

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTFORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018**SUNDRY NOTICES AND REPORTS ON WELLS**
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.*5. Lease Serial No.
NMNM030453

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other instructions on page 27. If Unit or CA/Agreement, Name and/or No.
891000303X

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other8. Well Name and No.
POKER LAKE UNIT 13 DTD 705H2. Name of Operator
XTO PERMIAN OPERATING LLCContact: KELLY KARDOS
E-Mail: kelly_kardos@xtoenergy.com9. API Well No.
30-015-45827-00-X13a. Address
6401 HOLIDAY HILL ROAD BLDG 5
MIDLAND, TX 797073b. Phone No. (include area code)
Ph: 432-620-437410. Field and Pool or Exploratory Area
PURPLE SAGE-WOLFCAMP (GAS)

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Sec 24 T24S R30E NWNE 512FNL 2205FEL
32.209221 N Lat, 103.832809 W Lon11. County or Parish, State
EDDY COUNTY, NM**12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA**

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	Change to Original A
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	PD

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

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

Change target formation from WC Bone Spring (Oil) to Purple Sage; Wolfcamp (Gas) ✓

Change the BHL from 2440' FNL & 2310' FEL in Sec. 36-T24S-R30E to 200' FSL & 2475' FEL in Sec. 25-T24S-R30E. ✓

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

XTO requests to utilize centralizers from KOP to TOC only a minimum of one every other joint.

In addition, XTO requests a variance to be able to batch drill these wells if necessary. In doing so, XTO will set intermediate casing and ensure that the well is cemented properly and the well is

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

**Electronic Submission #492930 verified by the BLM Well Information System
For XTO PERMIAN OPERATING LLC, sent to the Carlsbad
Committed to AFMSS for processing by PRISCILLA PEREZ on 11/19/2019 (20PP0458SE)**

Name (Printed/Typed) KELLY KARDOS

Title REGULATORY COORDINATOR

Signature (Electronic Submission)

Date 11/19/2019

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

**** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ** BLM REVISED ****RUP 1-29-2020
Accepted (Kmt)

Additional data for EC transaction #492930 that would not fit on the form

32. Additional remarks, continued

dead. With floats holding, no pressure on the intermediate csg annulus, and the installation of a TA cap as per GE recommendations, XTO will contact the BLM to skid the rig to drill the surface and intermediate for the remaining wells on the pad. Once surface and intermediate are all completed, XTO will begin drilling the production hole on each of the wells.

Poker Lake Unit 13 DTD 125H - 30-015-45821

Poker Lake Unit 13 DTD 705H - 30-015-45827

Poker Lake Unit 13 DTD 905H - 30-015-46106

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: (505) 748-9720

District III
1000 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

¹ API Number 30-015-45827	² Pool Code 98220	³ Pool Name PURPLE SAGE; WOLFCAMP
⁴ Property Code	⁵ Property Name POKER LAKE UNIT 13 DTD	⁶ Well Number 705H
⁷ OGRID No. 373075	⁸ Operator Name XTO PERMIAN OPERATING, LLC	⁹ Elevation 3,471'

¹⁰ Surface Location									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	24	24 S	30 E		512	NORTH	2,205	EAST	EDDY

¹¹ Bottom Hole Location If Different From Surface									
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
O	25	24 S	30 E		200	SOUTH	2,475	EAST	EDDY

¹² Dedicated Acres 640	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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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.

