eceived by OCD: 0/7/2024 6:44:29 AM U.S. Department of the Interior BUREAU OF LAND MANAGEMENT		Sundry Print Report 06/07/2024
Well Name: JAMES RANCH UNIT DI 7 SAWTOOTH	Well Location: T23S / R31E / SEC 6 / LOT 4 / 32.340052 / -103.821956	County or Parish/State: EDDY / NM
Well Number: 706H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM02953C	Unit or CA Name: JAMES RANCH UNIT	Unit or CA Number: NMNM70965X
US Well Number: 3001554875	<b>Operator:</b> XTO PERMIAN OPERATING LLC	

## **Notice of Intent**

Sundry ID: 2785653

Type of Submission: Notice of Intent

Date Sundry Submitted: 04/17/2024

Date proposed operation will begin: 05/15/2024

Type of Action: APD Change Time Sundry Submitted: 02:25

**Procedure Description:** XTO Permian Operating, LLC. respectfully requests approval to make changes to the approved APD as follows: SHL, FTP, LTP, BHL and proposed total depth FROM: TO: SHL: 260' FNL & 1129' FWL of Section 6-T23S-R31E 260' FNL & 1069' FWL of Section 6-T23S-R31E FTP: 700' FSL & 1650' FEL of Section 31-T22S-R31E 330' FNL & 990' FWL of Section 6-T23S-R31E PPP 1-2: 2637' FNL & 1653' FEL of Section 6-T23S-R31E 2637' FNL & 990' FWL of Section 6-T23S-R31E PPP 1-3: 0' FSL & 1656' FEL of Section 6-T23S-R31E 0' FNL & 990' FWL of Section 7-T23S-R31E LTP: 2540' FNL & 1650' FEL of Section 18-T23S-R31E 2532' FNL & 990' FWL of Section 18-T23S-R31E BHL: 2590' FNL & 1650' FEL of Section 18-T23S-R31E 2582' FNL & 990' FWL of Section 18-T23S-R31E Proposed total depth will change from 24622' MD; 9976' TVD (Bone Spring) to 23498' MD; 10982' TVD (Bone Spring). Casing and cement program has been updated and is in the attached drilling plan. ATTACHMENTS: C-102, Drilling Plan, Directional Plan, MBS, Casing Spec Sheets

## **NOI Attachments**

## **Procedure Description**

Wedge\_441\_\_5.500\_0.361\_P110\_CY\_12142023\_20240417142446.pdf

Talon\_HTQ\_RD\_5.5000\_20.0000\_0.3610\_\_P110\_RY\_20240417142446.pdf

Wedge\_461\_\_5.500\_0.361\_P110\_CY\_01292024\_20240417142446.pdf

Freedom\_5.5000\_20.0000\_0.3610\_\_P110\_RY\_20240417142421.pdf

4\_String\_Slimhole\_SDT\_3301\_1\_20240417142401.pdf

JRU\_DI\_7\_Sawtooth\_706H\_Directional\_Plan\_8\_29\_2023\_20240417142345.pdf

Received by OCD: 6/7/2024 6:44:29 AM Well Name: JAMES RANCH UNIT DI 7 SAWTOOTH	Well Location: T23S / R31E / SEC 6 / LOT 4 / 32.340052 / -103.821956	County or Parish/State: EDDY 7 of 24
Well Number: 706H	Type of Well: OIL WELL	Allottee or Tribe Name:
Lease Number: NMNM02953C	Unit or CA Name: JAMES RANCH UNIT	Unit or CA Number: NMNM70965X
<b>US Well Number:</b> 3001554875	<b>Operator:</b> XTO PERMIAN OPERATING LLC	

JRU\_DI7\_Sawtooth\_706H\_Drilling\_Plan\_20240417142335.pdf

State: TX

State:

JRU\_DI\_7\_SAWTOOTH\_706H\_C\_102\_signed\_4\_3\_2024\_20240417142323.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: RANELL (RUSTY) KLEIN

Signed on: MAY 10, 2024 09:03 AM

Name: XTO PERMIAN OPERATING LLC

Title: Regulatory Analyst

Street Address: 6401 HOLIDAY HILL ROAD BLDG 5

City: MIDLAND

Phone: (432) 620-6700

Email address: RANELL.KLEIN@EXXONMOBIL.COM

## Field

Representative Name: Street Address: City: Phone: Email address:

BLM POC Name: CHRISTOPHER WALLS BLM POC Phone: 5752342234 Disposition: Approved Signature: Chris Walls BLM POC Title: Petroleum Engineer BLM POC Email Address: cwalls@blm.gov

Zip:

Disposition Date: 06/05/2024

BLM Point of Contact

## Received by OCD: 6/7/2024 6:44:29 AM

	/#021 0.1					1 480 0 05
Form 3160-5 (June 2019)		UNITED STATE PARTMENT OF THE I EAU OF LAND MAN	NTERIOR		ON	RM APPROVED //B No. 1004-0137 res: October 31, 2021
Do not	use this f		DRTS ON WELLS to drill or to re-enter an PD) for such proposals.		6. If Indian, Allottee or	Tribe Name
	SUBMIT IN	TRIPLICATE - Other instru	uctions on page 2		7. If Unit of CA/Agreer	nent, Name and/or No.
1. Type of Well Oil Well	Gas V	Vell Other			8. Well Name and No.	
2. Name of Operator					9. API Well No.	
3a. Address			3b. Phone No. <i>(include area code)</i>		10. Field and Pool or E	xploratory Area
4. Location of Well (Foot	age, Sec., T.,F	R.,M., or Survey Description,	)		11. Country or Parish, S	itate
	12. CHE	CK THE APPROPRIATE B	OX(ES) TO INDICATE NATURE C	DF NOTI	CE, REPORT OR OTHI	ER DATA
TYPE OF SUBMIS	SSION		TYPE	E OF ACT	ΓΙΟΝ	
Notice of Intent		Acidize	Deepen [ Hydraulic Fracturing ]	_	uction (Start/Resume) amation	Water Shut-Off Well Integrity
Subsequent Report		Casing Repair Change Plans	New Construction		mplete porarily Abandon	Other
Final Abandonmen	t Notice	Convert to Injection	Plug Back	Wate	r Disposal	
the proposal is to deep the Bond under which completion of the invo	pen directiona the work wil olved operation ndonment No	Illy or recomplete horizontal be perfonned or provide th ons. If the operation results in	ly, give subsurface locations and mea e Bond No. on file with BLM/BIA. F n a multiple completion or recomplet	asured an Required tion in a	nd true vertical depths of subsequent reports must new interval, a Form 310	k and approximate duration thereof. If all pertinent markers and zones. Attach be filed within 30 days following 50-4 must be filed once testing has been e operator has detennined that the site

14. I hereby certify that the foregoing is true and correct. Name ( <i>Printed/Typed</i> )			
	Title		
Signature	Date		
THE SPACE FOR FEDE	RAL OR STATE	OFICE USE	
Approved by			
	Title		Date
Conditions of approval, if any, are attached. Approval of this notice does not warrant certify that the applicant holds legal or equitable title to those rights in the subject leas which would entitle the applicant to conduct operations thereon.			
Title 18 U.S.C Section 1001 and Title 43 U.S.C Section 1212, make it a crime for any any false, fictitious or fraudulent statements or representations as to any matter within		willfully to make to any d	lepartment or agency of the United States

(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, 3162.3-3, 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

## **Additional Information**

## **Additional Remarks**

program has been updated and is in the attached drilling plan.

