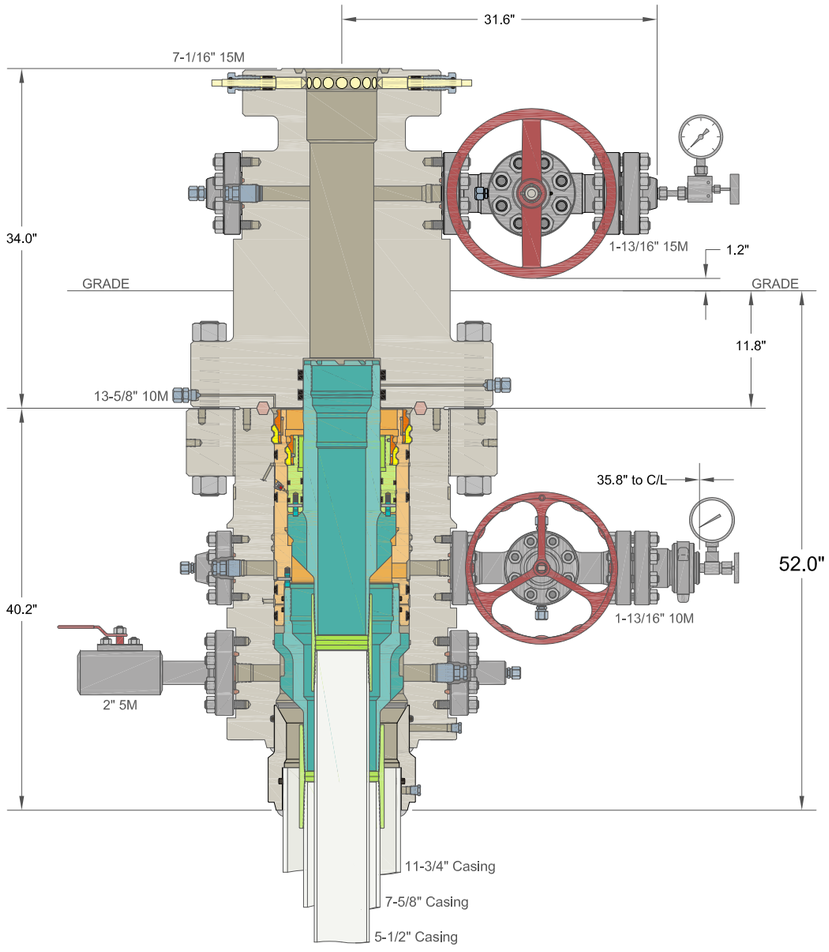
Road and location construction will begin after Santa Fe and BLM have approved the APD. Anticipated spud date will be as soon after Santa Fe and BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 45 days. If production casing is run, an additional 30 days will be needed to complete well and construct surface facilities and/or lay flow lines in order to place well on production.



DRILLING



SKID



COMPLETION

ALL DIMENSIONS APPROXIMATE

CACTUS WELLHEAD LLC		XTO ENERGY INC POKER LAKE, NM	
30" x 11-3/4" x 7-5/8" x 5-1/2" MBU-3T-SF SOW Wellhead System With 13-5/8" 10M x 7-1/16" 15M CTH-DBLHPS-SB Tubing Head And 7-5/8" & 5-1/2" Fluted Mandrel Casing Hangers	DRAWN	DLE	09DEC19
	APPRV		
	DRAWING NO.	ODE0003261	

Planned Wellpath Report

PLU 17 TWR #106H Permit Plan

REFERENCE WELLPATH IDENTIFICATION			
Operator	**XTO Energy Inc.**	Well	**PLU 17 TWR #106H**
Field	**Wolfcamp (Eddy Co., NM)**	API/Legal	
Facility	**PLU 17 TWR Pad 2**	Wellbore	**PLU 17 TWR #106H**
Slot	**PLU 17 TWR #106H**		

REPORT SETUP INFORMATION			
Projection System	**NAD27 / TM New Mexico SP, Eastern Zone (3001), US feet**	Software System	**WellArchitect® 6.0**
North Reference	**Grid**	User	**Deergai**
Scale	**0.999941**	Report Generated	**4/22/2020** at **2:10:20 PM**
Convergence at slot	**0.29° East**	Database	**WA-Houston**

WELLPATH LOCATION	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	**East[ft]**	**Easting[US ft]**	**Northing[US ft]**	**Latitude**	**Longitude**
Slot Location	-34.90	0.00	**666183.00**	**440451.90**	32°12'35.1993"N	103°47'45.6953"W
Facility Reference Pt			**666183.00**	**440486.80**	32°12'35.5447"N	103°47'45.6933"W
Field Reference Pt			**152400.30**	**0.00**	30°59'42.8458"N	105°26'33.6593"W

WELLPATH DATUM			
Calculation method	**Minimum curvature**	H&P 549 (RKB) to Facility Vertical Datum	**3549.00ft**
Horizontal Reference Pt	**Slot**	H&P 549 (RKB) to Mean Sea Level	**3549.00ft**
Vertical Reference Pt	**H&P 549 (RKB)**	H&P 549 (RKB) to Ground Level at Slot (PLU 17 TWR #106H)	**30.00ft**
MD Reference Pt	**H&P 549 (RKB)**	Section Origin	**N 0.00, E 0.00 ft**
Field Vertical Reference	**Mean Sea Level**	Section Azimuth	**179.85°**