	GEODETIC COORDINATES NAD 83 NME SURFACE LOCATION Y= 440,208.4 X= 696,141.8 LAT.= 32.209219°N LONG.= 103.832808°W FIRST TAKE POINT NAD 83 NME Y= 440,389.3 X= 695,871.1 LAT.= 32.209720°N LONG.= 103.833681°W	GEODETIC COORDINATES NAD 27 NME SURFACE LOCATION Y= 440,149.6 X= 654,957.8 LAT.= 32.209096°N LONG.= 103.833232°W FIRST TAKE POINT NAD 27 NME Y= 440,330.5 X= 654,687.1 LAT.= 32.209596°N LONG.= 103.833196°W	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. Kelly Kardos 11/15/19 Signature Date Kelly Kardos Printed Name kelly_kardos@xtoenergy.com E-mail Address
	CORNER COORDINATES TABLE NAD 83 NME A - Y= 440,718.6 N, X= 695,668.2 E B - Y= 440,723.1 N, X= 697,006.5 E C - Y= 438,079.8 N, X= 695,677.6 E D - Y= 438,084.4 N, X= 697,016.3 E E - Y= 435,438.2 N, X= 695,687.0 E F - Y= 435,442.2 N, X= 697,026.2 E G - Y= 432,798.6 N, X= 695,700.7 E H - Y= 432,801.0 N, X= 697,038.3 E I - Y= 430,157.5 N, X= 695,714.4 E J - Y= 430,159.4 N, X= 697,050.5 E	CORNER COORDINATES TABLE NAD 27 NME A - Y= 440,659.8 N, X= 654,484.2 E B - Y= 440,664.3 N, X= 655,822.5 E C - Y= 438,021.1 N, X= 654,493.6 E D - Y= 438,025.7 N, X= 655,832.2 E E - Y= 435,379.5 N, X= 654,502.9 E F - Y= 435,383.5 N, X= 655,842.0 E G - Y= 432,740.0 N, X= 654,516.5 E H - Y= 432,742.4 N, X= 655,854.0 E I - Y= 430,098.9 N, X= 654,530.1 E J - Y= 430,100.8 N, X= 655,866.2 E	
	LAST TAKE POINT NAD 83 NME Y= 430,487.8 X= 695,910.3 LAT.= 32.182502°N LONG.= 103.833703°W BOTTOM HOLE LOCATION NAD 83 NME Y= 430,357.8 X= 695,910.8 LAT.= 32.182144°N LONG.= 103.833703°W	LAST TAKE POINT NAD 27 NME Y= 430,429.2 X= 654,726.0 LAT.= 32.182378°N LONG.= 103.833219°W BOTTOM HOLE LOCATION NAD 27 NME Y= 430,299.2 X= 654,726.5 LAT.= 32.182021°N LONG.= 103.833219°W	
	¹⁸ SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. 04-29-2019 Date of Survey Signature and Seal of Professional Surveyor: MARK DILLON HARP 23786 Certificate Number RR 2018010157		

RWP 1-29-2020

Intent ☒ As Drilled ☐

API #
30-015-45827

Operator Name: XTO Permian Operating, LLC	Property Name: Poker Lake Unit 13 DTD	Well Number 705H
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Kick Off Point (KOP)

UL B	Section 24	Township 24S	Range 30E	Lot	Feet 512	From N/S North	Feet 2205	From E/W East	County Eddy
Latitude 32.209219					Longitude -103.832808			NAD NAD83	

First Take Point (FTP)

UL B	Section 24	Township 24S	Range 30E	Lot	Feet 330	From N/S North	Feet 2475	From E/W East	County Eddy
Latitude 32.209720					Longitude -103.833681			NAD NAD83	

Last Take Point (LTP)

UL O	Section 25	Township 24S	Range 30E	Lot	Feet 330	From N/S South	Feet 2475	From E/W East	County Eddy
Latitude 32.182502					Longitude -103.833703			NAD NAD83	

Is this well the defining well for the Horizontal Spacing Unit? ☐ N

Is this well an infill well? ☒ Y

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #
30-015-46251

Operator Name: XTO Permian Operating, LLC	Property Name: Poker Lake Unit 13 DTD	Well Number 206H
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KZ 06/29/2018

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

XTO Energy Inc.
PLU 13 Dog Town Draw 705H
Projected TD: 21732' MD / 11638' TVD
SHL: 512' FNL & 2205' FEL, Section 24, T24S, R30E
BHL: 200' FSL & 2475' FEL, Section 25, T24S, R30E
Eddy County, NM

1. Geologic Name of Surface Formation

A. Permian

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

Formation	Well Depth (TVD)	Water/Oil/Gas
Rustler	508'	Water
Top of Salt	918'	Water
Base of Salt	3973'	Water
Delaware	4193'	Water
Bone Spring	8168'	Water/Oil/Gas
1st Bone Spring Ss	9118'	Water/Oil/Gas
2nd Bone Spring Ss	9798'	Water/Oil/Gas
3rd Bone Spring Ss	10928'	Water/Oil/Gas
Wolfcamp	11343'	Water/Oil/Gas
Wolfcamp A	11538'	Water/Oil/Gas
Target/Land Curve	11638'	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 13-3/8 inch casing @ 760' (158' above the salt) and circulating cement back to surface. The salt will be isolated by setting 9-5/8 inch casing at 4110' and circulating cement to surface. An 8-3/4 inch vertical and curve hole will be drilled and 7 inch casing run and cemented 200' into the 9-5/8 inch casing. A 6 inch curve and lateral hole will be drilled to MD/TD and 4-1/2 inch liner will be set at TD and cemented back 250' into the 7 inch casing shoe.