ATTACHMENTS: C-102, Drilling Plan, Directional Plan, MBS, Casing Spec Sheets

## Location of Well

0. SHL: LOT 4 / 260 FNL / 1129 FWL / TWSP: 23S / RANGE: 31E / SECTION: 6 / LAT: 32.340052 / LONG: -103.821956 (TVD: 0 feet, MD: 0 feet ) PPP: SWSE / 700 FSL / 1650 FEL / TWSP: 22S / RANGE: 31E / SECTION: 31 / LAT: 32.342677 / LONG: -103.813803 (TVD: 9882 feet, MD: 10800 feet ) PPP: SWNE / 2637 FNL / 1653 FEL / TWSP: 23S / RANGE: 31E / SECTION: 6 / LAT: 32.333504 / LONG: -103.813785 (TVD: 9909 feet, MD: 14800 feet ) PPP: SWSW / 0 FSL / 1656 FEL / TWSP: 23S / RANGE: 31E / SECTION: 6 / LAT: 32.326245 / LONG: -103.81377 (TVD: 9927 feet, MD: 17400 feet ) BHL: SWNE / 2590 FNL / 1650 FEL / TWSP: 23S / RANGE: 31E / SECTION: 18 / LAT: 32.30461 / LONG: -103.813727 (TVD: 9976 feet, MD: 24622 feet )

### Received by OCD: 6/7/2024 6:44:29 AM

Tenaris

# Ten



= Tenaris		_		Couplin	Ig	Pipe Body	
TenarisHydril We 441 <sup>®</sup>	edge	•		Body: W	d: <b>Grey</b> nd: -	Grade: P110-CY 1st Band: White 2nd Band: Grey 3rd Band: - 4th Band: - 5th Band: - 6th Band: -	
Outside Diameter	5.500 in.	Wall Thickness		0.361 in.	Grade	P1	10-CY
Min. Wall Thickness	87.50 %	Pipe Body Drift	AF	Pl Standard	Туре	C	asing

#### **Pipe Body Data**

**Connection OD Option** 

Geometry			
Nominal OD	5.500 in.	Wall Thickness	0.361 in.
Nominal Weight	20.00 lb/ft	Plain End Weight	19.83 lb/ft
Drift	4.653 in.	OD Tolerance	API
Nominal ID	4.778 in.		

Dorformonoc

REGULAR

#### Performance

Body Yield Strength	641 x1000 lb
Min. Internal Yield Pressure	12,640 psi
SMYS	110,000 psi
Collapse Pressure	11,100 psi

#### **Connection Data**

Geometry	
Connection OD	5.852 in.
Coupling Length	8.714 in.
Connection ID	4.778 in.
Make-up Loss	3.780 in.
Threads per inch	3.40
Connection OD Option	Regular

Performance	
Tension Efficiency	81.50 %
Joint Yield Strength	522 x1000 lb
Internal Pressure Capacity	12,640 psi
Compression Efficiency	81.50 %
Compression Strength	522 x1000 lb
Max. Allowable Bending	72.59 °/100 ft
External Pressure Capacity	11,100 psi

Make-Up Torques	
Minimum	15,000 ft-Ib
Optimum	16,000 ft-Ib
Maximum	19,200 ft-Ib
Operation Limit Torques	
Operating Torque	32,000 ft-Ib
Yield Torque	38,000 ft-Ib
Buck-On	
Minimum	19,200 ft-Ib

#### Notes

This connection is fully interchangeable with: Wedge 441® - 5.5 in. - 0.304 (17.00) in. (lb/ft) Wedge 461® - 5.5 in. - 0.304 (17.00) / 0.361 (20.00) / 0.415 (23.00) in. (lb/ft) Connections with Dopeless® Technology are fully compatible with the same connection in its doped version

For the lastest performance data, always visit our website: www.tenaris.com For further information on concepts indicated in this datasheet, download the Datasheet Manual from www.tenaris.com

Tenaris has issued this document for general information only, and the information in this document, including, without limitation, any pictures, drawings or designs ("Information") is not intended to constitute professional or any other type of advice or recommendation and is provided on an "as is" basis. No warranty is given. Tenaris has not independently verified any information –if any-provided by the user in connection with, or for the purpose of, the Information contained hereunder. The use of the Information is at user's own risk and Tenaris does not assume any responsibility or liability of any kind for any loss, damage or injury resulting from, or in connection with any Information contained hereunder or any use thereof. The Information is subject to change or modification without notice. Tenaris's products and services are subject to Tenaris's and conditions or otherwise to the terms resulting from the respective contracts of sale or services, as the case may be, between petitioner and Tenaris. For more complete information please contact a Tenaris's representative or visit our website at www.tenaris.com . ©Tenaris 2023. All rights reserved.

Page 7 of 24

# U. S. Steel Tubular Products 5.500" 20.00lb/ft (0.361" Wall)

#### 11/29/2021 4:16:04

) P1	10 RY	USS-TALON HTQ™	RD
,			

MECHANICAL PROPERTIES	Pipe	USS-TALON HTQ™ RD		[6]
Minimum Yield Strength	110,000		psi	
Maximum Yield Strength	125,000		psi	
Minimum Tensile Strength	125,000		psi	
DIMENSIONS	Pipe	USS-TALON HTQ™ RD		
Outside Diameter	5.500	5.900	in.	
Wall Thickness	0.361		in.	
Inside Diameter	4.778	4.778	in.	
Standard Drift	4.653	4.653	in.	
Alternate Drift			in.	
Nominal Linear Weight, T&C	20.00		lb/ft	
Plain End Weight	19.83		lb/ft	
SECTION AREA	Pipe	USS-TALON HTQ™ RD		
Critical Area	5.828	5.828	sq. in.	
Joint Efficiency		100.0	%	[2]
PERFORMANCE	Pipe	USS-TALON HTQ™ RD		
Minimum Collapse Pressure	11,100	11,100	psi	
Minimum Internal Yield Pressure	12,640	12,640	psi	
Minimum Pipe Body Yield Strength	641,000		lb	
Joint Strength		641,000	lb	
Compression Rating		641,000	lb	
Reference Length		21,370	ft	[5]
Maximum Uniaxial Bend Rating		91.7	deg/100 ft	[3]
MAKE-UP DATA	Pipe	USS-TALON HTQ™ RD		
Make-Up Loss		5.58	in.	
Minimum Make-Up Torque		17,000	ft-lb	[4]
			6 U	[4]
Maximum Make-Up Torque		20,000	ft-lb	[4]

## Notes

- 1. Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness, and Specified Minimum Yield Strength (SMYS).
- 2. Joint efficiencies are calculated by dividing the connection critical area by the pipe body area.

3. Uniaxial bend rating shown is structural only.

4. Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).

- 5. Reference length is calculated by Joint Strength divided by Nominal Linear Weight, T&C with a 1.5 Safety factor.
- 6. Coupling must meet minimum mechanical properties of the pipe.

### Legal Notice

All material contained in this publication is for general information only. This material should not therefore be used or relied upon for any specific application without independent competent professional examination and verification of accuracy, suitability and applicability. Anyone making use of this material does so at their own risk and assumes any and all liability resulting from such use. U. S. Steel disclaims any and all expressed or implied warranties of fitness for any general or particular application.

U. S. Steel Tubular Products 460 Wildwood Forest Drive, Suite 300S Spring, Texas 77380 1-877-893-9461 connections@uss.com www.usstubular.com

### Received by OCD: 6/7/2024 6:44:29 AM

Tenaris

TenarisHydril Wedge 461<sup>®</sup>



Coupling

Grade: P110-CY Body: White 1st Band: Grey 2nd Band: -3rd Band: -

110,000 psi

11,100 psi

23,100 ft-lb

Pipe Body
Grade: P110-CY
1st Band: White
2nd Band: Grey
3rd Band: -
4th Band: -
5th Band: -
6th Band: -

Outside Diameter	5.500 in.	Wall Thickness	0.361 in.	Grade	P110-CY
Min. Wall Thickness	87.50 %	Pipe Body Drift	API Standard	Туре	Casing
Connection OD Option	REGULAR				

#### Pipe Body Data

Geometry	
Nominal OD	5.500 in.
Nominal Weight	20.00 lb/ft
Drift	4.653 in.
Nominal ID	4.778 in.

Wall Thickness	0.361 in
Plain End Weight	19.83 lb/fi
OD Tolerance	API

Performance

Body Yield Strength	641 x1000 lb
Min. Internal Yield Pressure	12,640 psi

Performance

**Collapse Pressure** 

SMYS

Maximum

#### **Connection Data**

Geometry	
Connection OD	6.300 in.
Coupling Length	7.714 in.
Connection ID	4.778 in.
Make-up Loss	3.775 in.
Threads per inch	3.40
Connection OD Option	Regular

Tension Efficiency	100 %
Joint Yield Strength	641 x1000 lb
Internal Pressure Capacity	12,640 psi
Compression Efficiency	100 %
Compression Strength	641 x1000 lb
Max. Allowable Bending	92 °/100 ft
External Pressure Capacity	11,100 psi
Coupling Face Load	290,000 lb

Make-Up Torques	
Minimum	17,000 ft-lb
Optimum	18,000 ft-lb
Maximum	21,600 ft-lb
Operation Limit Torques	
Operating Torque	39,000 ft-Ib
Yield Torque	46,000 ft-lb
Buck-On	
Minimum	21,600 ft-lb

