

U.S. Department of the Interior BUREAU OF LAND MANAGEMENT

Sundry Print Reports
08/29/2024

Well Name: OUTRIDER 28 FED Well Location: T24S / R32E / SEC 28 / County or Parish/State: LEA /

SESW / 32.18223 / -103.681391

Well Number: 402H Type of Well: OIL WELL Allottee or Tribe Name:

Lease Number: NMNM16353 Unit or CA Name: Unit or CA Number:

US Well Number: Operator: XTO ENERGY

INCORPORATED

## **Notice of Intent**

Sundry ID: 2745196

Type of Submission: Notice of Intent

Type of Action: APD Change

Date Sundry Submitted: 08/08/2023 Time Sundry Submitted: 09:01

Date proposed operation will begin: 08/08/2023

**Procedure Description:** \*\* First and Last Take Point Changes, Bottomhole Location Change, Drilling Plan Change, Casing/Cement Change XTO Energy Inc. requests permission to make the following changes to the original APD: No Additional Surface Disturbance FTP: fr/100'FSL & 843'FWL to 100'FSL & 825'FWL, NMNM016353 LTP: fr/100'FNL & 843'FWL to 100'FNL & 825'FWL, Section 21-T24S-R32E NMNM016353 Casing/Cement design per the attached drilling program. Attachments: C102 Drilling Program Directional Plan

## **NOI Attachments**

## **Procedure Description**

 $Outrider\_28\_Fed\_402H\_Sundry\_Attachments\_updated\_20230824111203.pdf$ 

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eceived by OCD: 8/29/2024 3:10:45 PM Well Name: OUTRIDER 28 FED

Well Location: T24S / R32E / SEC 28 /

SESW / 32.18223 / -103.681391

County or Parish/State: LEA/ 2 of

Well Number: 402H

Type of Well: OIL WELL

**Allottee or Tribe Name:** 

Lease Number: NMNM16353

**Unit or CA Name:** 

**Unit or CA Number:** 

**US Well Number:** 

**Operator: XTO ENERGY INCORPORATED** 

## **Conditions of Approval**

## **Additional**

Sec\_28\_24S\_32E\_NMP\_Sundry\_2745196\_Outrider\_28\_Fed\_402H\_COAs\_20230901140815.pdf

Sec\_28\_24S\_32E\_NMP\_Sundry\_2745196\_Outrider\_28\_Fed\_402H\_Eng\_Worksheet\_20230901140815.pdf

## **Operator**

I certify that the foregoing is true and correct. 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. Electronic submission of Sundry Notices through this system satisfies regulations requiring a

**Operator Electronic Signature: CASSIE EVANS** Signed on: AUG 24, 2023 11:12 AM

Name: XTO ENERGY INCORPORATED

Title: Regulatory Analyst

Street Address: 6401 HOLIDAY HILL ROAD BLDG 5

City: MIDLAND State: TX

Phone: (432) 218-3671

Email address: RANELL.KLEIN@EXXONMOBIL.COM

## **Field**

**Representative Name:** 

**Street Address:** 

City: State: Zip:

Phone:

**Email address:** 

## **BLM Point of Contact**

**BLM POC Name: CHRISTOPHER WALLS BLM POC Title:** Petroleum Engineer

**BLM POC Phone:** 5752342234 BLM POC Email Address: cwalls@blm.gov

**Disposition:** Approved Disposition Date: 09/05/2023

Signature: CHRISTOPHER WALLS

Page 2 of 2

Form 3160-5 (June 2019)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: October 31, 202

ΓHE INTERIOR	Exp
MANAGEMENT	5 Lease Serial No.

DOKI			NMNM16353				
Do not use this fo	OTICES AND REPO form for proposals to Use Form 3160-3 (A	to drill or to re	e-enter an	6. If Indian,	Allottee or	Γribe Name	
	TRIPLICATE - Other instru		•	7. If Unit of	CA/Agreen	nent, Name ar	nd/or No.
1. Type of Well		, ,					
Oil Well Gas W	Vell Other			8. Well Nan	ne and No.	UTRIDER 2	28 FED/402H
2. Name of Operator XTO ENERGY II	NCORPORATED			9. API Well			
3a. Address 15948 US HWY 77, ARI		3b. Phone No. (inc.) (325) 338-8339	lude area code)			ploratory Are 206M; BONE	
4. Location of Well (Footage, Sec., T.,R SEC 28/T24S/R32E/NMP	.,M., or Survey Description)			11. Country LEA/NM	or Parish, S	tate	
12. CHE	CK THE APPROPRIATE B	OX(ES) TO INDICA	ATE NATURE (	OF NOTICE, REPOR	T OR OTHE	R DATA	
TYPE OF SUBMISSION			TYPE	E OF ACTION			
✓ Notice of Intent	Acidize Alter Casing	Deepen Hydraulie	c Fracturing	Production (Start	/Resume)	Water S Well In	Shut-Off tegrity
Subsequent Report	Casing Repair	New Con		Recomplete		Other	
Final Abandonment Notice	Change Plans Convert to Injection	Plug and Plug Bac		Temporarily Abar Water Disposal	ndon		
the proposal is to deepen directional the Bond under which the work will completion of the involved operatio completed. Final Abandonment Not is ready for final inspection.)  ** First and Last Take Point Characteristics  XTO Energy Inc. requests permand Not Additional Surface Disturbation of the permander of th	the performed or provide thems. If the operation results in incest must be filed only after manges, Bottomhole Locar mission to make the followance  100FSL & 825FWL, NMN  100FNL & 825FWL, Section  1 information	e Bond No. on file we have a multiple complete all requirements, in tion Change, Drilling ving changes to the M016353  M016353  21-T24S-R32E N	vith BLM/BIA. I tion or recomple cluding reclama ng Plan Chang e original APD:	Required subsequent ition in a new interval, tion, have been comp	reports must , a Form 316 leted and the	be filed withi 0-4 must be f	in 30 days following filed once testing has been
4. I hereby certify that the foregoing is	,	inted/Typed)	Regulatory	Analyst			
CASSIE EVANS / Ph: (432) 218-36	5/1 	Tit	le				
Signature (Electronic Submissio	n)	Da	te		08/24/202	23	
	THE SPACE	FOR FEDER	AL OR STA	TE OFICE USE			
Approved by							
CHRISTOPHER WALLS / Ph: (575	5) 234-2234 / Approved		Petrole Title	eum Engineer	Da	te	09/05/2023
Conditions of approval, if any, are attach sertify that the applicant holds legal or e which would entitle the applicant to con-	quitable title to those rights		Office CAR	LSBAD			

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)

#### **GENERAL INSTRUCTIONS**

This form is designed for submitting proposals to perform certain well operations and reports of such operations when completed as indicated on Federal and Indian lands pursuant to applicable Federal law and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local area or regional procedures and practices, are either shown below, will be issued by or may be obtained from the local Federal office.

#### SPECIFIC INSTRUCTIONS

*Item 4* - Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult the local Federal office for specific instructions.

Item 13: Proposals to abandon a well and subsequent reports of abandonment should include such special information as is required by the local Federal office. In addition, such proposals and reports should include reasons for the abandonment; data on any former or present productive zones or other zones with present significant fluid contents not sealed off by cement or otherwise; depths (top and bottom) and method of placement of cement plugs; mud or other material placed below, between and above plugs; amount, size, method of parting of any casing, liner or tubing pulled and the depth to the top of any tubing left in the hole; method of closing top of well and date well site conditioned for final inspection looking for approval of the abandonment. If the proposal will involve **hydraulic fracturing operations**, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

#### **NOTICES**

The privacy Act of 1974 and the regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.

AUTHORITY: 30 U.S.C. 181 et seq., 351 et seq., 25 U.S.C. 396; 43 CFR 3160.

PRINCIPAL PURPOSE: The information is used to: (1) Evaluate, when appropriate, approve applications, and report completion of subsequent well operations, on a Federal or Indian lease; and (2) document for administrative use, information for the management, disposal and use of National Resource lands and resources, such as: (a) evaluating the equipment and procedures to be used during a proposed subsequent well operation and reviewing the completed well operations for compliance with the approved plan; (b) requesting and granting approval to perform those actions covered by 43 CFR 3162.3-2, 3162.3-3, and 3162.3-4; (c) reporting the beginning or resumption of production, as required by 43 CFR 3162.4-1(c)and (d) analyzing future applications to drill or modify operations in light of data obtained and methods used.

ROUTINE USES: Information from the record and/or the record will be transferred to appropriate Federal, State, local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecutions in connection with congressional inquiries or to consumer reporting agencies to facilitate collection of debts owed the Government.

EFFECT OF NOT PROVIDING THE INFORMATION: Filing of this notice and report and disclosure of the information is mandatory for those subsequent well operations specified in 43 CFR 3162.3-2, 3162.3-4.