3. Casing Design

Hole Size	Depth	OD Csg	Weight'	Collar	Grade	New/Used	SF Burst	SF Collapse	SF Tension
17-1/2"	0' - 760'	13-3/8"	54.5	BTC	J-55	New	2.14	3.25	20.59
12-1/4"	0' - 4110'	9-5/8"	40	BTC	J-55	New	1.37	1.99	3.83
8-3/4"	0' - 11993'	7"	32	BTC	P-110	New	1.19	1.98	2.34
6"	11993' - 21732'	4-1/2"	13.5	BTC	P-110	New	1.18	2.40	2.03

- XTO requests to utilize centralizers only in the curve after the KOP and only a minimum of one every other joint.
- 9-5/8" & 4-1/2" Collapse analyzed using 50% evacuation based on regional experience.
- 4-1/2" tension calculated using vertical hanging weight plus the lateral weight multiplied by a friction factor of 0.35

WELLHEAD:

A. Starting Head (RSH System): 13-3/8" SOW bottom x 13-5/8" 5M top flange

B. Tubing Head: 13-5/8" 5M bottom flange x 7-1/16" 10M top flange

- Wellhead will be installed by manufacturer's representatives.
- Manufacturer will monitor welding process to ensure appropriate temperature of seal.
- Operator will test the 9-5/8" casing to per Onshore Order 2.
- Wellhead manufacturer representative will not be present for BOP test plug installation

4. Cement Program

Surface Casing: 13-3/8", 54.5 New J-55, BTC casing to be set at +/- 760'

Lead: 340 sxs EconoCem-HLTRRC (mixed at 12.9 ppg, 1.87 ft³/sx, 10.13 gal/sx water)

Tail: 300 sxs Halcem-C + 2% CaCl (mixed at 14.8 ppg, 1.35 ft³/sx, 6.39 gal/sx water)

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

Top of cement: Surface

Intermediate Casing: 9-5/8", 40 New J-55, BTC casing to be set at +/- 4110'

Lead: 1090 sxs Halcem-C + 2% CaCl (mixed at 12.9 ppg, 1.88 ft³/sx, 9.61 gal/sx water)

Tail: 380 sxs Halcem-C + 2% CaCl (mixed at 14.8 ppg, 1.33 ft³/sx, 6.39 gal/sx water)

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

Top of cement: Surface

2nd Intermediate Casing: 7", 32 New P-110, BTC casing to be set at +/- 11993'

Lead: 670 sxs Halcem-C + 2% CaCl (mixed at 12.9 ppg, 1.88 ft³/sx, 9.61 gal/sx water)

Tail: 130 sxs Halcem-C + 2% CaCl (mixed at 14.8 ppg, 1.33 ft³/sx, 6.39 gal/sx water)

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

Top of cement: 200' inside previous casing

Production Casing: 4-1/2", 13.5 New P-110, BTC casing to be set at +/- 21732'

Tail: 770 sxs VersaCem (mixed at 13.2 ppg, 1.1743 ft³/sx, 8.38 gal/sx water)

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

Top of cement: Top of liner

5. Pressure Control Equipment

The blow out preventer equipment (BOP) for this well consists of a 13-5/8" minimum 5M Hydril and a 13-5/8" minimum 5M Double Ram BOP. MASP should not exceed 4399 psi.

All BOP testing will be done by an independent service company. Annular pressure tests will be limited to 50% of the working pressure. When nipping up on the 13-5/8" 5M bradenhead and flange, the BOP test will be limited to 5000 psi. When the 9-5/8" and 7" casing is set, the packoff seals will be tested to a minimum of 5000 psi. All BOP tests will include a low pressure test as per BLM regulations. The 5M BOP diagrams are attached. Blind rams will be functioned tested each trip, pipe rams will be functioned tested each day.

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

6. Proposed Mud Circulation System

INTERVAL	Hole Size	Mud Type	MW (ppg)	Viscosity (sec/qt)	Fluid Loss (cc)
0' to 760'	17-1/2"	FW/Native	8.4-8.8	35-40	NC
760' to 4110'	12-1/4"	Brine/Gel Sweeps	9.8-10.2	30-32	NC
4110' to 11993'	8-3/4"	FW / Cut Brine	8.6-9.3	29-32	NC - 20
11993' to 21732'	6"	OBM	11.2-11.8	32-50	NC-20

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

Spud with fresh water/native mud. Drill out from under 13-3/8" surface casing with brine solution. A 9.8ppg-10.2ppg 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 13-3/8" casing.