#### Notes

This connection is fully interchangeable with: Wedge 441® - 5.5 in. - 0.304 (17.00) / 0.361 (20.00) in. (lb/ft) Wedge 461® - 5.5 in. - 0.304 (17.00) / 0.415 (23.00) / 0.476 (26.00) in. (lb/ft) Connections with Dopeless® Technology are fully compatible with the same connection in its doped version In October 2019, TenarisHydril Wedge XP® 2.0 was renamed TenarisHydril Wedge 461™. Product dimensions and properties remain identical and both connections are fully interchonacoble. interchangeable

For the lastest performance data, always visit our website: www.tenaris.com For further information on concepts indicated in this datasheet, download the Datasheet Manual from www.tenaris.com

Tenaris has issued this document for general information only, and the information in this document, including, without limitation, any pictures, drawings or designs ("Information") is not intended to constitute professional or any other type of advice or recommendation and is provided on an "as is" basis. No warranty is given. Tenaris has not independently verified any information—if any-provided by the user in connection with, or for the purpose of, the Information contained hereunder. The use of the Information is a user's own risk and Tenaris does not assume any responsibility or liability of any loss, damage or injury resulting from, or in connection with any Information contained hereunder. The use of the Information contained hereunder or any use thereof. The Information in this document is subject to change or modification without notice. Tenaris's products and services are subject to Tenaris's and conditions or otherwise to the terms resulting from the respective contracts of sale or services, as the case may be, between petitioner and Tenaris. For more complete information please contact a Tenaris's representative or visit our website at www.tenaris.com . ©Tenaris 2024.All rights reserved.

## U. S. Steel Tubular Products 5.500" 20.00lb/ft (0.361" Wall) P110 RY USS-FREEDOM HTQ<sup>®</sup>

MECHANICAL PROPERTIES	Pipe	USS-FREEDOM HTQ <sup>®</sup>		
Minimum Yield Strength	110,000		psi	
Maximum Yield Strength	125,000		psi	
Minimum Tensile Strength	125,000		psi	
DIMENSIONS	Pipe	USS-FREEDOM HTQ <sup>®</sup>		
Outside Diameter	5.500	6.300	in.	
Wall Thickness	0.361		in.	
Inside Diameter	4.778	4.778	in.	
Standard Drift	4.653	4.653	in.	
Alternate Drift			in.	
Nominal Linear Weight, T&C	20.00		lb/ft	
Plain End Weight	19.83		lb/ft	
SECTION AREA	Pipe	USS-FREEDOM HTQ <sup>®</sup>		
Critical Area	5.828	5.828	sq. in.	
Joint Efficiency		100.0	%	
PERFORMANCE	Pipe	USS-FREEDOM HTQ <sup>®</sup>		
Minimum Collapse Pressure	11,100	11,100	psi	
Minimum Internal Yield Pressure	12,640	12,640	psi	
Minimum Pipe Body Yield Strength	641,000		lb	
Joint Strength		641,000	lb	
Compression Rating		641,000	lb	
Reference Length [4]		21,370	ft	
Maximum Uniaxial Bend Rating [2]		91.7	deg/100 ft	
MAKE-UP DATA	Pipe	USS-FREEDOM HTQ <sup>®</sup>		
Make-Up Loss		4.13	in.	
Minimum Make-Up Torque [3]		15,000	ft-lb	
Maximum Make-Up Torque [3]		21,000	ft-lb	

1. Other than proprietary collapse and connection values, performance properties have been calculated using standard equations defined by API 5C3 and do not incorporate any additional design or safety factors. Calculations assume nominal pipe OD, nominal wall thickness, and Specified Minimum Yield Strength (SMYS).

2. Uniaxial bending rating shown is structural only, and equal to compression efficiency.

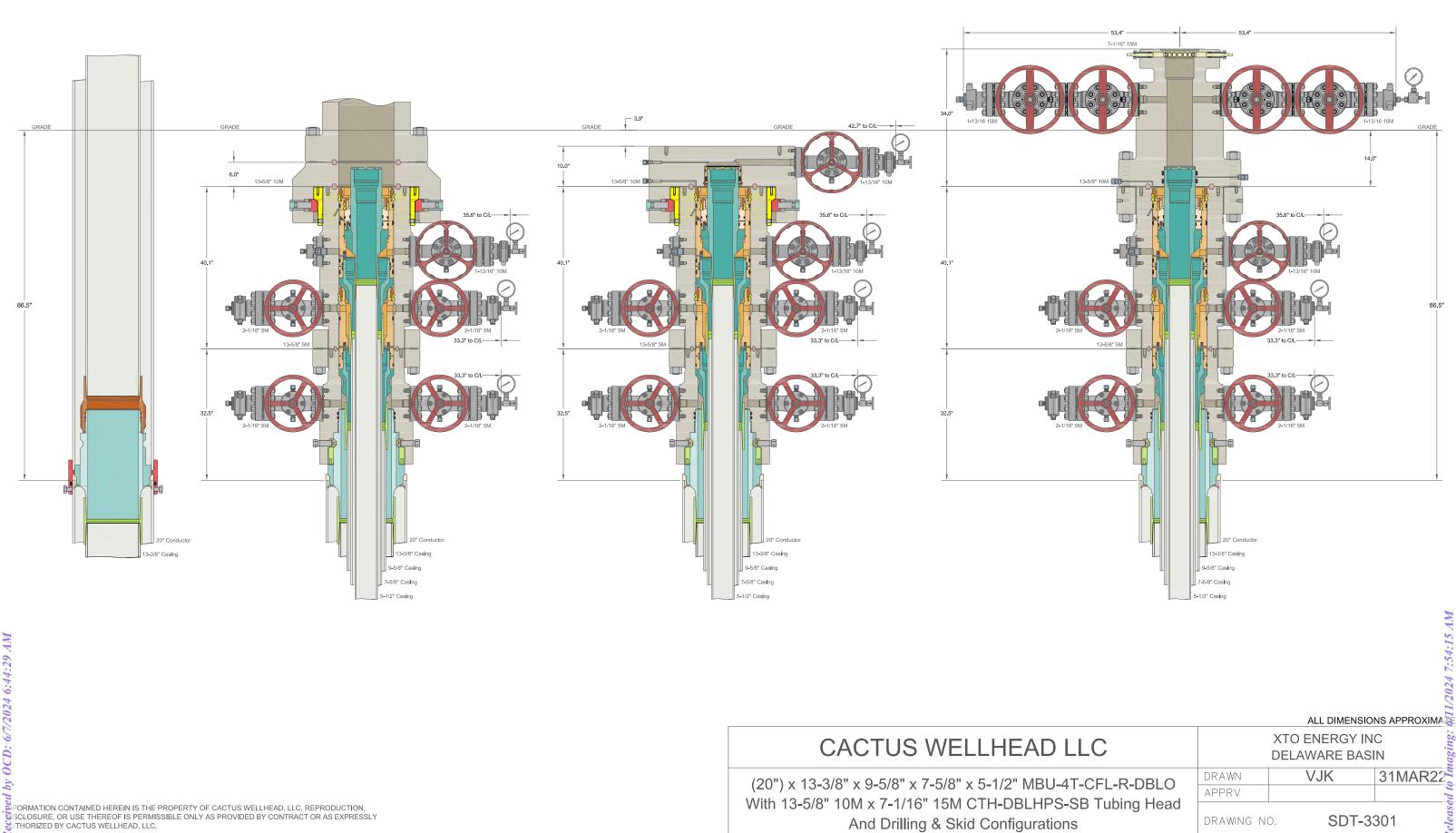
3. Torques have been calculated assuming a thread compound friction factor of 1.0 and are recommended only. Field make-up torques may require adjustment based on actual field conditions (e.g. make-up speed, temperature, thread compound, etc.).

4. Reference length is calculated by joint strength divided by plain end weight with 1.5 safety factor.

#### Legal Notice

All material contained in this publication is for general information only. This material should not therefore be used or relied upon for any specific application without independent competent professional examination and verification of accuracy, suitability and applicability. Anyone making use of this material does so at their own risk and assumes any and all liability resulting from such use. U. S. Steel disclaims any and all expressed or implied warranties of fitness for any general or particular application.