Planned Wellpath Report

PLU 17 TWR #106H Permit Plan

REFERENCE WELLPATH IDENTIFICATION			
Operator	**XTO Energy Inc.**	Well	**PLU 17 TWR #106H**
Field	**Wolfcamp (Eddy Co., NM)**	API/Legal	
Facility	**PLU 17 TWR Pad 2**	Wellbore	**PLU 17 TWR #106H**
Slot	**PLU 17 TWR #106H**		

WELLPATH DATA (228 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
0.00†	0.000	217.230	0.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
30.00	0.000	217.230	30.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	Tie On
130.00†	0.000	217.230	130.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
230.00†	0.000	217.230	230.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
330.00†	0.000	217.230	330.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
430.00†	0.000	217.230	430.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
530.00†	0.000	217.230	530.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
630.00†	0.000	217.230	630.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
730.00†	0.000	217.230	730.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
830.00†	0.000	217.230	830.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
930.00†	0.000	217.230	930.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
1030.00†	0.000	217.230	1030.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
1130.00†	0.000	217.230	1130.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
1230.00†	0.000	217.230	1230.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
1330.00†	0.000	217.230	1330.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
1430.00†	0.000	217.230	1430.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
1530.00†	0.000	217.230	1530.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
1630.00†	0.000	217.230	1630.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
1730.00†	0.000	217.230	1730.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
1830.00†	0.000	217.230	1830.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
1930.00†	0.000	217.230	1930.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
2030.00†	0.000	217.230	2030.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
2130.00†	0.000	217.230	2130.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
2230.00†	0.000	217.230	2230.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
2330.00†	0.000	217.230	2330.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
2430.00†	0.000	217.230	2430.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
2530.00†	0.000	217.230	2530.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
2630.00†	0.000	217.230	2630.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
2730.00†	0.000	217.230	2730.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
2830.00†	0.000	217.230	2830.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
2930.00†	0.000	217.230	2930.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
3030.00†	0.000	217.230	3030.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
3130.00†	0.000	217.230	3130.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
3230.00†	0.000	217.230	3230.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
3330.00†	0.000	217.230	3330.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
3430.00†	0.000	217.230	3430.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
3530.00†	0.000	217.230	3530.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
3630.00†	0.000	217.230	3630.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
3730.00†	0.000	217.230	3730.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
3830.00†	0.000	217.230	3830.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
3930.00†	0.000	217.230	3930.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
4030.00†	0.000	217.230	4030.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
4130.00†	0.000	217.230	4130.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
4230.00†	0.000	217.230	4230.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
4330.00†	0.000	217.230	4330.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	

Planned Wellpath Report

PLU 17 TWR #106H Permit Plan

REFERENCE WELLPATH IDENTIFICATION			
Operator	**XTO Energy Inc.**	Well	**PLU 17 TWR #106H**
Field	**Wolfcamp (Eddy Co., NM)**	API/Legal	
Facility	**PLU 17 TWR Pad 2**	Wellbore	**PLU 17 TWR #106H**
Slot	**PLU 17 TWR #106H**		