8. Logging, Coring and Testing Program

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

Open hole logging will not be done on this well.

9. Abnormal Pressures and Temperatures / Potential Hazards

None Anticipated. BHT of 155 to 175 F is anticipated. No H2S is expected but monitors will be in place to detect any H2S occurrences. Should these circumstances be encountered the operator and drilling contractor are prepared to take all necessary steps to ensure safety of all personnel and environment. Lost circulation could occur but is not expected to be a serious problem in this area and hole seepage will be compensated for by additions of small amounts of LCM in the drilling fluid. The maximum anticipated bottom hole pressure for this well is 6960 psi.

10. Anticipated Starting Date and Duration of Operations

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

XTO Energy

Project: Eddy County, NM (NAD27) NMEZ Grid
 Site: PLU 13 Dog Town Draw
 Well: 13-705H
 Wellbore: 705H Lateral
 Design: Plan #2

3471+27 @ 3498.00usft (GL+KB)
 NAD 1927 (NADCON CONUS)

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
508.00	508.00	Rustler
598.00	598.00	Magenta Dolomite
918.00	918.00	Top Salt
3973.00	3980.01	Base Salt
4193.00	4201.22	Delaware
8168.00	8195.50	Bone Spring
9118.00	9145.50	1st Bone Spring Ss
9798.00	9825.50	2nd Bone Spring Ss
10193.00	10220.50	3rd Bone Spring Lm
10928.00	10955.50	3rd Bone Spring Ss
11343.00	11382.75	Wolfcamp
11388.00	11435.64	Wolfcamp X
11463.00	11532.47	Wolfcamp Y
11538.00	11648.90	Wolfcamp A
11638.00	11992.54	LP



Azimuths to Grid North
 True North: -0.27°
 Magnetic North: 6.55°

Magnetic Field
 Strength: 47654.7nT
 Dip Angle: 59.98°
 Date: 11/11/2019
 Model: IGRF2015



TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
PLU 13 DTD 705H SHL	0.00	0.00	0.00	440149.60	654957.80	Point
PLU 13 DTD 705H FTP_330FNL_202FWL	1638.00	180.90	-270.70	440330.50	654687.10	Point
PLU 13 DTD 705H LTP_330FSL_198FWL	1638.00	-9720.40	-231.80	430429.20	654726.00	Point
PLU 13 DTD 705H PBHL_200FSL_197FWL	1638.00	-9850.40	-231.30	430299.20	654726.50	Rectangle (Sides: L10031.00 W100.00)

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2500.00	0.00	0.00	2500.00	0.00	0.00	0.00	0.00	0.00
2800.00	6.00	329.60	2799.45	13.54	-7.94	2.00	329.60	-13.57
7620.00	6.00	329.60	7593.05	448.09	-262.90	0.00	0.00	-449.10
7920.00	0.00	0.00	7892.50	461.63	-270.84	2.00	180.00	-462.67
11092.54	0.00	0.00	11065.04	461.63	-270.84	0.00	0.00	-462.67
11992.54	90.00	179.78	11638.00	-111.32	-268.64	10.00	179.78	110.29
11731.69	90.00	179.78	11638.00	-9850.40	-231.30	0.00	0.00	9849.44

Start Drop -2.00 21731.69

Start 3172.54 hold at 7920.00 MD

Start Build 10.00

Start 9739.15 hold at 11992.54 MD

PLU 13 DTD 705H FTP_330FNL_202FWL

PLU 13 DTD 705H PBHL_200FSL_197FWL

PLU 13 DTD 705H LTP_330FSL_198FWL

TD at 21731.69

9849

PLU 13 DTD 705H LTP_330FSL_198FWL

PLU 13 DTD 705H PBHL_200FSL_197FWL

To convert a Magnetic Direction to a Grid Direction, Add 6.55°
 To convert a Magnetic Direction to a True Direction, Add 6.81° East
 Magnetic North is 6.55° East of Grid North (Magnetic Convergence)
 Magnetic North is 6.81° East of True North (Magnetic Declination)

Plan: Plan #2 (13-705H/705H Lateral)
 Created By: Mekka Williams
 eSolina Well Design
 mekka@esolinawell.com
 14:31, November 18 2019