U. S. Steel Tubular Products 460 Wildwood Forest Drive, Suite 300S Spring, Texas 77380 1-877-893-9461 connections@uss.com www.usstubular.com JNCONTROLLED



## Long Lead\_Well Planning

EDDY JRU DI 7 Pad A JRU DI 7 Sawtooth 706H - Slot JRU DI 7 Sawtooth 706H

JRU DI 7 Sawtooth 706H

Plan: JRU DI 7 Sawtooth 706H

## **Standard Planning Report**

29 August, 2023

Database: Company:	LMRKPROD3 Long Lead_We	ll Planning		Local Co-ord TVD Reference	inate Referenc	ce:	Site JRU DI 7 Pad JRU DI 7 Sawtoot		
Project:	EDDY			MD Referenc	MD Reference:		3347.0usft JRU DI 7 Sawtooth 706H Default @		
Site:	JRU DI 7 Pad /	4		North Refere	nce:		3347.0usft Grid		
Well:	JRU DI 7 Sawt			Survey Calcu	lation Method	:	Minimum Curvatu	e	
Wellbore: Design:	JRU DI 7 Sawt JRU DI 7 Sawt								
Project	EDDY			_					
Map System: Geo Datum: Map Zone:	US State Plane 1 NAD 1927 (NAD New Mexico East	CON CONUS)		System Datum	:	M	ean Sea Level		
Site	JRU DI 7 Pad A								
Site Position: From: Position Uncertainty:	Map :	0.0 usft	Northing: Easting: Slot Radius:	487,864 658,059 13-3		titude: ngitude:		32° 20' 24.785   103° 49' 17.618 V	
Well	JRU DI 7 Sawto	oth 706H - Sk	ot JRU DI 7 Sawtoo	th 706H					
Well Position	+N/-S	-105.3 usft	Northing:	2	187,759.50 usf	ft La	titude:	32° 20' 23.744	
	+E/-W	-29.8 usft	Easting:		658,029.40 usf		ngitude:	103° 49' 17.971 \	
Position Uncertainty Grid Convergence:		0.0 usft 0.27 °	Wellhead Elev	ration:	usi	ft Gr	ound Level:	3,315.0 us	
Wellbore	JRU DI 7 Sawte	ooth 706H							
Magnetics	Model Nam	e	Sample Date	Declination (°)	ı		Angle (°)	Field Strength (nT)	
	IGRF	2020	8/11/2023		6.42		59.90	47,313.34854149	
Design	JRU DI 7 Sawto	oth 706H							
Audit Notes:									
Version:			Phase:	PLAN	Tie On	Depth:	0.	0	
Vertical Section:		•	rom (TVD)	+N/-S	+E/-W		Direc		
			<b>sft)</b> 0.0	<b>(usft)</b> -105.3	<b>(usft)</b> -29.8		(°) 179		
	ogram		2023						
Plan Survey Tool Pro Depth From (usft)	Depth To	Date 8/29/2 urvey (Wellbo		Tool Name	F	Remarks			
Plan Survey Tool Pro Depth From	Depth To (usft) S	Date 8/29/2 Survey (Wellbo		Tool Name XOM_R2OWSG I		Remarks			

Database:	LMRKPROD3	Local Co-ordinate Reference:	Site JRU DI 7 Pad A
Company:	Long Lead_Well Planning	TVD Reference:	JRU DI 7 Sawtooth 706H Default @
			3347.0usft
Project:	EDDY	MD Reference:	JRU DI 7 Sawtooth 706H Default @
			3347.0usft
Site:	JRU DI 7 Pad A	North Reference:	Grid
Well:	JRU DI 7 Sawtooth 706H	Survey Calculation Method:	Minimum Curvature
Wellbore:	JRU DI 7 Sawtooth 706H		
Design:	JRU DI 7 Sawtooth 706H		

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	-105.3	-29.8	0.00	0.00	0.00	0.00	
1,200.0	0.00	0.00	1,200.0	-105.3	-29.8	0.00	0.00	0.00	0.00	
1,258.8	1.18	228.49	1,258.8	-105.7	-30.3	2.00	2.00	0.00	228.49	
6,342.2	1.18	228.49	6,341.2	-174.9	-108.4	0.00	0.00	0.00	0.00	
6,401.1	0.00	359.73	6,400.0	-175.3	-108.9	2.00	-2.00	0.00	180.00	
10,266.1	0.00	359.73	10,265.0	-175.3	-108.9	0.00	0.00	0.00	359.73	
11,391.0	90.00	179.75	10,981.2	-891.4	-105.8	8.00	8.00	-16.00	179.75	
23,447.7	90.00	179.75	10,982.0	-12,948.0	-53.9	0.00	0.00	0.00	0.00 LTP	3-1
23,497.7	90.00	179.75	10,982.0	-12,998.0	-53.7	0.00	0.00	0.00	0.00 BHL	3-1

**Planning Report** 

Database:	LMRKPROD3	Local Co-ordinate Reference:	Site JRU DI 7 Pad A
Company:	Long Lead Well Planning	TVD Reference:	JRU DI 7 Sawtooth 706H Default @
	5 _ 5	TYD Reference.	3347.0usft
Project:	EDDY	MD Reference:	JRU DI 7 Sawtooth 706H Default @
			3347.0usft
Site:	JRU DI 7 Pad A	North Reference:	Grid
Well:	JRU DI 7 Sawtooth 706H	Survey Calculation Method:	Minimum Curvature
Wellbore:	JRU DI 7 Sawtooth 706H		
Design:	JRU DI 7 Sawtooth 706H		

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)
0.0	0.00	0.00	0.0	-105.3	-29.8	0.0	0.00	0.00	0.00
1,200.0	0.00	0.00	1,200.0	-105.3	-29.8	0.0	0.00	0.00	0.00
1,258.8	1.18	228.49	1,258.8	-105.7	-30.3	0.4	2.00	2.00	0.00
1,300.0	1.18	228.49	1,300.0	-106.3	-30.9	1.0	0.00	0.00	0.00
1,400.0	1.18	228.49	1,400.0	-107.6	-32.4	2.3	0.00	0.00	0.00
1,500.0	1.18	228.49	1,499.9	-109.0	-34.0	3.7	0.00	0.00	0.00
1,600.0	1.18	228.49	1,599.9	-110.3	-35.5	5.0	0.00	0.00	0.00
1,700.0	1.18	228.49	1,699.9	-111.7	-37.0	6.4	0.00	0.00	0.00
1,800.0	1.18	228.49	1,799.9	-113.1	-38.6	7.7	0.00	0.00	0.00
1,900.0	1.18	228.49	1,899.9	-114.4	-40.1	9.1	0.00	0.00	0.00
2,000.0	1.18	228.49	1,999.8	-115.8	-41.7	10.4	0.00	0.00	0.00
2,100.0	1.18	228.49	2,099.8	-117.2	-43.2	11.8	0.00	0.00	0.00
2,200.0	1.18	228.49	2,199.8	-118.5	-44.7	13.1	0.00	0.00	0.00
2,300.0	1.18	228.49	2,299.8	-119.9	-46.3	14.5	0.00	0.00	0.00
2,400.0	1.18	228.49	2,399.8	-121.2	-47.8	15.9	0.00	0.00	0.00
2,500.0	1.18	228.49	2,499.7	-122.6	-49.3	17.2	0.00	0.00	0.00
2,600.0	1.18	228.49	2,599.7	-124.0	-50.9	18.6	0.00	0.00	0.00
2,700.0	1.18	228.49	2,699.7	-125.3	-52.4	19.9	0.00	0.00	0.00
2,800.0	1.18	228.49	2,799.7	-126.7	-54.0	21.3	0.00	0.00	0.00
2,900.0	1.18	228.49	2,899.6	-128.0	-55.5	22.6	0.00	0.00	0.00
3,000.0	1.18	228.49	2,999.6	-129.4	-57.0	24.0	0.00	0.00	0.00
3,100.0	1.18	228.49	3,099.6	-130.8	-58.6	25.3	0.00	0.00	0.00
3,200.0	1.18	228.49	3,199.6	-132.1	-60.1	26.7	0.00	0.00	0.00
3,300.0	1.18	228.49	3,299.6	-133.5	-61.7	28.0	0.00	0.00	0.00
3,400.0	1.18	228.49	3,399.5	-134.8	-63.2	29.4	0.00	0.00	0.00
3,500.0	1.18	228.49	3,499.5	-136.2	-64.7	30.8	0.00	0.00	0.00
3,600.0	1.18	228.49	3,599.5	-137.6	-66.3	32.1	0.00	0.00	0.00
3,700.0	1.18	228.49	3,699.5	-138.9	-67.8	33.5	0.00	0.00	0.00
3,800.0	1.18	228.49	3,799.5	-140.3	-69.3	34.8	0.00	0.00	0.00
3,900.0	1.18	228.49	3,899.4	-141.7	-70.9	36.2	0.00	0.00	0.00
4,000.0	1.18	228.49	3,999.4	-143.0	-72.4	37.5	0.00	0.00	0.00
4,100.0	1.18	228.49	4,099.4	-144.4	-74.0	38.9	0.00	0.00	0.00
4,200.0	1.18	228.49	4,199.4	-145.7	-75.5	40.2	0.00	0.00	0.00
4,300.0	1.18	228.49	4,299.4	-147.1	-77.0	41.6	0.00	0.00	0.00
4,400.0	1.18	228.49	4,399.3	-148.5	-78.6	42.9	0.00	0.00	0.00
4,500.0	1.18	228.49	4,499.3	-149.8	-80.1	44.3	0.00	0.00	0.00
4,600.0	1.18	228.49	4,599.3	-151.2	-81.6	45.7	0.00	0.00	0.00
4,700.0	1.18	228.49	4,699.3	-152.5	-83.2	47.0	0.00	0.00	0.00
4,800.0	1.18	228.49	4,799.2	-153.9	-84.7	48.4	0.00	0.00	0.00
4,900.0	1.18	228.49	4,899.2	-155.3	-86.3	49.7	0.00	0.00	0.00
5,000.0	1.18	228.49	4,999.2	-156.6	-87.8	51.1	0.00	0.00	0.00
5,100.0	1.18	228.49	5,099.2	-158.0	-89.3	52.4	0.00	0.00	0.00
5,200.0	1.18	228.49	5,199.2	-159.4	-90.9	53.8	0.00	0.00	0.00
5,300.0	1.18	228.49	5,299.1	-160.7	-92.4	55.1	0.00	0.00	0.00
5,400.0	1.18	228.49	5,399.1	-162.1	-94.0	56.5	0.00	0.00	0.00
5,500.0	1.18	228.49	5,499.1	-163.4	-95.5	57.8	0.00	0.00	0.00
5,600.0	1.18	228.49	5,599.1	-164.8	-97.0	59.2	0.00	0.00	0.00
5,700.0	1.18	228.49	5,699.1	-166.2	-98.6	60.6	0.00	0.00	0.00
5,800.0	1.18	228.49	5,799.0	-167.5	-100.1	61.9	0.00	0.00	0.00
5,900.0	1.18	228.49	5,899.0	-168.9	-101.6	63.3	0.00	0.00	0.00
6,000.0	1.18	228.49	5,999.0	-170.2	-103.2	64.6	0.00	0.00	0.00
6,100.0	1.18	228.49	6,099.0	-171.6	-104.7	66.0	0.00	0.00	0.00