WELLPATH DATA (228 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
4430.00†	0.000	217.230	4430.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
4530.00†	0.000	217.230	4530.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
4630.00†	0.000	217.230	4630.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
4730.00†	0.000	217.230	4730.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
4830.00†	0.000	217.230	4830.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
4930.00†	0.000	217.230	4930.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
5030.00†	0.000	217.230	5030.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
5130.00†	0.000	217.230	5130.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
5230.00†	0.000	217.230	5230.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
5330.00†	0.000	217.230	5330.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
5430.00†	0.000	217.230	5430.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
5530.00†	0.000	217.230	5530.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
5630.00†	0.000	217.230	5630.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	
5700.00	0.000	217.230	5700.00	0.00	0.00	0.00	666183.00	440451.90	32°12'35.1993"N	103°47'45.6953"W	0.00	0.00	0.00	Begin Nudge
5730.00†	0.300	217.230	5730.00	0.06	-0.06	-0.05	666182.95	440451.84	32°12'35.1987"N	103°47'45.6959"W	1.00	1.00	0.00	
5830.00†	1.300	217.230	5829.99	1.17	-1.17	-0.89	666182.11	440450.73	32°12'35.1877"N	103°47'45.7058"W	1.00	1.00	0.00	
5930.00†	2.300	217.230	5929.94	3.67	-3.68	-2.79	666180.21	440448.23	32°12'35.1631"N	103°47'45.7280"W	1.00	1.00	0.00	
6030.00†	3.300	217.230	6029.82	7.55	-7.56	-5.75	666177.25	440444.34	32°12'35.1247"N	103°47'45.7627"W	1.00	1.00	0.00	
6130.00†	4.300	217.230	6129.60	12.82	-12.84	-9.76	666173.24	440439.06	32°12'35.0727"N	103°47'45.8096"W	1.00	1.00	0.00	
6170.00	4.700	217.230	6169.47	15.31	-15.34	-11.66	666171.34	440436.56	32°12'35.0481"N	103°47'45.8319"W	1.00	1.00	0.00	End of Build
6230.00†	4.700	217.230	6229.27	19.22	-19.25	-14.63	666168.37	440432.65	32°12'35.0095"N	103°47'45.8667"W	0.00	0.00	0.00	
6330.00†	4.700	217.230	6328.94	25.73	-25.78	-19.59	666163.41	440426.12	32°12'34.9452"N	103°47'45.9248"W	0.00	0.00	0.00	
6430.00†	4.700	217.230	6428.60	32.24	-32.30	-24.55	666158.46	440419.60	32°12'34.8809"N	103°47'45.9829"W	0.00	0.00	0.00	
6486.37	4.700	217.230	6484.78	35.91	-35.98	-27.34	666155.66	440415.92	32°12'34.8446"N	103°47'46.0156"W	0.00	0.00	0.00	End of Hold
6530.00†	4.264	217.230	6528.28	38.62	-38.69	-29.40	666153.60	440413.21	32°12'34.8179"N	103°47'46.0398"W	1.00	-1.00	0.00	
6630.00†	3.264	217.230	6628.06	43.83	-43.92	-33.37	666149.63	440407.98	32°12'34.7663"N	103°47'46.0863"W	1.00	-1.00	0.00	
6730.00†	2.264	217.230	6727.94	47.66	-47.76	-36.29	666146.71	440404.14	32°12'34.7285"N	103°47'46.1205"W	1.00	-1.00	0.00	
6830.00†	1.264	217.230	6827.89	50.11	-50.21	-38.15	666144.85	440401.69	32°12'34.7043"N	103°47'46.1423"W	1.00	-1.00	0.00	
6930.00†	0.264	217.230	6927.88	51.17	-51.27	-38.96	666144.04	440400.63	32°12'34.6939"N	103°47'46.1517"W	1.00	-1.00	0.00	
6956.37	0.000	179.630	6954.25	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	1.00	-1.00	0.00	Vertical
7030.00†	0.000	179.630	7027.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
7130.00†	0.000	179.630	7127.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
7230.00†	0.000	179.630	7227.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
7330.00†	0.000	179.630	7327.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
7430.00†	0.000	179.630	7427.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
7530.00†	0.000	179.630	7527.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
7630.00†	0.000	179.630	7627.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
7730.00†	0.000	179.630	7727.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
7830.00†	0.000	179.630	7827.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
7930.00†	0.000	179.630	7927.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
8030.00†	0.000	179.630	8027.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
8130.00†	0.000	179.630	8127.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
8230.00†	0.000	179.630	8227.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
8330.00†	0.000	179.630	8327.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
8430.00†	0.000	179.630	8427.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	

Planned Wellpath Report

PLU 17 TWR #106H Permit Plan

REFERENCE WELLPATH IDENTIFICATION			
Operator	XTO Energy Inc.	Well	PLU 17 TWR #106H
Field	Wolfcamp (Eddy Co., NM)	API/Legal	
Facility	PLU 17 TWR Pad 2	Wellbore	PLU 17 TWR #106H
Slot	PLU 17 TWR #106H		