The Paperwork Reduction Act of 1995 requires us to inform you that:

The BLM collects this information to evaluate proposed and/or completed subsequent well operations on Federal or Indian oil and gas leases.

Response to this request is mandatory.

The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

**BURDEN HOURS STATEMENT:** Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C St., N.W., Mail Stop 401 LS, Washington, D.C. 20240

(Form 3160-5, page 2)

## **Additional Information**

#### **Additional Remarks**

Casing/Cement design per the attached drilling program.

Attachments:

C102

Drilling Program

Directional Plan

#### **Location of Well**

0. SHL: SESW / 359 FSL / 2092 FWL / TWSP: 24S / RANGE: 32E / SECTION: 28 / LAT: 32.18223 / LONG: -103.681391 ( TVD: 0 feet, MD: 0 feet ) PPP: SWSW / 100 FSL / 843 FWL / TWSP: 24S / RANGE: 32E / SECTION: 28 / LAT: 32.181497 / LONG: -103.685428 ( TVD: 10640 feet, MD: 11200 feet ) BHL: NWNW / 50 FNL / 843 FWL / TWSP: 24S / RANGE: 32E / SECTION: 21 / LAT: 32.210125 / LONG: -103.685469 ( TVD: 10640 feet, MD: 21517 feet )

# PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME: XTO Energy Incorporated
WELL NAME & NO.: Outrider 28 Fed 402H
LOCATION: Sec 28-24S-32E-NMP
COUNTY: Lea County, New Mexico

Changes approved through engineering via **Sundry 2745196** on 09/01/2023. Any previous COAs not addressed within the updated COAs still apply.

COA

H <sub>2</sub> S	O No	Yes		
Potash / WIPP	None	Secretary	C R-111-P	□ WIPP
Cave / Karst	• Low	Medium	O High	Critical
Wellhead	Conventional	<ul><li>Multibowl</li></ul>	Both	O Diverter
Cementing	☐ Primary Squeeze	Cont. Squeeze	☐ EchoMeter	□ DV Tool
Special Req	Break Testing	☐ Water Disposal	$\square$ COM	□ Unit
Variance	▼ Flex Hose	☐ Casing Clearance	☐ Pilot Hole	☐ Capitan Reef
Variance	☐ Four-String	Offline Cementing	☐ Fluid-Filled	☐ Open Annulus
		Batch APD / Sundry		

#### A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the **Delaware Mountain Group**. As a result, the Hydrogen Sulfide area must meet all requirements from 43 CFR 3176, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

#### B. CASING

- 1. The **9-5/8** inch surface casing shall be set at approximately 958 feet (a minimum of 25 feet (Lea County) into the Rustler Anhydrite, above the salt, and below usable fresh water) 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 to surface. If cement does not circulate see B.1.a, c-d above.

Operator has proposed to pump down 9-5/8" X 7-5/8" annulus after primary cementing stage. Operator must run a CBL from TD of the 7-5/8" casing to surface. Submit results to the BLM.

If cement does not tie-back into the previous casing shoe, a third stage remediation BH may be performed. The appropriate BLM office shall be notified.

- 3. The minimum required fill of cement behind the 5-1/2 inch production casing is:
  - Cement should tie-back at least 300 feet into previous casing string. Operator shall provide method of verification. Operator is required to utilize additional cement as they do not meet the 0.422" clearance requirement listed within 43 CFR 3172.

#### 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. 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. Operator has proposed a 3M BOP in the sundry which is insufficient with an expected MASP of 3040 psi. They must use the required 5M BOP assembly that was included with their original submittal.
  - 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 43 CFR 3172 must be followed.

## D. SPECIAL REQUIREMENT (S)

### **BOPE Break Testing Variance**

- BOPE Break Testing is ONLY permitted for 5M BOPE or less. (Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP)
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- 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 (575-706-2779) prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (575-689-5981 Lea County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per Onshore Oil and Gas Order No. 2.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

#### **Offline Cementing**

Contact the BLM prior to the commencement of any offline cementing procedure.

## 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
     Email or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, BLM\_NM\_CFO\_DrillingNotifications@BLM.GOV (575) 361-2822

- ✓ Lea CountyCall the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 689-5981
- 1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
  - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
  - b. When the operator proposes to set surface casing with Spudder Rig
    - Notify the BLM when moving in and removing the Spudder Rig.
    - Notify the BLM when moving in the 2<sup>nd</sup> Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
    - BOP/BOPE test to be conducted per **43 CFR part 3170 Subpart 3172** 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. <u>Wait on cement (WOC) for Potash Areas:</u> After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the

following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log. The casing intergrity test can be done (prior to the cement setting up) immediately after bumping the plug.

- 3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
- 5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- 6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- 7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
- 8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.
- B. PRESSURE CONTROL
- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in 43 CFR part 3170 Subpart 3172 and API STD 53 Sec. 5.3.
- 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.
- 4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR part 3170 Subpart 3172 must be followed.
  - e. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- 5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
  - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
  - b. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)

- c. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to **43 CFR part 3170 Subpart 3172** with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (8 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- d. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- e. The results of the test shall be reported to the appropriate BLM office.
- f. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- g. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.
- h. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per 43 CFR part 3170 Subpart 3172.

#### 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.

Capitan Reef est top XXXX.