## 8/29/2023 10:26:04AM

**Planning Report** 

Database:	LMRKPROD3	Local Co-ordinate Reference:	Site JRU DI 7 Pad A
Company:	Long Lead_Well Planning	TVD Reference:	JRU DI 7 Sawtooth 706H Default @
Project:	EDDY	MD Reference:	3347.0usft JRU DI 7 Sawtooth 706H Default @ 3347.0usft
Site:	JRU DI 7 Pad A	North Reference:	Grid
Well:	JRU DI 7 Sawtooth 706H	Survey Calculation Method:	Minimum Curvature
Wellbore:	JRU DI 7 Sawtooth 706H		
Design:	JRU DI 7 Sawtooth 706H		

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)
	6,200.0	1.18	228.49	6,199.0	-173.0	-106.3	67.3	0.00	0.00	0.00
	6,300.0	1.18	228.49	6,298.9	-174.3	-107.8	68.7	0.00	0.00	0.00
	6,342.2	1.18	228.49	6,341.2	-174.9	-108.4	69.3	0.00	0.00	0.00
	6,400.0	0.02	228.49	6,398.9	-175.3	-108.9	69.7	2.00	-2.00	0.00
	6,401.1	0.02	359.73	6,400.0	-175.3	-108.9	69.7	2.00	-2.00	0.00
	10,266.1	0.00	359.73	10,265.0	-175.3	-108.9	69.7	0.00	0.00	0.00
	10,300.0	2.71	179.75	10,298.9	-176.1	-108.9	70.5	8.00	8.00	0.00
	10,400.0	10.71	179.75	10,398.1	-187.8	-108.8	82.1	8.00	8.00	0.00
	10,500.0	18.71	179.75	10,494.8	-213.2	-108.7	107.5	8.00	8.00	0.00
	10,600.0	26.71	179.75	10,587.0	-251.7	-108.6	146.1	8.00	8.00	0.00
	10,700.0	34.71	179.75	10,672.9	-302.8	-108.4	197.1	8.00	8.00	0.00
	10,800.0	42.71	179.75	10,750.8	-365.3	-108.1	259.6	8.00	8.00	0.00
	10,820.2	44.33	179.75	10,765.5	-379.2	-108.0	273.6	8.00	8.00	0.00
	FTP 3-1									
	10,900.0	50.71	179.75	10,819.3	-438.0	-107.8	332.4	8.00	8.00	0.00
	11,000.0	58.71	179.75	10,877.0	-519.6	-107.4	413.9	8.00	8.00	0.00
	11,100.0	66.71	179.75	10,922.9	-608.4	-107.0	502.7	8.00	8.00	0.00
	11,200.0	74.71	179.75	10,955.9	-702.7	-106.6	597.0	8.00	8.00	0.00
	11,300.0	82.71	179.75	10,975.4	-800.7	-106.2	695.0	8.00	8.00	0.00
	11,391.0	90.00	179.75	10,981.2	-891.4	-105.8	785.8	8.00	8.00	0.00
	11,400.0	90.00	179.75	10,981.2	-900.4	-105.8	794.8	0.00	0.00	0.00
	11,500.0	90.00	179.75	10,981.2	-1,000.4	-105.3	894.8	0.00	0.00	0.00
	11,600.0	90.00	179.75	10,981.2	-1,100.4	-104.9	994.8	0.00	0.00	0.00
	11,700.0	90.00	179.75	10,981.2	-1,200.4	-104.5	1,094.8	0.00	0.00	0.00
	11,800.0	90.00	179.75	10,981.2	-1,300.4	-104.1	1,194.8	0.00	0.00	0.00
	11,900.0	90.00	179.75	10,981.2	-1,400.4	-103.6	1,294.8	0.00	0.00	0.00
	12,000.0	90.00	179.75	10,981.2	-1,500.4	-103.2	1,394.8	0.00	0.00	0.00
	12,100.0	90.00	179.75	10,981.2	-1,600.4	-102.8	1,494.8	0.00	0.00	0.00
	12,200.0	90.00	179.75	10,981.3	-1,700.4	-102.3	1,594.8	0.00	0.00	0.00
	12,300.0	90.00	179.75	10,981.3	-1,800.4	-101.9	1,694.8	0.00	0.00	0.00
	12,400.0	90.00	179.75	10,981.3	-1,900.4	-101.5	1,794.8	0.00	0.00	0.00
	12,500.0	90.00	179.75	10,981.3	-2,000.4	-101.0	1,894.8	0.00	0.00	0.00
	12,600.0 12,700.0	90.00 90.00	179.75 179.75	10,981.3 10,981.3	-2,100.4 -2,200.4	-100.6 -100.2	1,994.8 2,094.8	0.00 0.00	0.00 0.00	0.00 0.00
	12,800.0	90.00	179.75	10,981.3	-2,300.4	-99.7	2,194.8	0.00	0.00	0.00
	12,900.0	90.00	179.75	10,981.3	-2,400.4	-99.3	2,294.8	0.00	0.00	0.00
	13,000.0	90.00	179.75 179.75	10,981.3 10,981.3	-2,500.4	-98.9	2,394.8 2,494.8	0.00 0.00	0.00 0.00	0.00 0.00
	13,100.0 13,200.0	90.00 90.00	179.75 179.75	10,981.3	-2,600.4 -2,700.4	-98.5 -98.0	2,494.8 2,594.8	0.00	0.00	0.00
	13,300.0	90.00	179.75	10,981.3	-2,800.4	-97.6	2,694.8	0.00	0.00	0.00
	13,400.0	90.00	179.75	10,981.3	-2,900.4	-97.2	2,794.8	0.00	0.00	0.00
	13,500.0 13,600.0	90.00 90.00	179.75 179.75	10,981.3 10,981.3	-3,000.4 -3,100.4	-96.7 -96.3	2,894.8 2,994.8	0.00 0.00	0.00 0.00	0.00 0.00
	13,700.0	90.00	179.75	10,981.3	-3,200.4	-90.3	2,994.8	0.00	0.00	0.00
	,									
	13,800.0	90.00	179.75	10,981.4	-3,300.4	-95.4	3,194.8	0.00	0.00	0.00
	13,900.0 14,000.0	90.00 90.00	179.75 179.75	10,981.4 10,981.4	-3,400.4 -3,500.4	-95.0 -94.6	3,294.8 3,394.8	0.00 0.00	0.00 0.00	0.00 0.00
	14,000.0	90.00	179.75	10,981.4	-3,500.4 -3,600.4	-94.0 -94.2	3,394.8 3,494.8	0.00	0.00	0.00
	14,200.0	90.00	179.75	10,981.4	-3,700.4	-94.2	3,594.8	0.00	0.00	0.00
	14,300.0 14,400.0	90.00 90.00	179.75 179.75	10,981.4 10,981.4	-3,800.4 -3,900.4	-93.3 -92.9	3,694.8 3,794.8	0.00 0.00	0.00 0.00	0.00 0.00
	14,500.0	90.00	179.75	10,981.4	-3,900.4	-92.9	3,894.8	0.00	0.00	0.00
L	11,000.0	00.00		10,001.4	1,000.4	-02.4	0,004.0	0.00	0.00	5.00

8/29/2023 10:26:04AM

Released to Imaging: 6/11/2024 7:54:15 AM

COMPASS 5000.17 Build 101

.