PREDATOR DIRECTIONAL
 11323 MONARCHS WAY
 Montgomery TX, 77316



Planning Report

Database:	PREDATOR_EDM	Local Co-ordinate Reference:	Well 13-705H
Company:	XTO Energy	TVD Reference:	3471+27 @ 3498.00usft (GL+KB)
Project:	Eddy County, NM (NAD27) NMEZ Grid	MD Reference:	3471+27 @ 3498.00usft (GL+KB)
Site:	PLU 13 Dog Town Draw	North Reference:	Grid
Well:	13-705H	Survey Calculation Method:	Minimum Curvature
Wellbore:	705H Lateral		
Design:	Plan #2		

Project:	Eddy County, NM (NAD27) NMEZ Grid		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site:	PLU 13 Dog Town Draw		
Site Position:		Northing:	440,075.00 usft
From:	Map	Easting:	654,089.10 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13.20 in
		Latitude:	32.20890166
		Longitude:	-103.83513310
		Grid Convergence:	0.27 °

Well	13-705H					
Well Position	+N/-S	74.60 usft	Northing:	440,149.60 usft	Latitude:	32.20909563
	+E/-W	868.70 usft	Easting:	654,957.80 usft	Longitude:	-103.83232339
Position Uncertainty		0.00 usft	Wellhead Elevation:		Ground Level:	3,471.00 usft

Wellbore	705H Lateral				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	11/11/19	6.81	59.98	47,654.72796391

Design	Plan #2			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N-S	+E-W	Direction
	(usft)	(usft)	(usft)	(°)
	0.00	0.00	0.00	179.78

Plan Survey Tool Program	Date:	11/18/19		
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	21,731.69	Plan #2 (705H Lateral)	A008Mb_MWD+IFR1+MS
				OWSG MWD + IFR1 + Multi-SI

Plan Sections										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,800.00	6.00	329.60	2,799.45	13.54	-7.94	2.00	2.00	0.00	329.60	
7,620.00	6.00	329.60	7,593.05	448.09	-262.90	0.00	0.00	0.00	0.00	
7,920.00	0.00	0.00	7,892.50	461.63	-270.84	2.00	-2.00	0.00	180.00	
11,092.54	0.00	0.00	11,065.04	461.63	-270.84	0.00	0.00	0.00	0.00	
11,992.54	90.00	179.78	11,638.00	-111.32	-268.64	10.00	10.00	0.00	179.78	
21,731.69	90.00	179.78	11,638.00	-9,850.40	-231.30	0.00	0.00	0.00	0.00	PLU 13 DTD 705H PE

Planning Report

Database:	PREDATOR_EDM	Local Co-ordinate Reference:	Well 13-705H
Company:	XTO Energy	TVD Reference:	3471+27 @ 3498.00usft (GL+KB)
Project:	Eddy County, NM (NAD27) NMEZ Grid	MD Reference:	3471+27 @ 3498.00usft (GL+KB)
Site:	PLU 13 Dog Town Draw	North Reference:	Grid
Well:	13-705H	Survey Calculation Method:	Minimum Curvature
Wellbore:	705H Lateral		
Design:	Plan #2		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
508.00	0.00	0.00	508.00	0.00	0.00	0.00	0.00	0.00	0.00	
Rustler										
598.00	0.00	0.00	598.00	0.00	0.00	0.00	0.00	0.00	0.00	
Magenta Dolomite										
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00	
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00	
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00	
918.00	0.00	0.00	918.00	0.00	0.00	0.00	0.00	0.00	0.00	
Top Salt										
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00	
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,600.00	2.00	329.60	2,599.98	1.51	-0.88	-1.51	2.00	2.00	0.00	
2,700.00	4.00	329.60	2,699.84	6.02	-3.53	-6.03	2.00	2.00	0.00	
2,800.00	6.00	329.60	2,799.45	13.54	-7.94	-13.57	2.00	2.00	0.00	
2,900.00	6.00	329.60	2,898.90	22.55	-13.23	-22.60	0.00	0.00	0.00	
3,000.00	6.00	329.60	2,998.36	31.57	-18.52	-31.64	0.00	0.00	0.00	
3,100.00	6.00	329.60	3,097.81	40.58	-23.81	-40.67	0.00	0.00	0.00	
3,200.00	6.00	329.60	3,197.26	49.60	-29.10	-49.71	0.00	0.00	0.00	
3,300.00	6.00	329.60	3,296.71	58.61	-34.39	-58.75	0.00	0.00	0.00	
3,400.00	6.00	329.60	3,396.17	67.63	-39.68	-67.78	0.00	0.00	0.00	
3,500.00	6.00	329.60	3,495.62	76.65	-44.97	-76.82	0.00	0.00	0.00	
3,600.00	6.00	329.60	3,595.07	85.66	-50.26	-85.85	0.00	0.00	0.00	
3,700.00	6.00	329.60	3,694.52	94.68	-55.55	-94.89	0.00	0.00	0.00	
3,800.00	6.00	329.60	3,793.97	103.69	-60.84	-103.93	0.00	0.00	0.00	
3,900.00	6.00	329.60	3,893.43	112.71	-66.13	-112.96	0.00	0.00	0.00	
3,980.01	6.00	329.60	3,973.00	119.92	-70.36	-120.19	0.00	0.00	0.00	
Base Salt										
4,000.00	6.00	329.60	3,992.88	121.72	-71.42	-122.00	0.00	0.00	0.00	
4,100.00	6.00	329.60	4,092.33	130.74	-76.70	-131.03	0.00	0.00	0.00	
4,200.00	6.00	329.60	4,191.78	139.76	-81.99	-140.07	0.00	0.00	0.00	
4,201.22	6.00	329.60	4,193.00	139.87	-82.06	-140.18	0.00	0.00	0.00	
Delaware										