#### Outrider 28 Fed 402H

9 5/8	surface	csg in a	12 1/4	inch hole.		<u>Design I</u>	Factors			Surface	2	
Segment	#/ft	Grade		Coupling	Body	Collapse	Burst	Length	B@s	a-B	a-C	Weight
"A"	40.00	J	55	BTC	16.44	5.8	2.04	958	9	3.75	11.07	38,320
"B"				BTC				0				0
w/8.4#/g	g mud, 30min Sfc	Csg Test psig:	1,500	Tail Cmt	does not	circ to sfc.	Totals:	958				38,32
omparison o	of Proposed to	Minimum R	equired Ceme	ent Volumes								
Hole	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd				Min Di
Size	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE				Hole-Cp
12 1/4	0.3132	350	587	300	96	8.90	1052	2M				0.81
7 5/8		gida tha	0.5/8			Design I	Factors			Int 1	,	
Segment	casing in:	Grade	9 5/8	Coupling	Joint	Collapse	Burst	Length	B@s	a-B	a-C	Weigh
"A"	29.70	RY P	110	Flush Joint	4.70	2.77	1.87	4,000	5	3.24		118,80
"B"	29.70 29.70	HCL		Flush Joint	∞ 4.70	2.77	1.36	<b>5,839</b>	4	2.36		<b>173,4</b> 1
_		_	80	Flush John	ω	2.99	Totals:		4	2.30	5.49	292,2
_	g mud, 30min Sfc		intended to a	ahiawa a tan af	0	ft from su		9,839				,
		. ,		chieve a top of				958				overlap.
Hole Size	Annular	1 Stage	1 Stage	Min	1 Stage	Drilling	Calc	Req'd				Min Di
	Volume	Cmt Sx	CuFt Cmt	Cu Ft	% Excess	Mud Wt	MASP	BOPE				Hole-C
8 3/4	0.1005	630	1404	996	41	9.30	2917	3M				0.56
8 3/4	0.1005	630	1404	996	41	9.30	2917	3M				0.56
8 3/4 Class 'H' tail cr	0.1005 nt yld > 1.20			996	41			3M				0.56
8 3/4 Class 'H' tail cr Tail cmt 5 1/2	0.1005 nt yld > 1.20 casing in	side the	7 5/8			Design Fa	ctors	3M		Prod 1		
8 3/4 Class 'H' tail cr  Tail cmt 5 1/2 Segment	0.1005 nt yld > 1.20 casing in: #/ft	side the Grade	7 5/8	Coupling	Joint	Design Fac	ctors Burst	Length	B@s	a-B	a-C	Weigl
8 3/4 Class 'H' tail cr  Tail cmt 5 1/2 Segment "A"	0.1005 nt yld > 1.20 casing in	side the	7 5/8			Design Fa	ctors	<b>Length</b> 9,739	<b>B@s</b> 3			<b>Weigl</b> 194,78
8 3/4 Class 'H' tail or Tail cmt 5 1/2 Segment "A" "B"	0.1005 nt yld > 1.20  casing ins #/ft 20.00	side the <b>Grade</b> RY P	7 5/8	Coupling	Joint	Design Fac	ctors Burst 2.5	Length 9,739 0		a-B	a-C	Weigl 194,78
8 3/4 Class 'H' tail cr  Tail cmt 5 1/2 Segment "A" "B" w/8.4#/g	0.1005 nt yld > 1.20  casing ins #/ft 20.00 g mud, 30min Sfc	side the Grade RY P	<b>7 5/8</b> 110 2,143	Coupling Semi-Premiur	<b>Joint</b> 3.29	Design Fac Collapse 2.19	ctors Burst 2.5 Totals:	Length 9,739 0 9,739		a-B	a-C	Weigl 194,78 0 194,78
8 3/4 Class 'H' tail cr  Tail cmt 5 1/2 Segment "A" "B" w/8.4#/g	0.1005 nt yld > 1.20  casing ins #/ft 20.00 g mud, 30min Sfc The cement vo	side the Grade RY P	7 5/8 110 2,143 intended to a	Coupling Semi-Premiur	Joint 3.29	Design Fac Collapse 2.19	Ctors Burst 2.5 Totals:	Length 9,739 0 9,739 6039		a-B	a-C	Weigl 194,78 0 194,78 overlap.
8 3/4 Class 'H' tail cr  Tail cmt 5 1/2 Segment "A" "B" w/8.4#/g	0.1005 nt yld > 1.20  casing ins #/ft 20.00 g mud, 30min Sfc The cement vo	side the Grade RY P Cosg Test psig: colume(s) are 1 Stage	7 5/8 110 2,143 intended to a 1 Stage	Coupling Semi-Premiur	Joint 3.29  3800 1 Stage	Design Fac Collapse 2.19 ft from su Drilling	Ctors Burst 2.5 Totals: urface or a Calc	Length 9,739 0 9,739 6039 Req'd		a-B	a-C	Weigl 194,78 0 194,78 overlap. Min Di
Tail cmt 5 1/2 Segment "A" w/8.4#/g	0.1005 Int yld > 1.20  casing ins #/ft 20.00 g mud, 30min Sfc The cement vo Annular Volume	side the Grade RY P Cosg Test psignolume(s) are 1 Stage Cmt Sx	7 5/8 110 2,143 intended to a 1 Stage CuFt Cmt	Coupling Semi-Premiur chieve a top of Min Cu Ft	Joint 3.29  3800 1 Stage % Excess	Design Fac Collapse 2.19	Ctors Burst 2.5 Totals:	Length 9,739 0 9,739 6039		a-B	a-C	Weigl 194,78 0 194,78 overlap. Min Di: Hole-C;
Tail cmt 5 1/2 Segment "A" w/8.4#/g Hole Size 6 3/4	0.1005 nt yld > 1.20  casing ins #/ft 20.00 g mud, 30min Sfc The cement vo Annular Volume 0.0835	side the Grade RY P Cosg Test psig: colume(s) are 1 Stage	7 5/8 110 2,143 intended to a 1 Stage	Coupling Semi-Premiur	Joint 3.29  3800 1 Stage	Design Fac Collapse 2.19 ft from su Drilling	Ctors Burst 2.5 Totals: urface or a Calc	Length 9,739 0 9,739 6039 Req'd		a-B	a-C	Weigl 194,78 0 194,78 overlap. Min Di: Hole-C;
Tail cmt 5 1/2 Segment "A" w/8.4#/g Hole Size 6 3/4	0.1005 nt yld > 1.20  casing ins #/ft 20.00 g mud, 30min Sfc The cement vo Annular Volume 0.0835	side the Grade RY P Cosg Test psignolume(s) are 1 Stage Cmt Sx	7 5/8 110 2,143 intended to a 1 Stage CuFt Cmt	Coupling Semi-Premiur chieve a top of Min Cu Ft	Joint 3.29  3800 1 Stage % Excess	Design Fac Collapse 2.19 ft from su Drilling Mud Wt	Ctors Burst 2.5 Totals: urface or a Calc	Length 9,739 0 9,739 6039 Req'd		a-B	a-C	Weigl 194,78 0 194,78 overlap. Min Di: Hole-C;
Tail cmt 5 1/2 Segment "A" w/8.4#/s Hole Size 6 3/4 Class 'C' tail cr	0.1005 nt yld > 1.20  casing ins #/ft 20.00 g mud, 30min Sfc The cement vo Annular Volume 0.0835	side the Grade RY P Cosg Test psignolume(s) are 1 Stage Cmt Sx	7 5/8 110 2,143 intended to a 1 Stage CuFt Cmt	Coupling Semi-Premiur chieve a top of Min Cu Ft	Joint 3.29  3800 1 Stage % Excess	Design Fac Collapse 2.19 ft from su Drilling Mud Wt	Ctors Burst 2.5 Totals: urface or a Calc	Length 9,739 0 9,739 6039 Req'd		a-B	a-C	Weigl 194,78 0 194,78 overlap. Min Di: Hole-C;
Tail cmt 5 1/2 Segment "A" w/8.4#/g	0.1005 nt yld > 1.20  casing ins #/ft 20.00 g mud, 30min Sfc The cement vo Annular Volume 0.0835	side the Grade RY P Cosg Test psignolume(s) are 1 Stage Cmt Sx	7 5/8 110 2,143 intended to a 1 Stage CuFt Cmt 1277	Coupling Semi-Premiur chieve a top of Min Cu Ft	Joint 3.29  3800 1 Stage % Excess	Design Fac Collapse 2.19 ft from su Drilling Mud Wt 10.00	Ectors Burst 2.5 Totals: urface or a Calc MASP	Length 9,739 0 9,739 6039 Req'd	3	<b>a-B</b> 4.33	<b>a-C</b> 3.81	Weigh 194,78 0 194,78
Tail cmt 5 1/2 Segment "A" w/8.4#/s Hole Size 6 3/4 Class 'C' tail cr	0.1005 nt yld > 1.20  casing ins #/ft 20.00 g mud, 30min Sfc The cement vo Annular Volume 0.0835	side the Grade RY P Cosg Test psignolume(s) are 1 Stage Cmt Sx	7 5/8 110 2,143 intended to a 1 Stage CuFt Cmt	Coupling Semi-Premiur chieve a top of Min Cu Ft	Joint 3.29  3800 1 Stage % Excess	Design Fac Collapse 2.19 ft from su Drilling Mud Wt	Ectors Burst 2.5 Totals: urface or a Calc MASP	Length 9,739 0 9,739 6039 Req'd	3	a-B	<b>a-C</b> 3.81	Weigl 194,78 0 194,78 overlap. Min Dis
Tail cmt 5 1/2 Segment "A" w/8.4#/s Hole Size 6 3/4 Class 'C' tail cr	0.1005 Int yld > 1.20  casing institute yld   20.00  g mud, 30min Sfc The cement voor Annular Volume 0.0835 Int yld > 1.35	side the Grade RY P Cosg Test psig: colume(s) are 1 Stage Cmt Sx 830	7 5/8 110 2,143 intended to a 1 Stage CuFt Cmt 1277	Coupling Semi-Premiur  chieve a top of Min Cu Ft 554	Joint 3.29  3800 1 Stage % Excess 130	Design Far Collapse 2.19 ft from su Drilling Mud Wt 10.00	Totals: urface or a Calc MASP	Length 9,739 0 9,739 6039 Req'd BOPE	3	a-B 4.33	a-C 3.81	Weigl 194,78 0 194,78 overlap. Min Di: Hole-C;
Tail cmt 5 1/2 Segment "A" "B" w/8.4#/s Hole Size 6 3/4 Class 'C' tail cr	0.1005 Int yld > 1.20  casing institute yld   20.00  g mud, 30min Sfc The cement voor Annular Volume 0.0835 Int yld > 1.35	side the Grade RY P Cosg Test psig: colume(s) are 1 Stage Cmt Sx 830	7 5/8 110 2,143 intended to a 1 Stage CuFt Cmt 1277	Coupling Semi-Premiur  chieve a top of Min Cu Ft 554  Coupling	Joint 3.29  3800 1 Stage % Excess 130	Design Far Collapse 2.19 ft from su Drilling Mud Wt 10.00	Totals: urface or a Calc MASP	Length 9,739 0 9,739 6039 Req'd BOPE	3	a-B 4.33	a-C 3.81	Weigl 194,78 0 194,78 overlap. Min Di Hole-C  0.23
Tail cmt 5 1/2 Segment "A" "B" w/8.4#/s Hole Size 6 3/4 Class 'C' tail cr #N/A 0 Segment "A" "B"	0.1005 Int yld > 1.20  casing institute yld   20.00  g mud, 30min Sfc The cement voor Annular Volume 0.0835 Int yld > 1.35	side the Grade RY P Cosg Test psig: colume(s) are 1 Stage Cmt Sx 830  Grade	7 5/8 110 2,143 intended to a 1 Stage CuFt Cmt 1277	Coupling Semi-Premiur  chieve a top of Min Cu Ft 554  Coupling 0.00	Joint 3.29  3800 1 Stage % Excess 130	Design Far Collapse 2.19 ft from su Drilling Mud Wt 10.00	Totals: urface or a Calc MASP	Length 9,739 0 9,739 6039 Req'd BOPE	3	a-B 4.33	a-C 3.81	Weigl 194,78 0 194,78 overlap. Min Di Hole-C  0.23
Tail cmt 5 1/2 Segment "A" "B" w/8.4#/s Hole Size 6 3/4 Class 'C' tail cr #N/A 0 Segment "A" "B"	0.1005 Int yld > 1.20  casing institute the second of the case of	side the Grade RY P Cosg Test psig: colume(s) are 1 Stage Cmt Sx 830  Grade	7 5/8 110 2,143 intended to a 1 Stage CuFt Cmt 1277	Coupling Semi-Premiur  chieve a top of Min Cu Ft 554  Coupling 0.00 0.00	Joint 3.29  3800 1 Stage % Excess 130	Design Far Collapse 2.19 ft from su Drilling Mud Wt 10.00	Totals:  Factors Burst 2.5  Totals:  In tale:  Totals:  Totals:  Totals:	Length 9,739 0 9,739 6039 Req'd BOPE Length 0	3	a-B 4.33	a-C 3.81 sing> a-C	Weigi 194,73 0 194,73 overlap. Min Di Hole-C 0.23 Weigi 0 0
8 3/4 Class 'H' tail cr  Tail cmt 5 1/2 Segment "A" "B" w/8.4#/s Hole Size 6 3/4 Class 'C' tail cr #N/A 0 Segment "A" "B" w/8.4#/s	0.1005 Int yld > 1.20  casing institute the second of the case of	side the Grade RY P Cosg Test psig: colume(s) are 1 Stage Cmt Sx 830  Grade Cosg Test psig: column (s) are cont Sx column (s) are cont Sx column (s) are cont Sx column (s) are column (s)	7 5/8  110  2,143 intended to a 1 Stage CuFt Cmt 1277	Coupling Semi-Premiur  chieve a top of Min Cu Ft 554  Coupling 0.00 0.00  TOC intended	Joint 3.29  3800 1 Stage % Excess 130  #N/A	Design Far Collapse 2.19  ft from su Drilling Mud Wt 10.00  Design I Collapse	Totals: Totals: MASP  Factors Burst  Totals:	Length 9,739 0 9,739 6039 Req'd BOPE  Length 0 0 #N/A	3	a-B 4.33	a-C 3.81 sing> a-C	Weigl 194,78 0 194,78 overlap. Min Di: Hole-Cp 0.23 Weigl 0 0 overlap.
Tail cmt 5 1/2 Segment "A" w/8.4#/s Hole Size 6 3/4 Class 'C' tail cr #N/A 0 Segment "A" "B"	0.1005 Int yld > 1.20  casing institute the second of the case of	side the Grade RY P Cosg Test psig: colume(s) are 1 Stage Cmt Sx 830  Grade	7 5/8 110 2,143 intended to a 1 Stage CuFt Cmt 1277	Coupling Semi-Premiur  chieve a top of Min Cu Ft 554  Coupling 0.00 0.00	Joint 3.29  3800 1 Stage % Excess 130  #N/A	Design Far Collapse 2.19 ft from su Drilling Mud Wt 10.00	Totals:  Factors Burst 2.5  Totals:  In tale:  Totals:  Totals:  Totals:	Length 9,739 0 9,739 6039 Req'd BOPE  Length 0 0	3	a-B 4.33	a-C 3.81 sing> a-C	Weigl 194,78 0 194,78 overlap. Min Di Hole-C  0.23 Weigl 0 0