WELLPATH DATA (228 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
8530.00†	0.000	179.630	8527.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
8630.00†	0.000	179.630	8627.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
8730.00†	0.000	179.630	8727.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
8830.00†	0.000	179.630	8827.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
8930.00†	0.000	179.630	8927.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
9030.00†	0.000	179.630	9027.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
9130.00†	0.000	179.630	9127.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
9230.00†	0.000	179.630	9227.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
9330.00†	0.000	179.630	9327.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
9430.00†	0.000	179.630	9427.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
9530.00†	0.000	179.630	9527.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
9630.00†	0.000	179.630	9627.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
9730.00†	0.000	179.630	9727.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
9830.00†	0.000	179.630	9827.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
9930.00†	0.000	179.630	9927.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
10030.00†	0.000	179.630	10027.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
10130.00†	0.000	179.630	10127.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
10230.00†	0.000	179.630	10227.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
10330.00†	0.000	179.630	10327.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
10430.00†	0.000	179.630	10427.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
10530.00†	0.000	179.630	10527.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
10630.00†	0.000	179.630	10627.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
10730.00†	0.000	179.630	10727.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
10830.00†	0.000	179.630	10827.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
10930.00†	0.000	179.630	10927.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
11030.00†	0.000	179.630	11027.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
11130.00†	0.000	179.630	11127.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
11230.00†	0.000	179.630	11227.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
11330.00†	0.000	179.630	11327.88	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	
11363.16	0.000	179.630	11361.04	51.22	-51.32	-39.00	666144.01	440400.58	32°12'34.6934"N	103°47'46.1522"W	0.00	0.00	0.00	Curve KOP
11430.00†	6.684	179.630	11427.73	55.11	-55.21	-38.97	666144.03	440396.69	32°12'34.6549"N	103°47'46.1521"W	10.00	10.00	0.00	
11530.00†	16.684	179.630	11525.53	75.34	-75.44	-38.84	666144.16	440376.46	32°12'34.4547"N	103°47'46.1518"W	10.00	10.00	0.00	
11630.00†	26.684	179.630	11618.34	112.24	-112.34	-38.60	666144.40	440339.56	32°12'34.0896"N	103°47'46.1511"W	10.00	10.00	0.00	
11730.00†	36.684	179.630	11703.33	164.70	-164.80	-38.26	666144.74	440287.11	32°12'33.5705"N	103°47'46.1502"W	10.00	10.00	0.00	
11830.00†	46.684	179.630	11777.91	231.11	-231.21	-37.83	666145.17	440220.70	32°12'32.9132"N	103°47'46.1491"W	10.00	10.00	0.00	
11930.00†	56.684	179.630	11839.84	309.47	-309.57	-37.33	666145.67	440142.34	32°12'32.1378"N	103°47'46.1478"W	10.00	10.00	0.00	
12030.00†	66.684	179.630	11887.21	397.40	-397.50	-36.76	666146.24	440054.43	32°12'31.2678"N	103°47'46.1463"W	10.00	10.00	0.00	
12130.00†	76.684	179.630	11918.59	492.21	-492.31	-36.15	666146.85	439959.62	32°12'30.3295"N	103°47'46.1447"W	10.00	10.00	0.00	
12230.00†	86.684	179.630	11933.04	591.03	-591.13	-35.51	666147.49	439860.81	32°12'29.3516"N	103°47'46.1430"W	10.00	10.00	0.00	
12263.16	90.000	179.630	11934.00	624.17	-624.27	-35.30	666147.71	439827.67	32°12'29.0237"N	103°47'46.1424"W	10.00	10.00	0.00	LP 359' past FTP
12330.00†	90.000	179.630	11934.00	691.01	-691.11	-34.87	666148.14	439760.84	32°12'28.3623"N	103°47'46.1413"W	0.00	0.00	0.00	
12430.00†	90.000	179.630	11934.00	791.01	-791.11	-34.22	666148.78	439660.84	32°12'27.3727"N	103°47'46.1396"W	0.00	0.00	0.00	
12530.00†	90.000	179.630	11934.00	891.01	-891.10	-33.57	666149.43	439560.85	32°12'26.3832"N	103°47'46.1379"W	0.00	0.00	0.00	
12630.00†	90.000	179.630	11934.00	991.01	-991.10	-32.93	666150.07	439460.86	32°12'25.3936"N	103°47'46.1362"W	0.00	0.00	0.00	
12730.00†	90.000	179.630	11934.00	1091.01	-1091.10	-32.28	666150.72	439360.87	32°12'24.4041"N	103°47'46.1345"W	0.00	0.00	0.00	

Planned Wellpath Report

PLU 17 TWR #106H Permit Plan

REFERENCE WELLPATH IDENTIFICATION			
Operator	**XTO Energy Inc.**	Well	**PLU 17 TWR #106H**
Field	**Wolfcamp (Eddy Co., NM)**	API/Legal	
Facility	**PLU 17 TWR Pad 2**	Wellbore	**PLU 17 TWR #106H**
Slot	**PLU 17 TWR #106H**		