Database:	LMRKPROD3	Local Co-ordinate Reference:	Site JRU DI 7 Pad A
Company:	Long Lead_Well Planning	TVD Reference:	JRU DI 7 Sawtooth 706H Default @
			3347.0usft
Project:	EDDY	MD Reference:	JRU DI 7 Sawtooth 706H Default @
			3347.0usft
Site:	JRU DI 7 Pad A	North Reference:	Grid
Well:	JRU DI 7 Sawtooth 706H	Survey Calculation Method:	Minimum Curvature
Wellbore:	JRU DI 7 Sawtooth 706H		
Design:	JRU DI 7 Sawtooth 706H		

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)
14,600.0	90.00	179.75	10,981.4	-4,100.4	-92.0	3,994.8	0.00	0.00	0.00
14,700.0	90.00	179.75	10,981.4	-4,200.4	-91.6	4,094.8	0.00	0.00	0.00
14,800.0	90.00	179.75	10,981.4	-4.300.4	-91.1	4,194.8	0.00	0.00	0.00
14,800.0	90.00	179.75	10,981.4	-4,400.4	-91.1	4,194.8	0.00	0.00	0.00
15,000.0	90.00	179.75	10,981.4	-4,500.4	-90.3	4,394.8	0.00	0.00	0.00
15,100.0	90.00	179.75	10,981.4	-4,600.4	-89.8	4,494.8	0.00	0.00	0.00
15,200.0	90.00	179.75	10,981.5	-4,700.4	-89.4	4,594.8	0.00	0.00	0.00
15,300.0	90.00	179.75	10,981.5	-4,800.4	-89.0	4,694.8	0.00	0.00	0.00
15,400.0	90.00	179.75	10,981.5	-4,900.4	-88.6	4,794.8	0.00	0.00	0.00
15,500.0	90.00	179.75	10,981.5	-5,000.4	-88.1	4,894.8	0.00	0.00	0.00
15,600.0	90.00	179.75	10,981.5	-5,100.4	-87.7	4,994.8	0.00	0.00	0.00
15,700.0	90.00	179.75	10,981.5	-5,200.4	-87.3	5,094.8	0.00	0.00	0.00
15,800.0	90.00	179.75	10,981.5	-5,300.4	-86.8	5,194.8	0.00	0.00	0.00
15,900.0	90.00	179.75	10,981.5	-5,400.4	-86.4	5,294.8	0.00	0.00	0.00
16,000.0	90.00	179.75	10,981.5	-5,500.4	-86.0	5,394.8	0.00	0.00	0.00
16,100.0	90.00	179.75	10,981.5	-5,600.4	-85.5	5,494.8	0.00	0.00	0.00
16,200.0	90.00	179.75	10,981.5	-5,700.4	-85.1	5,594.8	0.00	0.00	0.00
16,300.0	90.00	179.75	10,981.5	-5,800.4	-84.7	5,694.8	0.00	0.00	0.00
16,400.0	90.00	179.75	10,981.5	-5,900.4	-84.2	5,794.8	0.00	0.00	0.00
16,500.0	90.00	179.75	10,981.5	-6,000.4	-83.8	5,894.8	0.00	0.00	0.00
16,600.0	90.00	179.75	10,981.5	-6,100.4	-83.4	5,994.8	0.00	0.00	0.00
16,700.0	90.00	179.75	10,981.6	-6,200.4	-83.0	6,094.8	0.00	0.00	0.00
16,800.0	90.00	179.75	10,981.6	-6,300.4	-82.5	6,194.8	0.00	0.00	0.00
16,900.0	90.00	179.75	10,981.6	-6,400.4	-82.1	6,294.8	0.00	0.00	0.00
17,000.0	90.00	179.75	10,981.6	-6,500.4	-81.7	6,394.8	0.00	0.00	0.00
17,100.0	90.00	179.75	10,981.6	-6,600.4	-81.2	6,494.8	0.00	0.00	0.00
17,200.0	90.00	179.75	10,981.6	-6,700.4	-80.8	6,594.8	0.00	0.00	0.00
17,300.0	90.00	179.75	10,981.6	-6,800.4	-80.4	6,694.8	0.00	0.00	0.00
17,400.0	90.00	179.75	10,981.6	-6,900.4	-79.9	6,794.8	0.00	0.00	0.00
17,500.0	90.00	179.75	10,981.6	-7,000.4	-79.5	6,894.8	0.00	0.00	0.00
17,600.0	90.00	179.75	10,981.6	-7,100.4	-79.1	6,994.8	0.00	0.00	0.00
17,700.0	90.00	179.75	10,981.6	-7,200.4	-78.6	7,094.8	0.00	0.00	0.00
17,800.0	90.00	179.75	10,981.6	-7,300.4	-78.2	7,194.8	0.00	0.00	0.00
17,900.0	90.00	179.75	10,981.6	-7,400.3	-77.8	7,294.8	0.00	0.00	0.00
18,000.0	90.00	179.75	10,981.6	-7,500.3	-77.4	7,394.8	0.00	0.00	0.00
18,100.0	90.00	179.75	10,981.6	-7,600.3	-76.9	7,494.8	0.00	0.00	0.00
18,200.0	90.00	179.75	10,981.7	-7,700.3	-76.5	7,594.8	0.00	0.00	0.00
18,300.0	90.00	179.75	10,981.7	-7,800.3	-76.1	7,694.8	0.00	0.00	0.00
18,400.0	90.00	179.75	10,981.7	-7,900.3	-75.6	7,794.8	0.00	0.00	0.00
18,500.0	90.00	179.75	10,981.7	-8,000.3	-75.2	7,894.8	0.00	0.00	0.00
18,600.0	90.00	179.75	10,981.7	-8,100.3	-74.8	7,994.8	0.00	0.00	0.00
18,700.0	90.00	179.75	10,981.7	-8,200.3	-74.3	8,094.8	0.00	0.00	0.00
18,800.0	90.00	179.75	10,981.7	-8,300.3	-73.9	8,194.8	0.00	0.00	0.00
18,900.0	90.00	179.75	10,981.7	-8,400.3	-73.5	8,294.8	0.00	0.00	0.00
19,000.0	90.00	179.75	10,981.7	-8,500.3	-73.1	8,394.8	0.00	0.00	0.00
19,100.0	90.00	179.75	10,981.7	-8,600.3	-72.6	8,494.8	0.00	0.00	0.00
19,200.0	90.00	179.75	10,981.7	-8,700.3	-72.2	8,594.8	0.00	0.00	0.00
19,300.0	90.00	179.75	10,981.7	-8,800.3	-71.8	8,694.8	0.00	0.00	0.00
19,400.0	90.00	179.75	10,981.7	-8,900.3	-71.3	8,794.8	0.00	0.00	0.00
19,500.0	90.00	179.75	10,981.7	-9,000.3	-70.9	8,894.8	0.00	0.00	0.00
19,600.0	90.00	179.75	10,981.7	-9,100.3	-70.5	8,994.8	0.00	0.00	0.00
19,700.0	90.00	179.75	10,981.8	-9,200.3	-70.0	9,094.8	0.00	0.00	0.00