Carlsbad Field Office 9/1/2023

#N/A

<u>District I</u>
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
<u>District II</u>
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

District III 1000 Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170 District IV

District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3460 Fax: (505) 476-3462 State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102 Revised August 1, 2011 Submit one copy to appropriate District Office

☐ AMENDED REPORT

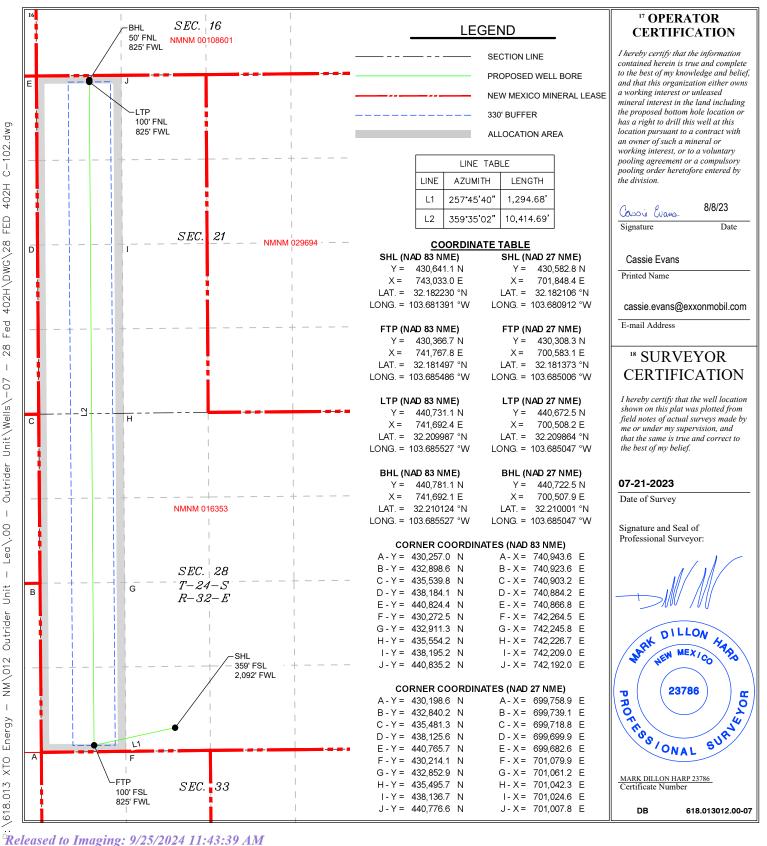
WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number	r	<sup>2</sup> Pool Code	<sup>3</sup> Pool Name		
30-025-		97899	WC-25 G-06 S253206; BONE SPRING		
<sup>4</sup> Property Code			roperty Name RIDER 28 FED	<sup>6</sup> Well Number <b>402H</b>	
<sup>7</sup> OGRID No. <b>005380</b>			perator Name ENERGY, INC.	<sup>9</sup> Elevation <b>3,528</b> '	

<sup>10</sup> Surface Location UL or lot no. Section Township North/South line Feet from the East/West line Feet from the County **24S** 32E **SOUTH** 2,092 **WEST** LEA Ν 28 "Bottom Hole Location If Different From Surface

UL or lot no. East/West line Section Township Feet from the County Range Lot Idn Feet from the North/South line 21 **24S** 32E 50 **NORTH** 825 WEST **LEA** <sup>3</sup> Joint or Infill 12 Dedicated Acres <sup>4</sup>Consolidation Code <sup>5</sup>Order No.

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



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

XTO Energy Inc.
Outrider 28 Fed 402H
Projected TD: 21725' MD / 10523' TVD
SHL: 359' FSL & 2092' FWL , Section 28, T24S, R32E
BHL: 50' FNL & 825' FWL , Section 21, T24S, R32E
Lea County, NM

#### 1. Geologic Name of Surface Formation

A. Quaternary

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

Formation	Well Depth (TVD)	Water/Oil/Gas
Rustler	858'	Water
Top of Salt	1169'	Water
Base of Salt	4498'	Water
Delaware	4708'	Water
Brushy Canyon	7194'	Water/Oil/Gas
Bone Spring	8636'	Water
1st Bone Spring	9438'	Water/Oil/Gas
2nd Bone Spring	10013'	Water/Oil/Gas
Target/Land Curve	10523'	Water/Oil/Gas

<sup>\*\*\*</sup> 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 9.625 inch casing @ 958' (211' above the salt) and circulating cement back to surface. The intermediate will isolate from the top of salt down to the next casing seat by setting 7.625 inch casing at 9838.5' and cemented to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 21725 MD/TD and 5.5 inch production casing will be set at TD and cemented back up in the intermediate shoe (estimated TOC 9538.5 feet).

#### 3. Casing Design

Hole Size	Depth	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
12.25	0' – 958'	9.625	40	J-55	втс	New	1.69	6.57	16.44
8.75	0' – 4000'	7.625	29.7	RY P-110	Flush Joint	New	3.28	2.92	1.91
8.75	4000' – 9838.5'	7.625	29.7	HC L-80	Flush Joint	New	2.39	2.43	2.34
6.75	0' - 9738.5'	5.5	20	RY P-110	Semi-Premium	New	1.26	2.31	2.16
6.75	9738.5' - 21725'	5.5	20	RY P-110	Semi-Flush	New	1.26	2.14	2.16

- · XTO requests the option to utilize a spudder rig (Atlas Copco RD20 or Equivalent) to set and cement surface casing per this Sundry
- · XTO requests to not utilize centralizers in the curve and lateral
- · 7.625 Collapse analyzed using 50% evacuation based on regional experience.
- 5.5 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
- · XTO requests the option to use 5" BTC Float equipment for the the production casing

<sup>\*\*\*</sup> Groundwater depth 40' (per NM State Engineers Office).