Planning Report

Database:	PREDATOR_EDM	Local Co-ordinate Reference:	Well 13-705H
Company:	XTO Energy	TVD Reference:	3471+27 @ 3498.00usft (GL+KB)
Project:	Eddy County, NM (NAD27) NMEZ Grid	MD Reference:	3471+27 @ 3498.00usft (GL+KB)
Site:	PLU 13 Dog Town Draw	North Reference:	Grid
Well:	13-705H	Survey Calculation Method:	Minimum Curvature
Wellbore:	705H Lateral		
Design:	Plan #2		

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,300.00	6.00	329.60	4,291.23	148.77	-87.28	-149.11	0.00	0.00	0.00
4,400.00	6.00	329.60	4,390.69	-157.79	-92.57	-158.14	0.00	0.00	0.00
4,500.00	6.00	329.60	4,490.14	166.80	-97.86	-167.18	0.00	0.00	0.00
4,600.00	6.00	329.60	4,589.59	175.82	-103.15	-176.21	0.00	0.00	0.00
4,700.00	6.00	329.60	4,689.04	184.83	-108.44	-185.25	0.00	0.00	0.00
4,800.00	6.00	329.60	4,788.50	193.85	-113.73	-194.29	0.00	0.00	0.00
4,900.00	6.00	329.60	4,887.95	202.87	-119.02	-203.32	0.00	0.00	0.00
5,000.00	6.00	329.60	4,987.40	211.88	-124.31	-212.36	0.00	0.00	0.00
5,100.00	6.00	329.60	5,086.85	220.90	-129.60	-221.39	0.00	0.00	0.00
5,200.00	6.00	329.60	5,186.30	229.91	-134.89	-230.43	0.00	0.00	0.00
5,300.00	6.00	329.60	5,285.76	238.93	-140.18	-239.47	0.00	0.00	0.00
5,400.00	6.00	329.60	5,385.21	247.94	-145.47	-248.50	0.00	0.00	0.00
5,500.00	6.00	329.60	5,484.66	256.96	-150.76	-257.54	0.00	0.00	0.00
5,600.00	6.00	329.60	5,584.11	265.98	-156.05	-266.57	0.00	0.00	0.00
5,700.00	6.00	329.60	5,683.57	274.99	-161.34	-275.61	0.00	0.00	0.00
5,800.00	6.00	329.60	5,783.02	284.01	-166.63	-284.65	0.00	0.00	0.00
5,900.00	6.00	329.60	5,882.47	293.02	-171.92	-293.68	0.00	0.00	0.00
6,000.00	6.00	329.60	5,981.92	302.04	-177.21	-302.72	0.00	0.00	0.00
6,100.00	6.00	329.60	6,081.37	311.05	-182.49	-311.75	0.00	0.00	0.00
6,200.00	6.00	329.60	6,180.83	320.07	-187.78	-320.79	0.00	0.00	0.00
6,300.00	6.00	329.60	6,280.28	329.09	-193.07	-329.83	0.00	0.00	0.00
6,400.00	6.00	329.60	6,379.73	338.10	-198.36	-338.86	0.00	0.00	0.00
6,500.00	6.00	329.60	6,479.18	347.12	-203.65	-347.90	0.00	0.00	0.00