WELLPATH DATA (228 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
12830.00†	90.000	179.630	11934.00	1191.01	-1191.10	-31.64	666151.37	439260.88	32°12'23.4145"N	103°47'46.1328"W	0.00	0.00	0.00	
12930.00†	90.000	179.630	11934.00	1291.01	-1291.09	-30.99	666152.01	439160.88	32°12'22.4250"N	103°47'46.1311"W	0.00	0.00	0.00	
13030.00†	90.000	179.630	11934.00	1391.01	-1391.09	-30.34	666152.66	439060.89	32°12'21.4354"N	103°47'46.1294"W	0.00	0.00	0.00	
13130.00†	90.000	179.630	11934.00	1491.01	-1491.09	-29.70	666153.30	438960.90	32°12'20.4459"N	103°47'46.1277"W	0.00	0.00	0.00	
13230.00†	90.000	179.630	11934.00	1591.01	-1591.09	-29.05	666153.95	438860.91	32°12'19.4563"N	103°47'46.1260"W	0.00	0.00	0.00	
13330.00†	90.000	179.630	11934.00	1691.01	-1691.09	-28.41	666154.59	438760.92	32°12'18.4668"N	103°47'46.1243"W	0.00	0.00	0.00	
13430.00†	90.000	179.630	11934.00	1791.00	-1791.08	-27.76	666155.24	438660.93	32°12'17.4773"N	103°47'46.1226"W	0.00	0.00	0.00	
13530.00†	90.000	179.630	11934.00	1891.00	-1891.08	-27.12	666155.89	438560.93	32°12'16.4877"N	103°47'46.1209"W	0.00	0.00	0.00	
13630.00†	90.000	179.630	11934.00	1991.00	-1991.08	-26.47	666156.53	438460.94	32°12'15.4982"N	103°47'46.1192"W	0.00	0.00	0.00	
13730.00†	90.000	179.630	11934.00	2091.00	-2091.08	-25.82	666157.18	438360.95	32°12'14.5086"N	103°47'46.1175"W	0.00	0.00	0.00	
13830.00†	90.000	179.630	11934.00	2191.00	-2191.08	-25.18	666157.82	438260.96	32°12'13.5191"N	103°47'46.1158"W	0.00	0.00	0.00	
13930.00†	90.000	179.630	11934.00	2291.00	-2291.07	-24.53	666158.47	438160.97	32°12'12.5295"N	103°47'46.1141"W	0.00	0.00	0.00	
14030.00†	90.000	179.630	11934.00	2391.00	-2391.07	-23.89	666159.11	438060.97	32°12'11.5400"N	103°47'46.1124"W	0.00	0.00	0.00	
14130.00†	90.000	179.630	11934.00	2491.00	-2491.07	-23.24	666159.76	437960.98	32°12'10.5504"N	103°47'46.1107"W	0.00	0.00	0.00	
14230.00†	90.000	179.630	11934.00	2591.00	-2591.07	-22.60	666160.41	437860.99	32°12'9.5609"N	103°47'46.1090"W	0.00	0.00	0.00	
14330.00†	90.000	179.630	11934.00	2691.00	-2691.07	-21.95	666161.05	437761.00	32°12'8.5713"N	103°47'46.1073"W	0.00	0.00	0.00	
14430.00†	90.000	179.630	11934.00	2791.00	-2791.06	-21.30	666161.70	437661.01	32°12'7.5818"N	103°47'46.1056"W	0.00	0.00	0.00	
14530.00†	90.000	179.630	11934.00	2891.00	-2891.06	-20.66	666162.34	437561.02	32°12'6.5922"N	103°47'46.1039"W	0.00	0.00	0.00	
14630.00†	90.000	179.630	11934.00	2991.00	-2991.06	-20.01	666162.99	437461.02	32°12'5.6027"N	103°47'46.1022"W	0.00	0.00	0.00	
14730.00†	90.000	179.630	11934.00	3091.00	-3091.06	-19.37	666163.63	437361.03	32°12'4.6131"N	103°47'46.1005"W	0.00	0.00	0.00	
14830.00†	90.000	179.630	11934.00	3190.99	-3191.06	-18.72	666164.28	437261.04	32°12'3.6236"N	103°47'46.0988"W	0.00	0.00	0.00	
14930.00†	90.000	179.630	11934.00	3290.99	-3291.05	-18.08	666164.93	437161.05	32°12'2.6340"N	103°47'46.0971"W	0.00	0.00	0.00	
15030.00†	90.000	179.630	11934.00	3390.99	-3391.05	-17.43	666165.57	437061.06	32°12'1.6445"N	103°47'46.0954"W	0.00	0.00	0.00	
15130.00†	90.000	179.630	11934.00	3490.99	-3491.05	-16.78	666166.22	436961.07	32°12'0.6549"N	103°47'46.0937"W	0.00	0.00	0.00	
15230.00†	90.000	179.630	11934.00	3590.99	-3591.05	-16.14	666166.86	436861.07	32°11'59.6654"N	103°47'46.0920"W	0.00	0.00	0.00	
15330.00†	90.000	179.630	11934.00	3690.99	-3691.04	-15.49	666167.51	436761.08	32°11'58.6758"N	103°47'46.0903"W	0.00	0.00	0.00	
15430.00†	90.000	179.630	11934.00	3790.99	-3791.04	-14.85	666168.15	436661.09	32°11'57.6863"N	103°47'46.0886"W	0.00	0.00	0.00	
15530.00†	90.000	179.630	11934.00	3890.99	-3891.04	-14.20	666168.80	436561.10	32°11'56.6967"N	103°47'46.0869"W	0.00	0.00	0.00	
15630.00†	90.000	179.630	11934.00	3990.99	-3991.04	-13.55	666169.45	436461.11	32°11'55.7072"N	103°47'46.0852"W	0.00	0.00	0.00	
15730.00†	90.000	179.630	11934.00	4090.99	-4091.04	-12.91	666170.09	436361.11	32°11'54.7176"N	103°47'46.0835"W	0.00	0.00	0.00	
15830.00†	90.000	179.630	11934.00	4190.99	-4191.03	-12.26	666170.74	436261.12	32°11'53.7281"N	103°47'46.0818"W	0.00	0.00	0.00	
15930.00†	90.000	179.630	11934.00	4290.99	-4291.03	-11.62	666171.38	436161.13	32°11'52.7385"N	103°47'46.0801"W	0.00	0.00	0.00	
16030.00†	90.000	179.630	11934.00	4390.99	-4391.03	-10.97	666172.03	436061.14	32°11'51.7490"N	103°47'46.0784"W	0.00	0.00	0.00	
16130.00†	90.000	179.630	11934.00	4490.99	-4491.03	-10.33	666172.67	435961.15	32°11'50.7594"N	103°47'46.0767"W	0.00	0.00	0.00	
16230.00†	90.000	179.630	11934.00	4590.98	-4591.03	-9.68	666173.32	435861.16	32°11'49.7699"N	103°47'46.0750"W	0.00	0.00	0.00	
16330.00†	90.000	179.630	11934.00	4690.98	-4691.02	-9.03	666173.97	435761.16	32°11'48.7803"N	103°47'46.0733"W	0.00	0.00	0.00	
16430.00†	90.000	179.630	11934.00	4790.98	-4791.02	-8.39	666174.61	435661.17	32°11'47.7908"N	103°47'46.0716"W	0.00	0.00	0.00	
16530.00†	90.000	179.630	11934.00	4890.98	-4891.02	-7.74	666175.26	435561.18	32°11'46.8012"N	103°47'46.0699"W	0.00	0.00	0.00	
16630.00†	90.000	179.630	11934.00	4990.98	-4991.02	-7.10	666175.90	435461.19	32°11'45.8117"N	103°47'46.0682"W	0.00	0.00	0.00	
16730.00†	90.000	179.630	11934.00	5090.98	-5091.02	-6.45	666176.55	435361.20	32°11'44.8221"N	103°47'46.0665"W	0.00	0.00	0.00	
16830.00†	90.000	179.630	11934.00	5190.98	-5191.01	-5.81	666177.19	435261.20	32°11'43.8326"N	103°47'46.0648"W	0.00	0.00	0.00	
16930.00†	90.000	179.630	11934.00	5290.98	-5291.01	-5.16	666177.84	435161.21	32°11'42.8430"N	103°47'46.0631"W	0.00	0.00	0.00	
17030.00†	90.000	179.630	11934.00	5390.98	-5391.01	-4.51	666178.49	435061.22	32°11'41.8535"N	103°47'46.0614"W	0.00	0.00	0.00	
17130.00†	90.000	179.630	11934.00	5490.98	-5491.01	-3.87	666179.13	434961.23	32°11'40.8639"N	103°47'46.0597"W	0.00	0.00	0.00	
17230.00†	90.000	179.630	11934.00	5590.98	-5591.00	-3.22	666179.78	434861.24	32°11'39.8744"N	103°47'46.0580"W	0.00	0.00	0.00	