#### Wellhead:

- Permanent Wellhead Multibowl System

  A. Starting Head: 11" 10M top flange x 9-5/8" bottom

  B. Tubing Head: 11" 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
  - $\cdot \ \text{Wellhead Manufacturer representative will not be present for BOP test plug installation}$

#### 4. Cement Program

#### Surface Casing: 9.625, 40 New BTC, J-55 casing to be set at +/- 958'

Lead: 220 sxs EconoCem-HLTRRC (mixed at 10.5 ppg, 1.87 ft3/sx, 10.13 gal/sx water) Tail: 130 sxs Class C + 2% CaCl (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)

Top of Cement: Surface

Compressives: 12-hr = 900 psi 24 hr = 1500 psi

#### 2nd Intermediate Casing: 7.625, 29.7 New casing to be set at +/- 9838.5'

st Stage

Optional Lead: 390 sxs Class C (mixed at 10.5 ppg, 2.77 ft3/sx, 15.59 gal/sx water)

TOC: Surface

Tail: 240 sxs Class C (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water)

TOC: Brushy Canyon @ 7194

Compressives: 12-hr = 900 psi 24 hr = 1150 psi

2nd Stage

Lead: 0 sxs Class C (mixed at 12.9 ppg, 2.16 ft3/sx, 9.61 gal/sx water) Tail: 810 sxs Class C (mixed at 14.8 ppg, 1.33 ft3/sx, 6.39 gal/sx water)

Top of Cement: 0

Compressives: 12-hr = 900 psi 24 hr = 1150 psi

XTO requests to pump a two stage cement job on the 7-5/8" intermediate casing string with the first stage being pumped conventionally with the calculated top of cement at the Brush Canyon (7194') and the second stage performed as a bradenhead squeeze with planned cement from the Brushy Canyon to surface. If cement is not visually confirmed to circulate to surface, the final cement top after the second stage job will be verified by Echo-meter. If necessary, a top out consisting of 1,500 sack of Class C cement + 3% Salt + 1% PreMag-M + 6% Bentonite Gel (2.30 yld, 12.91 ppg) will be executed as a contingency. If cement is still unable to circulate to surface, another Echo-meter run will be performed for cement top verification.

XTO will report to the BLM the volume of fluid (limited to 5 bbls) used to flush intermediate casing valves following backside cementing procedures.

XTO requests to pump an Optional Lead if well conditions dictate in an attempt to bring cement inside the first intermediate casing. If cement reaches the desired height, the BLM will be notified and the second stage bradenhead squeeze and subsequent TOC verification will be negated.

XTO requests the option to conduct the bradenhead squeeze and TOC verification offline as per standard approval from BLM when unplanned remediation is needed and batch drilling is approved. In the event the bradenhead is conducted, we will ensure the first stage cement job is cemented properly and the well is static with floats holding and no pressure on the csg annulus as with all other casing strings where batch drilling operations occur before moving off the rig. The TA cap will also be installed per Cactus procedure and pressure inside the casing will be monitored via the valve on the TA cap as per standard batch drilling ops.

#### Production Casing: 5.5, 20 New Semi-Flush, RY P-110 casing to be set at +/- 21725'

Lead: 20 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement: 9538.5 feet
Tail: 840 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement: 10038.5 feet
Compressives: 12-hr = 800 psi 24 hr = 1500 psi

XTO requests the option to offline cement and remediate (if needed) surface and intermediate casing strings where batch drilling is approved and if unplanned remediation is needed. XTO will ensure well is static with no pressure on the csg annulus, as with all other casing strings where batch drilling operations occur before moving off the rig. The TA cap will also be installed when applicable per Cactus procedure and pressure inside the casing will be monitored via the valve on the TA cap as per standard batch drilling ops. Offline cement operations will then be conducted after the rig is moved off the current well to the next well in the batch sequence.

#### 5. Pressure Control Equipment

Once the permanent WH is installed on the 9.625 casing, the blow out preventer equipment (BOP) will consist of a 13-5/8" minimum 3M Hydril and a 13-5/8" minimum 3M Double Ram BOP. MASP should not exceed 2883 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).

All BOP testing will be done by an independent service company. Annular pressure tests will be limited to 50% of the working pressure. When nippling up on the 9.625, 3M bradenhead and flange, the BOP test will be limited to 3000 psi. When nippling up on the 7.625, the BOP will be tested to a minimum of 3000 psi. All BOP tests will include a low pressure test as per BLM regulations. The 3M 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 casing and ensure that the well is cemented properly (unless approval is given for offline cementing) and the well is static. With floats holding, no pressure on the csg annulus, and the installation of a 10K TA cap as per Cactus recommendations, XTO will contact the BLM to skid the rig to drill the remaining wells on the pad. Once surface and both 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 2. When skidding to drill an intermediate section that does not penetrate into the Wolfcamp.

#### 6. Proposed Mud Circulation System

INTERVAL	Hole Size	Mud Type	MW	Viscosity	Fluid Loss
INTERVAL	Flore Size	Mud Type	(ppg)	(sec/qt)	(cc)
0' - 958'	12.25	FW/Native	8.4-8.9	35-40	NC
958' - 9838.5'	8.75	FW / Cut Brine / Direct Emulsion	8.8-9.3	30-32	NC
9838.5' - 21725'	6.75	ОВМ	9.5-10	50-60	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 9-5/8" surface casing with brine solution. A 9.7 ppg - 10.2 ppg cut brine mud will be used while drilling through the salt formation. 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 9.625 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 170 to 190 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 5198 psi.

#### 10. Anticipated Starting Date and Duration of Operations

Anticipated spud date will be after BLM approval. Move in operations and drilling is expected to take 40 days.

## Long Lead\_Well Planning

Lea County
Outrider 28 Fed Pad B
402H

OH

Plan: Plan 1

## **Standard Planning Report**

25 July, 2023

#### Planning Report

LMRKPROD3 Database:

Company: Long Lead\_Well Planning

Project: Lea County

Outrider 28 Fed Pad B Site: Well: 402H

Wellbore: OH Plan 1 Design:

**Local Co-ordinate Reference:** 

**TVD Reference:** MD Reference: North Reference:

**Survey Calculation Method:** 

Well 402H

RKB(3528+30) @ 3558.0usft RKB(3528+30) @ 3558.0usft

Grid

Minimum Curvature

Project Lea County

US State Plane 1927 (Exact solution) Map System: NAD 1927 (NADCON CONUS) Geo Datum:

New Mexico East 3001 Map Zone:

System Datum:

Mean Sea Level

Outrider 28 Fed Pad B Site

Northing: 430,612.60 usft Site Position: Latitude: 32° 10' 55.878 N From: Мар Easting: 701,848.20 usft Longitude: 103° 40' 51.282 W

**Position Uncertainty:** 3.0 usft Slot Radius: 13-3/16 "

Well 402H

**Well Position** 

0.0 usft +N/-S Northing: +E/-W

0.0 usft

Easting:

430,582.80 usft 701,848.40 usft Latitude: Longitude:

32° 10' 55.583 N 103° 40' 51.282 W

**Position Uncertainty** 0.0 usft Wellhead Elevation: usft **Ground Level:** 3,558.0 usft

0.35 **Grid Convergence:** 

ОН Wellbore

Declination Magnetics **Model Name** Sample Date Dip Angle Field Strength (°) (°) (nT) IGRF2020 47,239.56808317 7/18/2023 6.35 59.78

Design Plan 1

Audit Notes:

Phase: PLAN Tie On Depth: 0.0 Version:

Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (usft) (usft) (usft) (°) 359.59 0.0 0.0 0.0

**Plan Survey Tool Program** Date 7/25/2023

21,578.0

**Depth From** Depth To

0.0

(usft) (usft) Survey (Wellbore)

**Tool Name** Plan 1 (OH) XOM\_R2OWSG MWD+IFR1+

OWSG MWD + IFR1 + Multi-St

Remarks

#### Planning Report

Database: LMRKPROD3

Company: Long Lead\_Well Planning

Project: Lea County
Site: Outrider 28 Fed Pad B

Well: 402H
Wellbore: OH
Design: Plan 1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well 402H

RKB(3528+30) @ 3558.0usft RKB(3528+30) @ 3558.0usft

Grid

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.00	0.00	0.00	0.00	
2,069.6	17.39	231.83	2,056.3	-80.9	-103.0	2.00	2.00	0.00	231.83	
6,556.1	17.39	231.83	6,337.7	-909.7	-1,157.2	0.00	0.00	0.00	0.00	
7,425.7	0.00	0.00	7,194.0	-990.7	-1,260.1	2.00	-2.00	0.00	180.00	
10,038.5	0.00	0.00	9,806.8	-990.7	-1,260.1	0.00	0.00	0.00	0.00	
11,163.5	90.00	359.59	10,523.0	-274.5	-1,265.3	8.00	0.00	0.00	359.59	402H_FTP
21,528.0	90.00	359.59	10,523.0	10,089.7	-1,340.2	0.00	0.00	0.00	0.00	402H_LTP
21,578.0	90.00	359.59	10,523.0	10,139.7	-1,340.6	0.00	0.00	0.00	0.00	402H_BHL