## 8/29/2023 10:26:04AM

Database:	LMRKPROD3	Local Co-ordinate Reference:	Site JRU DI 7 Pad A
Company:	Long Lead_Well Planning	TVD Reference:	JRU DI 7 Sawtooth 706H Default @
			3347.0usft
Project:	EDDY	MD Reference:	JRU DI 7 Sawtooth 706H Default @
			3347.0usft
Site:	JRU DI 7 Pad A	North Reference:	Grid
Well:	JRU DI 7 Sawtooth 706H	Survey Calculation Method:	Minimum Curvature
Wellbore:	JRU DI 7 Sawtooth 706H		
Design:	JRU DI 7 Sawtooth 706H		

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)
19,800.0	90.00	179.75	10,981.8	-9,300.3	-69.6	9,194.8	0.00	0.00	0.00
19,900.0	90.00	179.75	10,981.8	-9,400.3	-69.2	9,294.8	0.00	0.00	0.00
20,000.0	90.00	179.75	10,981.8	-9,500.3	-68.7	9,394.8	0.00	0.00	0.00
20,100.0	90.00	179.75	10,981.8	-9,600.3	-68.3	9,494.8	0.00	0.00	0.00
20,200.0	90.00	179.75	10,981.8	-9,700.3	-67.9	9,594.8	0.00	0.00	0.00
20,300.0	90.00	179.75	10,981.8	-9,800.3	-67.5	9,694.8	0.00	0.00	0.00
20,400.0	90.00	179.75	10,981.8	-9,900.3	-67.0	9,794.8	0.00	0.00	0.00
20,500.0	90.00	179.75	10,981.8	-10,000.3	-66.6	9,894.8	0.00	0.00	0.00
20,600.0	90.00	179.75	10,981.8	-10,100.3	-66.2	9,994.8	0.00	0.00	0.00
20,700.0	90.00	179.75	10,981.8	-10,200.3	-65.7	10,094.8	0.00	0.00	0.00
20,800.0	90.00	179.75	10,981.8	-10,300.3	-65.3	10,194.8	0.00	0.00	0.00
20,900.0	90.00	179.75	10,981.8	-10,400.3	-64.9	10,294.8	0.00	0.00	0.00
21,000.0	90.00	179.75	10,981.8	-10,500.3	-64.4	10,394.8	0.00	0.00	0.00
21,100.0	90.00	179.75	10,981.8	-10,600.3	-64.0	10,494.8	0.00	0.00	0.00
21,200.0	90.00	179.75	10,981.9	-10,700.3	-63.6	10,594.8	0.00	0.00	0.00
21,300.0	90.00	179.75	10,981.9	-10,800.3	-63.1	10,694.8	0.00	0.00	0.00
21,400.0	90.00	179.75	10,981.9	-10,900.3	-62.7	10,794.8	0.00	0.00	0.00
21,500.0	90.00	179.75	10,981.9	-11,000.3	-62.3	10,894.8	0.00	0.00	0.00
21,600.0	90.00	179.75	10,981.9	-11,100.3	-61.9	10,994.8	0.00	0.00	0.00
21,700.0	90.00	179.75	10,981.9	-11,200.3	-61.4	11,094.8	0.00	0.00	0.00
21,800.0	90.00	179.75	10,981.9	-11,300.3	-61.0	11,194.8	0.00	0.00	0.00
21,900.0	90.00	179.75	10,981.9	-11,400.3	-60.6	11,294.8	0.00	0.00	0.00
22,000.0	90.00	179.75	10,981.9	-11,500.3	-60.1	11,394.8	0.00	0.00	0.00
22,100.0	90.00	179.75	10,981.9	-11,600.3	-59.7	11,494.8	0.00	0.00	0.00
22,200.0	90.00	179.75	10,981.9	-11,700.3	-59.3	11,594.8	0.00	0.00	0.00
22,300.0	90.00	179.75	10,981.9	-11,800.3	-58.8	11,694.8	0.00	0.00	0.00
22,400.0	90.00	179.75	10,981.9	-11,900.3	-58.4	11,794.8	0.00	0.00	0.00
22,500.0	90.00	179.75	10,981.9	-12,000.3	-58.0	11,894.8	0.00	0.00	0.00
22,600.0	90.00	179.75	10,981.9	-12,100.3	-57.6	11,994.8	0.00	0.00	0.00
22,700.0	90.00	179.75	10,982.0	-12,200.3	-57.1	12,094.8	0.00	0.00	0.00
22,800.0	90.00	179.75	10,982.0	-12,300.3	-56.7	12,194.8	0.00	0.00	0.00
22,900.0	90.00	179.75	10,982.0	-12,400.3	-56.3	12,294.8	0.00	0.00	0.00
23,000.0	90.00	179.75	10,982.0	-12,500.3	-55.8	12,394.8	0.00	0.00	0.00
23,100.0	90.00	179.75	10,982.0	-12,600.3	-55.4	12,494.8	0.00	0.00	0.00
23,200.0	90.00	179.75	10,982.0	-12,700.3	-55.0	12,594.8	0.00	0.00	0.00
23,300.0	90.00	179.75	10,982.0	-12,800.3	-54.5	12,694.8	0.00	0.00	0.00
23,400.0	90.00	179.75	10,982.0	-12,900.3	-54.1	12,794.8	0.00	0.00	0.00
23,447.7	90.00	179.75	10,982.0	-12,948.0	-53.9	12,842.5	0.00	0.00	0.00
LTP 3-1			10 000 0	10.000.0		10.000			
23,497.7	90.00	179.75	10,982.0	-12,998.0	-53.7	12,892.5	0.00	0.00	0.00

Database: Company: Project: Site: Well: Wellbore: Design:	LMRKPROD3 Long Lead_W EDDY JRU DI 7 Pad JRU DI 7 Saw JRU DI 7 Saw JRU DI 7 Saw	ell Planning A tooth 706H tooth 706H			TVD Reference: MD Reference: North Reference:			Site JRU DI 7 Pad A JRU DI 7 Sawtooth 706H Default @ 3347.0usft JRU DI 7 Sawtooth 706H Default @ 3347.0usft Grid Minimum Curvature			
Design Targets Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easti (usf	•	Latitude	Longitude	
FTP 3-1 - plan misses targe - Rectangle (sides	-		10,982.0 20.2usft MD	-175.3 (10765.5 TVE	-108.9 D, -379.2 N, -1	487,689.50 08.0 E)	657	,950.30	32° 20' 23.055 N	103° 49' 18.897 W	
LTP 3-1 - plan hits target ce - Rectangle (sides		359.73 ))	10,982.0	-12,948.0	-53.9	474,916.80	658	,005.30	32° 18' 16.656 N	103° 49' 18.966 W	
BHL 3-1 - plan hits target ce - Rectangle (sides		359.73 ))	10,982.0	-12,998.0	-53.7	474,866.80	658	,005.50	32° 18' 16.162 N	103° 49' 18.967 W	

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

XTO Energy Inc. JRU DI 7 Sawtooth FED COM 706H Projected TD: 23497.8' MD / 10982' TVD SHL: 260' FNL & 1069' FWL , Section 6, T23S, R31E BHL: 2582' FNL & 990' FWL , Section 18, T23S, R31E Eddy County, NM

1. Geologic Name of Surface Formation Quaternary

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

Formation	Well Depth (TVD)	Water/Oil/Gas
Rustler	230'	Water
Top of Salt	577'	Water
Base of Salt	3684'	Water
Delaware	3917'	Water
Brushy Canyon	6452'	Water/Oil/Gas
Bone Spring	7745'	Water
1st Bone Spring Ss	8787'	Water/Oil/Gas
2nd Bone Spring Ss	9625'	Water/Oil/Gas
3rd Bone Spring Sh	10187'	Water/Oil/Gas
Target/Land Curve	10982'	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 13.375 inch casing @ 552' (25' above the salt) and circulating cement back to surface. The salt will be isolated by setting 9.625 inch casing at 3784' and circulating cement to surface. The second intermediate will isolate from the salt down to the next casing seat by setting 7.625 inch casing at 9860' and cementing to surface. A 6.75 inch curve and 6.75 inch lateral hole will be drilled to 23497.8 MD/TD and 5.5 inch production casing will be set at TD and cemented back up to 2nd intermediate (estimated TOC 9360 feet) per Potash regulations.