6,600.00	6.00	329.60	6,578.64	356.13	-208.94	-356.93	0.00	0.00	0.00
6,700.00	6.00	329.60	6,678.09	365.15	-214.23	-365.97	0.00	0.00	0.00
6,800.00	6.00	329.60	6,777.54	374.16	-219.52	-375.01	0.00	0.00	0.00
6,900.00	6.00	329.60	6,876.99	383.18	-224.81	-384.04	0.00	0.00	0.00
7,000.00	6.00	329.60	6,976.44	392.20	-230.10	-393.08	0.00	0.00	0.00
7,100.00	6.00	329.60	7,075.90	401.21	-235.39	-402.11	0.00	0.00	0.00
7,200.00	6.00	329.60	7,175.35	410.23	-240.68	-411.15	0.00	0.00	0.00
7,300.00	6.00	329.60	7,274.80	419.24	-245.97	-420.18	0.00	0.00	0.00
7,400.00	6.00	329.60	7,374.25	428.26	-251.26	-429.22	0.00	0.00	0.00
7,500.00	6.00	329.60	7,473.71	437.27	-256.55	-438.26	0.00	0.00	0.00
7,600.00	6.00	329.60	7,573.16	446.29	-261.84	-447.29	0.00	0.00	0.00
7,620.00	6.00	329.60	7,593.05	448.09	-262.90	-449.10	0.00	0.00	0.00
7,700.00	4.40	329.60	7,672.72	454.35	-266.56	-455.37	2.00	-2.00	0.00
7,800.00	2.40	329.60	7,772.53	459.46	-269.56	-460.49	2.00	-2.00	0.00
7,900.00	0.40	329.60	7,872.50	461.57	-270.80	-462.61	2.00	-2.00	0.00
7,920.00	0.00	0.00	7,892.50	461.63	-270.84	-462.67	2.00	-2.00	0.00
8,000.00	0.00	0.00	7,972.50	461.63	-270.84	-462.67	0.00	0.00	0.00
8,100.00	0.00	0.00	8,072.50	461.63	-270.84	-462.67	0.00	0.00	0.00
8,195.50	0.00	0.00	8,168.00	461.63	-270.84	-462.67	0.00	0.00	0.00
Bone Spring									
8,200.00	0.00	0.00	8,172.50	461.63	-270.84	-462.67	0.00	0.00	0.00
8,300.00	0.00	0.00	8,272.50	461.63	-270.84	-462.67	0.00	0.00	0.00
8,400.00	0.00	0.00	8,372.50	461.63	-270.84	-462.67	0.00	0.00	0.00
8,500.00	0.00	0.00	8,472.50	461.63	-270.84	-462.67	0.00	0.00	0.00
8,600.00	0.00	0.00	8,572.50	461.63	-270.84	-462.67	0.00	0.00	0.00
8,700.00	0.00	0.00	8,672.50	461.63	-270.84	-462.67	0.00	0.00	0.00
8,800.00	0.00	0.00	8,772.50	461.63	-270.84	-462.67	0.00	0.00	0.00
8,900.00	0.00	0.00	8,872.50	461.63	-270.84	-462.67	0.00	0.00	0.00
9,000.00	0.00	0.00	8,972.50	461.63	-270.84	-462.67	0.00	0.00	0.00
9,100.00	0.00	0.00	9,072.50	461.63	-270.84	-462.67	0.00	0.00	0.00