## Planning Report

Database: LMRKPROD3

Company: Long Lead\_Well Planning

Project: Lea County

Site: Outrider 28 Fed Pad B

Well: 402H
Wellbore: OH
Design: Plan 1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

**Survey Calculation Method:** 

Well 402H

RKB(3528+30) @ 3558.0usft RKB(3528+30) @ 3558.0usft

Grid

jn:	riaii i								
ned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
402H_SHL									
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	0.00
1,300.0	2.00	231.83	1,300.0	-1.1	-1.4	-1.1	2.00	2.00	0.00
1,400.0	4.00	231.83	1,399.8	-4.3	-5.5	-4.3	2.00	2.00	0.00
1,500.0	6.00	231.83	1,499.5	-9.7	-12.3	-9.6	2.00	2.00	0.00
1,600.0	8.00	231.83	1,598.7	-17.2	-21.9	-17.1	2.00	2.00	0.00
1,700.0	10.00	231.83	1,697.5	-26.9	-34.2	-26.7	2.00	2.00	0.00
1,800.0	12.00	231.83	1,795.6	-38.7	-49.2	-38.3	2.00	2.00	0.00
1,900.0	14.00	231.83	1,893.1	-52.6	-66.9	-52.1	2.00	2.00	0.00
2,000.0	16.00	231.83	1,989.6	-68.6	-87.2	-68.0	2.00	2.00	0.00
2,069.6	17.39	231.83	2,056.3	-80.9	-103.0	-80.2	2.00	2.00	0.00
2,100.0	17.39	231.83	2,085.3	-86.6	-110.1	-85.8	0.00	0.00	0.00
2,200.0	17.39	231.83	2,180.7	-105.0	-133.6	-104.1	0.00	0.00	0.00
2,300.0	17.39	231.83	2,276.2	-123.5	-157.1	-122.4	0.00	0.00	0.00
2,400.0	17.39	231.83	2,371.6	-142.0	-180.6	-140.7	0.00	0.00	0.00
2,500.0	17.39	231.83	2,467.0	-160.5	-204.1	-159.0	0.00	0.00	0.00
2,600.0	17.39	231.83	2,467.0 2,562.5	-160.5 -178.9	-204.1 -227.6	-159.0 -177.3	0.00	0.00	0.00
2,700.0	17.39	231.83	2,657.9	-176.9 -197.4	-227.6 -251.1	-177.3 -195.6	0.00	0.00	0.00
2,800.0	17.39	231.83	2,753.3	-215.9	-274.6	-213.9	0.00	0.00	0.00
2,900.0	17.39	231.83	2,733.3	-234.3	-274.0	-213.9	0.00	0.00	0.00
3,000.0	17.39	231.83	2,944.2	-252.8	-321.6	-250.5	0.00	0.00	0.00
3,100.0	17.39	231.83	3,039.6	-271.3	-345.1	-268.8	0.00	0.00	0.00
3,200.0	17.39	231.83	3,135.0	-289.8	-368.6	-287.1	0.00	0.00	0.00
3,300.0	17.39	231.83	3,230.5	-308.2	-392.1	-305.4	0.00	0.00	0.00
3,400.0	17.39	231.83	3,325.9	-326.7	-415.6	-323.7	0.00	0.00	0.00
3,500.0	17.39	231.83	3,421.3	-345.2	-439.1	-342.0	0.00	0.00	0.00
3,600.0	17.39	231.83	3,516.7	-363.7	-462.6	-360.3	0.00	0.00	0.00
3,700.0	17.39	231.83	3,612.2	-382.1	-486.1	-378.6	0.00	0.00	0.00
3,800.0	17.39	231.83	3,707.6	-400.6	-509.6	-396.9	0.00	0.00	0.00
3,900.0	17.39	231.83	3,803.0	-419.1	-533.1	-415.3	0.00	0.00	0.00
4,000.0	17.39	231.83	3,898.5	-437.5	-556.6	-433.6	0.00	0.00	0.00
4,100.0	17.39	231.83	3,993.9	-456.0	-580.1	-451.9	0.00	0.00	0.00
4,200.0	17.39	231.83	4,089.3	-474.5	-603.5	-470.2	0.00	0.00	0.00
4,300.0	17.39	231.83	4,184.7	-493.0	-627.0	-488.5	0.00	0.00	0.00
4,400.0	17.39	231.83	4,280.2	-511.4	-650.5	-506.8	0.00	0.00	0.00
4,500.0	17.39	231.83	4,375.6	-529.9	-674.0	-525.1	0.00	0.00	0.00
4,600.0	17.39	231.83	4,471.0	-548.4	-697.5	-543.4	0.00	0.00	0.00
4,700.0	17.39	231.83	4,566.5	-566.9	-721.0	-561.7	0.00	0.00	0.00
4,800.0	17.39	231.83	4,661.9	-585.3	-744.5	-580.0	0.00	0.00	0.00
4,900.0	17.39	231.83	4,757.3	-603.8	-768.0	-598.3	0.00	0.00	0.00
5,000.0	17.39	231.83	4,852.7	-622.3	-791.5	-616.6	0.00	0.00	0.00
5,100.0	17.39	231.83	4,948.2	-640.8	-815.0	-634.9	0.00	0.00	0.00
5,200.0	17.39	231.83	5,043.6	-659.2	-838.5	-653.2	0.00	0.00	0.00
5,300.0	17.39	231.83	5,139.0	-677.7	-862.0	-671.5	0.00	0.00	0.00
5,400.0	17.39	231.83	5,234.5	-696.2	-885.5	-689.8	0.00	0.00	0.00
5,500.0	17.39	231.83	5,329.9	-714.6	-909.0	-708.1	0.00	0.00	0.00
5,600.0	17.39	231.83	5,425.3	-733.1	-932.5	-726.4 744.7	0.00	0.00	0.00
5,700.0 5,800.0	17.39	231.83	5,520.7	-751.6	-956.0 -979.5	-744.7	0.00	0.00	0.00
5,800.0	17.39 17.39	231.83 231.83	5,616.2 5,711.6	-770.1 -788.5	-979.5 -1,003.0	-763.0 -781.3	0.00 0.00	0.00 0.00	0.00 0.00
6,000.0	17.39	231.83	5,807.0	-807.0	-1,026.5	-799.6	0.00	0.00	0.00
6,100.0	17.39	231.83	5,902.5	-825.5	-1,050.0	-817.9	0.00	0.00	0.00
6,200.0	17.39	231.83	5,997.9	-844.0	-1,073.5	-836.3	0.00	0.00	0.00

## Planning Report

Database: LMRKPROD3

Company: Long Lead\_Well Planning

Project: Lea County

Site: Outrider 28 Fed Pad B

Well: 402H
Wellbore: OH
Design: Plan 1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well 402H