Planned Wellpath Report

PLU 17 TWR #106H Permit Plan

REFERENCE WELLPATH IDENTIFICATION			
Operator	**XTO Energy Inc.**	Well	**PLU 17 TWR #106H**
Field	**Wolfcamp (Eddy Co., NM)**	API/Legal	
Facility	**PLU 17 TWR Pad 2**	Wellbore	**PLU 17 TWR #106H**
Slot	**PLU 17 TWR #106H**		

WELLPATH DATA (228 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
17330.00†	90.000	179.630	11934.00	5690.98	-5691.00	-2.58	666180.42	434761.25	32°11'38.8848"N	103°47'46.0563"W	0.00	0.00	0.00	
17430.00†	90.000	179.630	11934.00	5790.98	-5791.00	-1.93	666181.07	434661.25	32°11'37.8953"N	103°47'46.0546"W	0.00	0.00	0.00	
17530.00†	90.000	179.630	11934.00	5890.97	-5891.00	-1.29	666181.71	434561.26	32°11'36.9057"N	103°47'46.0529"W	0.00	0.00	0.00	
17630.00†	90.000	179.630	11934.00	5990.97	-5991.00	-0.64	666182.36	434461.27	32°11'35.9162"N	103°47'46.0512"W	0.00	0.00	0.00	
17730.00†	90.000	179.630	11934.00	6090.97	-6090.99	0.01	666183.01	434361.28	32°11'34.9266"N	103°47'46.0495"W	0.00	0.00	0.00	
17830.00†	90.000	179.630	11934.00	6190.97	-6190.99	0.65	666183.65	434261.29	32°11'33.9371"N	103°47'46.0478"W	0.00	0.00	0.00	
17930.00†	90.000	179.630	11934.00	6290.97	-6290.99	1.30	666184.30	434161.30	32°11'32.9475"N	103°47'46.0461"W	0.00	0.00	0.00	
18030.00†	90.000	179.630	11934.00	6390.97	-6390.99	1.94	666184.94	434061.30	32°11'31.9580"N	103°47'46.0444"W	0.00	0.00	0.00	
18130.00†	90.000	179.630	11934.00	6490.97	-6490.99	2.59	666185.59	433961.31	32°11'30.9684"N	103°47'46.0427"W	0.00	0.00	0.00	
18230.00†	90.000	179.630	11934.00	6590.97	-6590.98	3.24	666186.24	433861.32	32°11'29.9789"N	103°47'46.0409"W	0.00	0.00	0.00	
18330.00†	90.000	179.630	11934.00	6690.97	-6690.98	3.88	666186.88	433761.33	32°11'28.9893"N	103°47'46.0392"W	0.00	0.00	0.00	
18430.00†	90.000	179.630	11934.00	6790.97	-6790.98	4.53	666187.53	433661.34	32°11'27.9998"N	103°47'46.0375"W	0.00	0.00	0.00	
18530.00†	90.000	179.630	11934.00	6890.97	-6890.98	5.17	666188.17	433561.34	32°11'27.0102"N	103°47'46.0358"W	0.00	0.00	0.00	
18630.00†	90.000	179.630	11934.00	6990.97	-6990.98	5.82	666188.82	433461.35	32°11'26.0207"N	103°47'46.0341"W	0.00	0.00	0.00	
18730.00†	90.000	179.630	11934.00	7090.97	-7090.97	6.46	666189.46	433361.36	32°11'25.0311"N	103°47'46.0324"W	0.00	0.00	0.00	
18830.00†	90.000	179.630	11934.00	7190.97	-7190.97	7.11	666190.11	433261.37	32°11'24.0416"N	103°47'46.0307"W	0.00	0.00	0.00	
18930.00†	90.000	179.630	11934.00	7290.96	-7290.97	7.76	666190.76	433161.38	32°11'23.0520"N	103°47'46.0290"W	0.00	0.00	0.00	
19030.00†	90.000	179.630	11934.00	7390.96	-7390.97	8.40	666191.40	433061.39	32°11'22.0625"N	103°47'46.0273"W	0.00	0.00	0.00	
19130.00†	90.000	179.630	11934.00	7490.96	-7490.97	9.05	666192.05	432961.39	32°11'21.0729"N	103°47'46.0256"W	0.00	0.00	0.00	
19230.00†	90.000	179.630	11934.00	7590.96	-7590.96	9.69	666192.69	432861.40	32°11'20.0834"N	103°47'46.0239"W	0.00	0.00	0.00	
19330.00†	90.000	179.630	11934.00	7690.96	-7690.96	10.34	666193.34	432761.41	32°11'19.0938"N	103°47'46.0222"W	0.00	0.00	0.00	