#### 3. Casing Design

Hole Size	MD	TVD	OD Csg	Weight	Grade	Collar	New/Used	SF Burst	SF Collapse	SF Tension
17.5	0' – 552'	571'	13.375	54.5	J-55	BTC	New	2.41	4.63	30.22
12.25	0' – 3784'	3688'	9.625	40	J-55	BTC	New	1.76	2.39	4.16
8.75	0' – 3884'	3788'	7.625	29.7	RY P-110	Flush Joint	New	2.64	3.08	1.91
8.75	3884' – 9860'	9502'	7.625	29.7	HC L-80	Flush Joint	New	1.92	3.68	2.29
6.75	0' – 9760'	9409'	5.5	20	RY P-110	Semi-Premium	New	1.05	2.08	2.05
6.75	9760' - 23497.8'	10982'	5.5	20	RY P-110	Semi-Flush	New	1.05	1.85	5.46

Production casing meets the clearance requiremenets as tapered string crosses over before encountering the intermediate shoe, per Onshore Order 2.3.B.1
 XTO requests the option to utilize a spudder rig (Atlas Copco RD20 or Equivalent) to set and cement surface and

Intermediate 1 casing per this Sundry
 13.375 Collapse analyzed using 50% evacuation based on regional experience.

7.625 Collapse analyzed using 50% evacuation based on regional experience.
 7.625 Tension calculated using vertical hanging weight plus the lateral weight multiplied by a friction factor of 0.35

#### Wellhead:

Permanent Wellhead – Multibowl System
 A. Starting Head: 13-5/8" 10M top flange x 13-3/8" bottom
 B. Tubing Head: 13-5/8" 10M bottom flange x 7-1/16" 15M top flange
 Wellhead will be installed by manufacturer's representatives.
 Wanufacturer will monitor welding process to ensure appropriate temperature of seal.

#### 4. Cement Program

#### Surface Casing: 13.375, 54.5 New BTC, J-55 casing to be set at +/- 552

Lead: 180 sxs EconoCem-HLTRRC (mixed at 12.9 ppg, 1.87 ft3/sx, 10.13 gal/sx water Tail: 300 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 = 250 psi 24 hr = 500 psi

Due to the high probability of not getting cement to surface during conventional top-out jobs in the area, ~10-20 ppb gravel will be added on the backside of the 1" to get cement to surface, if required.

#### 1st Intermediate Casing: 9.625, 40 New BTC, J-55 casing to be set at +/- 3784

Lead: 1570 sxs Class C (mixed at 12.9 ppg, 1.39 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 +/- 9860

 Ist Stage
 Optional Lead: 150 sxs Class C (mixed at 10.5 ppg, 2.77 ft3/sx, 15.59 gal/sx water TOC: 3584

 Tail: 310 sxs Class C (mixed at 14.8 ppg, 1.35 ft3/sx, 6.39 gal/sx water', TOC: Brushy Canyon @ 6452
 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: 400 sxs Class C (mixed at 14.8 ppg, 1.33 ft3/sx, 6.39 gal/sx water)

 Tail: 400 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 (6452) 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 include the Echo-meter verified fluid top and the volume of displacement fluid above the cement slurry in the annulus in all post-drill sundries on wells utilizing this cement program.

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 to surface. 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 +/- 23497.8

 Lead: 30 sxs NeoCem (mixed at 11.5 ppg, 2.69 ft3/sx, 15.00 gal/sx water) Top of Cement:
 9360 feet

 Tail: 950 sxs VersaCem (mixed at 13.2 ppg, 1.51 ft3/sx, 8.38 gal/sx water) Top of Cement:
 0266 feet

 Compressives:
 12-hr =
 1375 psi
 24 hr = 2285 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 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 13.375 casing, the blow out preventer equipment (BOP) will consist of a 13-5/8° minimum 5M Hydril and a 13-5/8° minimum 10M Double Ram BOP. MASP should not exceed 3580 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 13.375, 10M bradenhead and flange, the BOP test will be limited to 10000 psi. When nippling up on the 7.625, the BOP will be tested to a minimum of 10000 psi. All BOP tests will include a low pressure test as per BLM regulations. The 10M 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

r				1	
INTERVAL	Hole Size	Mud Type	MW	Viscosity	Fluid Loss
INTERVIL	100 0120	muu Type	(ppg)	(sec/qt)	(cc)
0' - 552'	17.5	FW/Native	8.5-9	35-40	NC
552' - 3784'	12.25	Brine	10-10.5	30-32	NC
3784' to 9860'	8.75	BDE/OBM or FW/Brine	8.6-9.1	30-32	NC
9860' to 23497.8'	6.75	OBM	10.5-11	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 13-3/8" surface casing with brine solution. 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 Kelly cock will be in the drill string at all times.
- A full opening drill pipe stabbing valve having appropriate connections will be on the rig floor at all times. H2S monitors will be on location when drilling below the 13.375 casing.
- C.

#### 8. Logging, Coring and Testing Program

Open hole logging will not be done on this well.

9. Abnormal Pressures and Temperatures / Potential Hazards None Anticipated. BHT of 175 to 195 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 5996 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.

.

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 District II

District II 811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720 District III 1000 Rio Brazos Road, Aztec, NM 87410

Dioto Rio Brazos Road, Aztec, NM 87410 Phone: (505) 334-6178 Fax: (505) 334-6170 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

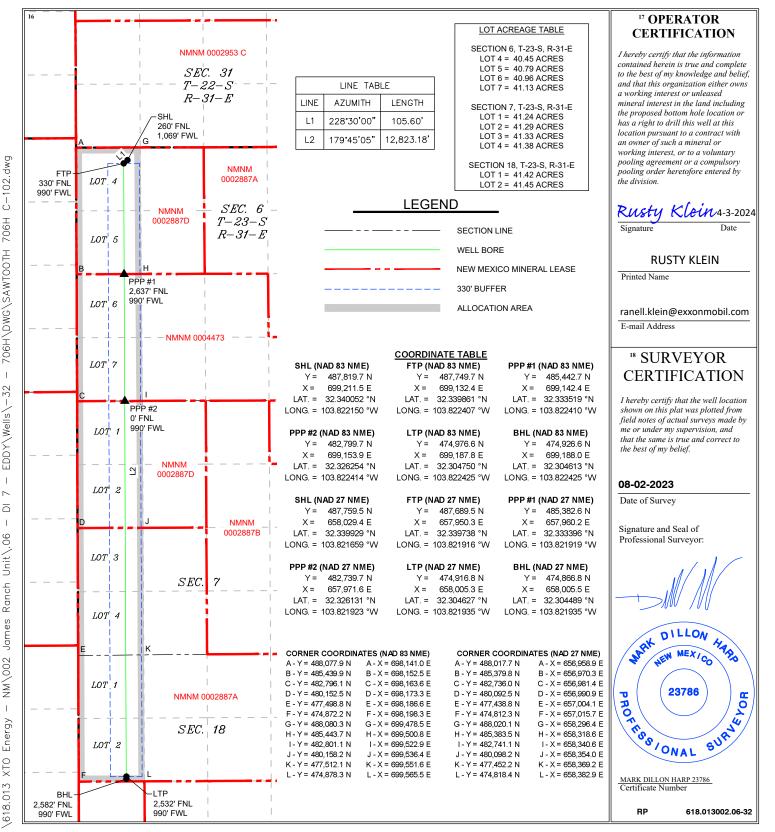
> OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

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 Pool Name Pool Code LOS MEDANOS; BONE SPRING **30-015-** 54875 40295 Property Code Well Number <sup>5</sup> Property Name 333473 **JRU DI 7 SAWTOOTH** 706H OGRID No. Elevation Operator Nam **XTO PERMIAN OPERATING, LLC** 373075 3.315 <sup>10</sup> Surface Location UL or lot no. East/West line Section Township Rang Lot Idr Feet from the North/South line Feet from th County 23 S 31 E NORTH 1,069 WEST EDDY 4 6 260 "Bottom Hole Location If Different From Surface UL or lot no. Section East/West line Feet from the County Township Range Lot Idn Feet from the North/South line Е 18 23 S 31 E 2,582 NORTH 990 WEST EDDY <sup>15</sup>Order No. <sup>12</sup>Dedicated Acres <sup>3</sup> Joint or Infill <sup>4</sup>Consolidation Code 411.44

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.



District I 1625 N. French Dr., Hobbs, NM 88240 Phone:(575) 393-6161 Fax:(575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Operator:	OGRID:
XTO PERMIAN OPERATING LLC.	373075
6401 HOLIDAY HILL ROAD	Action Number:
MIDLAND, TX 79707	351865
	Action Type:
	[C-103] NOI Change of Plans (C-103A)

#### CONDITIONS

Created By	Condition	Condition Date
ward.rikala	All original COA's still apply. Additionally, if cement is not circulated to surface during cementing operations, then a CBL is required.	6/11/2024

Action 351865