RKB(3528+30) @ 3558.0usft RKB(3528+30) @ 3558.0usft

Grid

anned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
6,300.0	17.39	231.83	6.093.3	-862.4	-1,097.0	-854.6	0.00	0.00	0.00
6,400.0	17.39	231.83	6,188.7	-880.9	-1,120.5	-872.9	0.00	0.00	0.00
6,500.0	17.39	231.83	6,284.2	-899.4	-1,144.0	-891.2	0.00	0.00	0.00
6,556.1	17.39	231.83	6,337.7	-909.7	-1,157.2	-901.4	0.00	0.00	0.00
6,600.0 6,700.0	16.51	231.83 231.83	6,379.7 6,476.1	-917.6 -934.2	-1,167.2 -1,188.3	-909.3 -925.6	2.00 2.00	-2.00 -2.00	0.00
6,800.0	14.51 12.51	231.83	6,573.3	-934.2 -948.6	-1,100.3 -1,206.6	-925.6 -940.0	2.00	-2.00 -2.00	0.00 0.00
					-1,200.0				
6,900.0	10.51	231.83	6,671.3	-961.0	-1,222.3	-952.2	2.00	-2.00	0.00
7,000.0	8.51	231.83	6,769.9	-971.2	-1,235.3	-962.3	2.00	-2.00	0.00
7,100.0	6.51	231.83	6,869.0	-979.2	-1,245.6	-970.3	2.00	-2.00	0.00
7,200.0	4.51	231.83	6,968.6	-985.2	-1,253.1	-976.2	2.00	-2.00	0.00
7,300.0	2.51	231.83	7,068.4	-989.0	-1,258.0	-979.9	2.00	-2.00	0.00
7,400.0	0.51	231.83	7,168.3	-990.6	-1,260.0	-981.6	2.00	-2.00	0.00
7,425.7	0.00	0.00	7,194.0	-990.7	-1,260.1	-981.6	2.00	-2.00	0.00
10,038.5	0.00	0.00	9,806.8	-990.7	-1,260.1	-981.6	0.00	0.00	0.00
10,100.0	4.92	359.59	9,868.2	-988.0	-1,260.1	-979.0	8.00	8.00	0.00
10,200.0	12.92	359.59	9,967.0	-972.5	-1,260.3	-963.5	8.00	8.00	0.00
10,300.0	20.92	359.59	10,062.5	-943.5	-1,260.5	-934.4	8.00	8.00	0.00
10,300.0	20.92	359.59 359.59	10,062.5	-943.5 -901.4	-1,260.5 -1,260.8	-934.4 -892.3	8.00	8.00 8.00	0.00
10,500.0	36.92	359.59	10,133.2	-901.4 -847.1	-1,261.2	-838.0	8.00	8.00	0.00
10,600.0	44.92	359.59	10,312.5	-781.6	-1,261.2	-772.6	8.00	8.00	0.00
10,700.0	52.92	359.59	10,378.2	-706.3	-1,262.2	-697.2	8.00	8.00	0.00
10,800.0	60.92	359.59	10,432.7	-622.6	-1,262.8	-613.5	8.00	8.00	0.00
10,900.0	68.92	359.59	10,475.1	-532.1	-1,263.4	-523.0	8.00	8.00	0.00
11,000.0	76.92	359.59	10,504.4	-436.6	-1,264.1	-427.5	8.00	8.00	0.00
11,100.0	84.92	359.59	10,520.2	-337.9	-1,264.8	-328.8	8.00	8.00	0.00
11,163.5	90.00	359.59	10,523.0	-274.5	-1,265.3	-265.4	8.00	8.00	0.00
402H_FTP									
11,200.0	90.00	359.59	10,523.0	-238.0	-1,265.6	-228.9	0.00	0.00	0.00
11,300.0	90.00	359.59	10,523.0	-138.0	-1,266.3	-128.9	0.00	0.00	0.00
11,400.0	90.00	359.59	10,523.0	-38.0	-1,267.0	-28.9	0.00	0.00	0.00
11,500.0	90.00	359.59	10,523.0	62.0	-1,267.7	71.1	0.00	0.00	0.00
11,600.0	90.00	359.59	10,523.0	162.0	-1,268.5	171.1	0.00	0.00	0.00
11,700.0	90.00	359.59	10,523.0	262.0	-1,269.2	271.1	0.00	0.00	0.00
11,800.0	90.00	359.59	10,523.0	362.0	-1,269.2 -1,269.9	371.1	0.00	0.00	0.00
11,900.0	90.00	359.59	10,523.0	462.0	-1,209.9	471.1	0.00	0.00	0.00
12,000.0	90.00	359.59	10,523.0	562.0	-1,270.0	571.1	0.00	0.00	0.00
12,100.0	90.00	359.59	10,523.0	662.0	-1,272.1	671.1	0.00	0.00	0.00
12,200.0	90.00	359.59	10,523.0	762.0	-1,272.8	771.1	0.00	0.00	0.00
12,300.0	90.00	359.59	10,523.0	862.0	-1,273.5	871.1	0.00	0.00	0.00
12,400.0	90.00	359.59	10,523.0	962.0	-1,274.2	971.1	0.00	0.00	0.00
12,500.0	90.00	359.59	10,523.0 10,523.0	1,062.0	-1,275.0 -1,275.7	1,071.1	0.00	0.00	0.00
12,600.0	90.00	359.59		1,162.0	-1,275.7	1,171.1	0.00	0.00	0.00
12,700.0	90.00	359.59	10,523.0	1,262.0	-1,276.4	1,271.1	0.00	0.00	0.00
12,800.0	90.00	359.59	10,523.0	1,362.0	-1,277.1	1,371.1	0.00	0.00	0.00
12,900.0	90.00	359.59	10,523.0	1,462.0	-1,277.8	1,471.1	0.00	0.00	0.00
13,000.0	90.00	359.59	10,523.0	1,562.0	-1,278.6	1,571.1	0.00	0.00	0.00
13,100.0	90.00	359.59	10,523.0	1,662.0	-1,279.3	1,671.1	0.00	0.00	0.00
13,200.0	90.00	359.59	10,523.0	1,762.0	-1,280.0	1,771.1	0.00	0.00	0.00
13,300.0	90.00	359.59	10,523.0	1,862.0	-1,280.7	1,871.1	0.00	0.00	0.00
13,400.0	90.00	359.59	10,523.0	1,962.0	-1,281.5	1,971.1	0.00	0.00	0.00
	90.00	359.59	10,523.0	2,062.0	-1,282.2	2,071.1	0.00	0.00	0.00
13,500.0	90.00	000.00			1,202.2	2,071.1	0.00		0.00

## Planning Report

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Project: Lea County

Site: Outrider 28 Fed Pad B

Well: 402H
Wellbore: OH
Design: Plan 1

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

**Survey Calculation Method:** 

Well 402H

RKB(3528+30) @ 3558.0usft RKB(3528+30) @ 3558.0usft

Grid

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
13,700.0	90.00	359.59	10,523.0	2,262.0	-1,283.6	2,271.1	0.00	0.00	0.00
13,800.0	90.00	359.59	10,523.0	2,362.0	-1,284.4	2,371.1	0.00	0.00	0.00
13,900.0	90.00	359.59	10,523.0	2,461.9	-1,285.1	2,471.1	0.00	0.00	0.00
14,000.0	90.00	359.59	10,523.0	2,561.9	-1,285.8	2,571.1	0.00	0.00	0.00
14,100.0	90.00	359.59	10,523.0	2,661.9	-1,286.5	2,671.1	0.00	0.00	0.00
14,200.0	90.00	359.59	10,523.0	2,761.9	-1,287.2	2,771.1	0.00	0.00	0.00
14,300.0	90.00	359.59	10,523.0	2,861.9	-1,288.0	2,871.1	0.00	0.00	0.00
14,400.0	90.00	359.59	10,523.0	2,961.9	-1,288.7	2,971.1	0.00	0.00	0.00
14,500.0	90.00	359.59	10,523.0	3,061.9	-1,289.4	3,071.1	0.00	0.00	0.00
14,600.0	90.00	359.59	10,523.0	3,161.9	-1,290.1	3,171.1	0.00	0.00	0.00
14,700.0	90.00	359.59	10,523.0	3,261.9	-1,290.9	3,271.1	0.00	0.00	0.00
14,800.0	90.00	359.59	10,523.0	3,361.9	-1,291.6	3,371.1	0.00	0.00	0.00
14,900.0	90.00	359.59	10,523.0	3,461.9	-1,292.3	3,471.1	0.00	0.00	0.00
15,000.0	90.00	359.59	10,523.0	3,561.9	-1,293.0	3,571.1	0.00	0.00	0.00
15,100.0	90.00	359.59	10,523.0	3,661.9	-1,293.7	3,671.1	0.00	0.00	0.00
15 200 0	00.00	350.50	10,523.0	2.764.0	1 204 5	2 774 4	0.00	0.00	0.00
15,200.0 15,300.0	90.00 90.00	359.59 359.59	10,523.0	3,761.9 3,861.9	-1,294.5 -1,295.2	3,771.1 3,871.1	0.00	0.00	0.00
15,400.0	90.00	359.59	10,523.0	3,961.9	-1,295.2	3,971.1	0.00	0.00	0.00
15,500.0	90.00	359.59	10,523.0	4,061.9	-1,295.9	4,071.1	0.00	0.00	0.00
15,600.0	90.00	359.59	10,523.0	4,161.9	-1,290.0	4,071.1	0.00	0.00	0.00
15,700.0	90.00	359.59	10,523.0	4,261.9	-1,298.1	4,271.1	0.00	0.00	0.00
15,800.0	90.00	359.59	10,523.0	4,361.9	-1,298.8	4,371.1	0.00	0.00	0.00
15,900.0	90.00	359.59	10,523.0	4,461.9	-1,299.5	4,471.1	0.00	0.00	0.00
16,000.0	90.00	359.59	10,523.0	4,561.9	-1,300.3	4,571.1	0.00	0.00	0.00
16,100.0	90.00	359.59	10,523.0	4,661.9	-1,301.0	4,671.1	0.00	0.00	0.00
16,200.0	90.00	359.59	10,523.0	4,761.9	-1,301.7	4,771.1	0.00	0.00	0.00
16,300.0	90.00	359.59	10,523.0	4,861.9	-1,302.4	4,871.1	0.00	0.00	0.00
16,400.0	90.00	359.59	10,523.0	4,961.9	-1,303.1	4,971.1	0.00	0.00	0.00
16,500.0	90.00	359.59	10,523.0	5,061.9	-1,303.9	5,071.1	0.00	0.00	0.00
16,600.0	90.00	359.59	10,523.0	5,161.9	-1,304.6	5,171.1	0.00	0.00	0.00
16,700.0	90.00	359.59	10,523.0	5,261.9	-1,305.3	5,271.1	0.00	0.00	0.00
16,800.0	90.00	359.59	10,523.0	5,361.9	-1,306.0	5,371.1	0.00	0.00	0.00
16,900.0	90.00	359.59	10,523.0	5,461.9	-1,306.8	5,471.1	0.00	0.00	0.00
17,000.0	90.00	359.59	10,523.0	5,561.9	-1,300.5	5,571.1	0.00	0.00	0.00
17,100.0	90.00	359.59	10,523.0	5,661.9	-1,308.2	5,671.1	0.00	0.00	0.00
			,						
17,200.0	90.00	359.59	10,523.0	5,761.9	-1,308.9	5,771.1	0.00	0.00	0.00
17,300.0	90.00	359.59	10,523.0	5,861.9	-1,309.6	5,871.1	0.00	0.00	0.00
17,400.0	90.00	359.59	10,523.0	5,961.9	-1,310.4	5,971.1	0.00	0.00	0.00
17,500.0	90.00	359.59	10,523.0	6,061.9	-1,311.1 1 211 0	6,071.1	0.00	0.00	0.00
17,600.0	90.00	359.59	10,523.0	6,161.9	-1,311.8	6,171.1	0.00	0.00	0.00
17,700.0	90.00	359.59	10,523.0	6,261.8	-1,312.5	6,271.1	0.00	0.00	0.00
17,800.0	90.00	359.59	10,523.0	6,361.8	-1,313.3	6,371.1	0.00	0.00	0.00
17,900.0	90.00	359.59	10,523.0	6,461.8	-1,314.0	6,471.1	0.00	0.00	0.00
18,000.0	90.00	359.59	10,523.0	6,561.8	-1,314.7	6,571.1	0.00	0.00	0.00
18,100.0	90.00	359.59	10,523.0	6,661.8	-1,315.4	6,671.1	0.00	0.00	0.00
18,200.0	90.00	359.59	10,523.0	6,761.8	-1,316.2	6,771.1	0.00	0.00	0.00
18,300.0	90.00	359.59	10,523.0	6,861.8	-1,316.9	6,871.1	0.00	0.00	0.00
18,400.0	90.00	359.59	10,523.0	6,961.8	-1,317.6	6,971.1	0.00	0.00	0.00
18,500.0	90.00	359.59	10,523.0	7,061.8	-1,318.3	7,071.1	0.00	0.00	0.00
18,600.0	90.00	359.59	10,523.0	7,161.8	-1,319.0	7,171.1	0.00	0.00	0.00
18,700.0	90.00	359.59	10,523.0	7,261.8	-1,319.8 1,320.5	7,271.1	0.00	0.00	0.00
18,800.0 18,900.0	90.00	359.59	10,523.0 10,523.0	7,361.8	-1,320.5	7,371.1	0.00	0.00	0.00
	90.00	359.59 350.50	10,523.0	7,461.8	-1,321.2 1,321.0	7,471.1 7,571.1	0.00 0.00	0.00	0.00
19,000.0	90.00	359.59	10,523.0	7,561.8	-1,321.9	7,571.1	0.00	0.00	0.00