19430.00†	90.000	179.630	11934.00	7790.96	-7790.96	10.98	666193.98	432661.42	32°11'18.1043"N	103°47'46.0205"W	0.00	0.00	0.00	
19530.00†	90.000	179.630	11934.00	7890.96	-7890.96	11.63	666194.63	432561.43	32°11'17.1147"N	103°47'46.0188"W	0.00	0.00	0.00	
19630.00†	90.000	179.630	11934.00	7990.96	-7990.95	12.28	666195.28	432461.43	32°11'16.1252"N	103°47'46.0171"W	0.00	0.00	0.00	
19730.00†	90.000	179.630	11934.00	8090.96	-8090.95	12.92	666195.92	432361.44	32°11'15.1356"N	103°47'46.0154"W	0.00	0.00	0.00	
19830.00†	90.000	179.630	11934.00	8190.96	-8190.95	13.57	666196.57	432261.45	32°11'14.1461"N	103°47'46.0137"W	0.00	0.00	0.00	
19930.00†	90.000	179.630	11934.00	8290.96	-8290.95	14.21	666197.21	432161.46	32°11'13.1565"N	103°47'46.0120"W	0.00	0.00	0.00	
20030.00†	90.000	179.630	11934.00	8390.96	-8390.95	14.86	666197.86	432061.47	32°11'12.1670"N	103°47'46.0103"W	0.00	0.00	0.00	
20130.00†	90.000	179.630	11934.00	8490.96	-8490.94	15.50	666198.50	431961.48	32°11'11.1774"N	103°47'46.0086"W	0.00	0.00	0.00	
20230.00†	90.000	179.630	11934.00	8590.96	-8590.94	16.15	666199.15	431861.48	32°11'10.1879"N	103°47'46.0069"W	0.00	0.00	0.00	
20330.00†	90.000	179.630	11934.00	8690.95	-8690.94	16.80	666199.80	431761.49	32°11'9.1983"N	103°47'46.0052"W	0.00	0.00	0.00	
20430.00†	90.000	179.630	11934.00	8790.95	-8790.94	17.44	666200.44	431661.50	32°11'8.2088"N	103°47'46.0035"W	0.00	0.00	0.00	
20530.00†	90.000	179.630	11934.00	8890.95	-8890.94	18.09	666201.09	431561.51	32°11'7.2192"N	103°47'46.0018"W	0.00	0.00	0.00	
20630.00†	90.000	179.630	11934.00	8990.95	-8990.93	18.73	666201.73	431461.52	32°11'6.2297"N	103°47'46.0001"W	0.00	0.00	0.00	
20730.00†	90.000	179.630	11934.00	9090.95	-9090.93	19.38	666202.38	431361.52	32°11'5.2401"N	103°47'45.9984"W	0.00	0.00	0.00	
20830.00†	90.000	179.630	11934.00	9190.95	-9190.93	20.03	666203.02	431261.53	32°11'4.2506"N	103°47'45.9967"W	0.00	0.00	0.00	
20930.00†	90.000	179.630	11934.00	9290.95	-9290.93	20.67	666203.67	431161.54	32°11'3.2610"N	103°47'45.9950"W	0.00	0.00	0.00	
21030.00†	90.000	179.630	11934.00	9390.95	-9390.93	21.32	666204.32	431061.55	32°11'2.2715"N	103°47'45.9933"W	0.00	0.00	0.00	
21130.00†	90.000	179.630	11934.00	9490.95	-9490.92	21.96	666204.96	430961.56	32°11'1.2819"N	103°47'45.9916"W	0.00	0.00	0.00	
21230.00†	90.000	179.630	11934.00	9590.95	-9590.92	22.61	666205.61	430861.57	32°11'0.2923"N	103°47'45.9899"W	0.00	0.00	0.00	
21330.00†	90.000	179.630	11934.00	9690.95	-9690.92	23.25	666206.25	430761.57	32°10'59.3028"N	103°47'45.9882"W	0.00	0.00	0.00	
21430.00†	90.000	179.630	11934.00	9790.95	-9790.92	23.90	666206.90	430661.58	32°10'58.3132"N	103°47'45.9865"W	0.00	0.00	0.00	
21530.00†	90.000	179.630	11934.00	9890.95	-9890.92	24.55	666207.54	430561.59	32°10'57.3237"N	103°47'45.9848"W	0.00	0.00	0.00	
21630.00†	90.000	179.630	11934.00	9990.94	-9990.91	25.19	666208.19	430461.60	32°10'56.3341"N	103°47'45.9831"W	0.00	0.00	0.00	
21730.00†	90.000	179.630	11934.00	10090.94	-10090.91	25.84	666208.84	430361.61	32°10'55.3446"N	103°47'45.9814"W	0.00	0.00	0.00	

Planned Wellpath Report

PLU 17 TWR #106H Permit Plan

REFERENCE WELLPATH IDENTIFICATION			
Operator	**XTO Energy Inc.**	Well	**PLU 17 TWR #106H**
Field	**Wolfcamp (Eddy Co., NM)**	API/Legal	
Facility	**PLU 17 TWR Pad 2**	Wellbore	**PLU 17 TWR #106H**
Slot	**PLU 17 TWR #106H**		

WELLPATH DATA (228 stations) † = interpolated, ‡ = extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	DLS [°/100ft]	Build Rate [°/100ft]	Turn Rate [°/100ft]	Comments
21807.81	90.000	179.630	11934.00	10168.76	-10168.72	26.34	666209.34	430283.80	32°10'54.5746"N	103°47'45.9800"W	0.00	0.00	0.00	LTP (330' FSL)
21830.00†	90.000	179.630	11934.00	10190.94	-10190.91	26.48	666209.48	430261.62	32°10'54.3550"N	103°47'45.9797"W	0.00	0.00	0.00	
21917.82	90.000	179.630	11934.00	10278.77	-10278.73	27.05	666210.05	430173.80	32°10'53.4860"N	103°47'45.9782"W	0.00	0.00	0.00	PBHl (200' FSL)

TARGETS

Name	MD [ft]	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
PLU 17 TWR #106H BHL	N/A	11934.00	-10278.73	26.80	**666209.80**	**430173.80**	32°10'53.4860"N	103°47'45.9811"W	rectangle
	2D Rectangle 9654.66 x 50.								
PLU 17 TWR #106H FTP	N/A	11934.00	-265.22	-35.30	**666147.70**	**440186.70**	32°12'32.5767"N	103°47'46.1216"W	point
PLU 17 TWR #106H LTP	N/A	11934.00	-10168.72	26.10	**666209.10**	**430283.80**	32°10'54.5746"N	103°47'45.9828"W	point

SURVEY PROGRAM - Ref Wellbore: PLU 17 TWR #106H Ref Wellpath: PLU 17 TWR #106H Permit Plan

Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment	Wellbore
30.00	11363.16	BH NaviTrak (2019) (Standard)		PLU 17 TWR #106H
11363.16	21917.82	OWSG MWD rev2 + IFR1 + Multi-Station Correction		PLU 17 TWR #106H

Additional data for EC transaction #513150 that would not fit on the form

32. Additional remarks, continued

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 and the supporting documentation submitted to the BLM, 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. 2. The first intermediate hole section drilled on the pad will be the deepest. All of the remaining hole sections will be the same depth or shallower. 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
Directional Plan

Revisions to Operator-Submitted EC Data for Sundry Notice #513150

	Operator Submitted	BLM Revised (AFMSS)
Sundry Type:	APDCH NOI	APDCH NOI
Lease:	NMLC061705B	NMLC061705B
Agreement:	NMNM71016X	891000303X (NMNM71016X)
Operator:	XTO PERMIAN OPERATING, LLC 6401 HOLIDAY HILL RD BLDG 5 MIDLAND, TX 79707 Ph: 432-620-4374	XTO PERMIAN OPERATING LLC 6401 HOLIDAY HILL ROAD BLDG 5 MIDLAND, TX 79707 Ph: 432.683 2277
Admin Contact:	KELLY KARDOS REGULATORY COORDINATOR E-Mail: kelly_kardos@xtoenergy.com Ph: 432-620-4374	KELLY KARDOS REGULATORY COORDINATOR E-Mail: kelly_kardos@xtoenergy.com Ph: 432-620-4374
Tech Contact:	KELLY KARDOS REGULATORY COORDINATOR E-Mail: kelly_kardos@xtoenergy.com Ph: 432-620-4374	KELLY KARDOS REGULATORY COORDINATOR E-Mail: kelly_kardos@xtoenergy.com Ph: 432-620-4374
Location: State: County:	 NM EDDY	 NM EDDY
Field/Pool:	PURPLE SAGE WOLFCAMP	PURPLE SAGE-WOLFCAMP (GAS)
Well/Facility:	POKER LAKE UNIT 17 TWR 106H Sec 20 T24S R31E Mer NMP NWNE 65FNL 1613FEL	POKER LAKE UNIT 17 TWR 106H Sec 20 T24S R31E NWNE 40FNL 1613FEL 32.209969 N Lat, 103.796509 W Lon