#### Planning Report

Database: LMRKPROD3

Company: Long Lead\_Well Planning

Outrider 28 Fed Pad B

Project: Lea County

 Well:
 402H

 Wellbore:
 OH

 Design:
 Plan 1

Site:

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

Survey Calculation Method:

Well 402H

RKB(3528+30) @ 3558.0usft RKB(3528+30) @ 3558.0usft

Grid

nned Survey										
Measured Depth (usft)	Inclination Azimuth		Vertical Depth +N/-S (usft) (usft)		+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
19,100.0	90.00	359.59	10,523.0	7,661.8	-1,322.7	7,671.1	0.00	0.00	0.00	
19,200.0 19,300.0 19,400.0 19,500.0 19,600.0	90.00 90.00 90.00 90.00 90.00	359.59 359.59 359.59 359.59 359.59	10,523.0 10,523.0 10,523.0 10,523.0 10,523.0	7,761.8 7,861.8 7,961.8 8,061.8 8,161.8	-1,323.4 -1,324.1 -1,324.8 -1,325.5 -1,326.3	7,771.1 7,871.1 7,971.1 8,071.1 8,171.1	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	
19,700.0 19,800.0 19,900.0 20,000.0 20,100.0	90.00 90.00 90.00 90.00 90.00	359.59 359.59 359.59 359.59 359.59	10,523.0 10,523.0 10,523.0 10,523.0 10,523.0	8,261.8 8,361.8 8,461.8 8,561.8 8,661.8	-1,327.0 -1,327.7 -1,328.4 -1,329.2 -1,329.9	8,271.1 8,371.1 8,471.1 8,571.1 8,671.1	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	
20,200.0 20,300.0 20,400.0 20,500.0 20,600.0	90.00 90.00 90.00 90.00 90.00	359.59 359.59 359.59 359.59 359.59	10,523.0 10,523.0 10,523.0 10,523.0 10,523.0	8,761.8 8,861.8 8,961.8 9,061.8 9,161.8	-1,330.6 -1,331.3 -1,332.0 -1,332.8 -1,333.5	8,771.1 8,871.1 8,971.1 9,071.1 9,171.1	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	
20,700.0 20,800.0 20,900.0 21,000.0 21,100.0	90.00 90.00 90.00 90.00 90.00	359.59 359.59 359.59 359.59 359.59	10,523.0 10,523.0 10,523.0 10,523.0 10,523.0	9,261.8 9,361.8 9,461.8 9,561.8 9,661.8	-1,334.2 -1,334.9 -1,335.7 -1,336.4 -1,337.1	9,271.1 9,371.1 9,471.1 9,571.1 9,671.1	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	
21,200.0 21,300.0 21,400.0 21,500.0 21,528.0	90.00 90.00 90.00 90.00 90.00	359.59 359.59 359.59 359.59 359.59	10,523.0 10,523.0 10,523.0 10,523.0 10,523.0	9,761.8 9,861.8 9,961.8 10,061.7 10,089.7	-1,337.8 -1,338.6 -1,339.3 -1,340.0 -1,340.2	9,771.1 9,871.1 9,971.1 10,071.1 10,099.0	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	
402H_LTP										
21,578.0 <b>402H_BHL</b>	90.00	359.59	10,523.0	10,139.7	-1,340.6	10,149.0	0.00	0.00	0.00	

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
402H_SHL - plan hits target cen - Rectangle (sides W		0.00	0.0	0.0	0.0	430,582.80	701,848.40	32° 10' 55.583 N	103° 40' 51.282 W
402H_BHL - plan misses target	0.00 center by 0.1u	0.00 usft at 21578	10,523.0 .0usft MD (1	10,139.7 0523.0 TVD,	-1,340.5 10139.7 N, -13	440,722.50 440.6 E)	700,507.90	32° 12' 36.004 N	103° 41' 6.168 W
402H_FTP - plan hits target cen - Point	0.00 ter	0.00	10,523.0	-274.5	-1,265.3	430,308.30	700,583.10	32° 10' 52.943 N	103° 41' 6.024 W
402H_LTP - plan hits target cen - Point	0.00 ter	0.00	10,523.0	10,089.7	-1,340.2	440,672.50	700,508.20	32° 12' 35.509 N	103° 41' 6.168 W

ALL DIMENSIONS APPROXIMA

## CACTUS WELLHEAD LLC

20" x 9-5/8" x 7-5/8" x 5-1/2" MBU-T-CFL-R-DBLO Wellhead With 11" 10M x 7-1/16" 15M CTH-DBLHPS Tubing Head And 9-5/8", 7-5/8" & 5-1/2" Pin Bottom Mandrel Casing Hangers

XTO ENERGY INC DELAWARE BASIN								
DRAWN	VJK	31MAR						
APPRV								

DRAWING NO. HBE0000479

FORMATION CONTAINED HEREIN IS THE PROPERTY OF CACTUS WELLHEAD, LLC. REPRODUCTION, SCLOSURE, OR USE THEREOF IS PERMISSIBLE ONLY AS PROVIDED BY CONTRACT OR AS EXPRESSLY SUTHORIZED BY CACTUS WELLHEAD, LLC.

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**State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division** 1220 S. St Francis Dr. **Santa Fe, NM 87505** 

CONDITIONS

Action 379326

#### **CONDITIONS**

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	379326
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

#### CONDITIONS

Created By	Condition	Condition Date
pkautz	IF ON ANY STRING CEMENT DOES NOT CIRCULATE, A CBL MUST BE RUN ON THAT STRING OF CASING.	9/25/2024
pkautz	WHEN PERFOMING A BRADENHEAD CEMENT JOB A CBL MUST BE RUN BEFORE AND AFTER THE BRADENEAD CEMENT JOB.	9/25/2024