Planning Report

Database:	PREDATOR_EDM	Local Co-ordinate Reference:	Well 13-705H
Company:	XTO Energy	TVD Reference:	3471+27 @ 3498.00usft (GL+KB)
Project:	Eddy County, NM (NAD27) NMEZ Grid	MD Reference:	3471+27 @ 3498.00usft (GL+KB)
Site:	PLU 13 Dog Town Draw	North Reference:	Grid
Well:	13-705H	Survey Calculation Method:	Minimum Curvature
Wellbore:	705H Lateral		
Design:	Plan #2		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
9,145.50	0.00	0.00	9,118.00	461.63	-270.84	-462.67	0.00	0.00	0.00
1st Bone Spring Ss									
9,200.00	0.00	0.00	9,172.50	461.63	-270.84	-462.67	0.00	0.00	0.00
9,300.00	0.00	0.00	9,272.50	461.63	-270.84	-462.67	0.00	0.00	0.00
9,400.00	0.00	0.00	9,372.50	461.63	-270.84	-462.67	0.00	0.00	0.00
9,500.00	0.00	0.00	9,472.50	461.63	-270.84	-462.67	0.00	0.00	0.00
9,600.00	0.00	0.00	9,572.50	461.63	-270.84	-462.67	0.00	0.00	0.00
9,700.00	0.00	0.00	9,672.50	461.63	-270.84	-462.67	0.00	0.00	0.00
9,800.00	0.00	0.00	9,772.50	461.63	-270.84	-462.67	0.00	0.00	0.00
9,825.50	0.00	0.00	9,798.00	461.63	-270.84	-462.67	0.00	0.00	0.00
2nd Bone Spring Ss									
9,900.00	0.00	0.00	9,872.50	461.63	-270.84	-462.67	0.00	0.00	0.00
10,000.00	0.00	0.00	9,972.50	461.63	-270.84	-462.67	0.00	0.00	0.00
10,100.00	0.00	0.00	10,072.50	461.63	-270.84	-462.67	0.00	0.00	0.00
10,200.00	0.00	0.00	10,172.50	461.63	-270.84	-462.67	0.00	0.00	0.00
10,220.50	0.00	0.00	10,193.00	461.63	-270.84	-462.67	0.00	0.00	0.00
3rd Bone Spring Lim									
10,300.00	0.00	0.00	10,272.50	461.63	-270.84	-462.67	0.00	0.00	0.00
10,400.00	0.00	0.00	10,372.50	461.63	-270.84	-462.67	0.00	0.00	0.00
10,500.00	0.00	0.00	10,472.50	461.63	-270.84	-462.67	0.00	0.00	0.00
10,600.00	0.00	0.00	10,572.50	461.63	-270.84	-462.67	0.00	0.00	0.00
10,700.00	0.00	0.00	10,672.50	461.63	-270.84	-462.67	0.00	0.00	0.00
10,800.00	0.00	0.00	10,772.50	461.63	-270.84	-462.67	0.00	0.00	0.00
10,900.00	0.00	0.00	10,872.50	461.63	-270.84	-462.67	0.00	0.00	0.00
10,955.50	0.00	0.00	10,928.00	461.63	-270.84	-462.67	0.00	0.00	0.00
3rd Bone Spring Ss									
11,000.00	0.00	0.00	10,972.50	461.63	-270.84	-462.67	0.00	0.00	0.00
11,092.54	0.00	0.00	11,065.04	461.63	-270.84	-462.67	0.00	0.00	0.00
11,100.00	0.75	179.78	11,072.50	461.58	-270.84	-462.62	10.00	10.00	0.00
11,150.00	5.75	179.78	11,122.40	458.75	-270.83	-459.79	10.00	10.00	0.00
11,200.00	10.75	179.78	11,171.87	451.58	-270.80	-452.62	10.00	10.00	0.00
11,250.00	15.75	179.78	11,220.53	440.13	-270.75	-441.17	10.00	10.00	0.00
11,300.00	20.75	179.78	11,268.00	424.48	-270.69	-425.52	10.00	10.00	0.00
11,350.00	25.75	179.78	11,313.92	404.75	-270.62	-405.79	10.00	10.00	0.00
11,382.75	29.02	179.78	11,343.00	389.69	-270.56	-390.73	10.00	10.00	0.00
Wolfcamp									
11,400.00	30.75	179.78	11,357.96	381.10	-270.53	-382.13	10.00	10.00	0.00
11,435.64	34.31	179.78	11,388.00	361.94	-270.45	-362.97	10.00	10.00	0.00
Wolfcamp X									
11,450.00	35.75	179.78	11,399.76	353.70	-270.42	-354.73	10.00	10.00	0.00
11,500.00	40.75	179.78	11,439.01	322.75	-270.30	-323.79	10.00	10.00	0.00
11,532.47	43.99	179.78	11,463.00	300.87	-270.22	-301.91	10.00	10.00	0.00
Wolfcamp Y									
11,550.00	45.75	179.78	11,475.42	288.51	-270.17	-289.54	10.00	10.00	0.00
11,600.00	50.75	179.78	11,508.71	251.22	-270.03	-252.26	10.00	10.00	0.00
11,648.90	55.64	179.78	11,538.00	212.08	-269.88	-213.11	10.00	10.00	0.00
Wolfcamp A									
11,650.00	55.75	179.78	11,538.62	211.17	-269.88	-212.21	10.00	10.00	0.00
11,700.00	60.75	179.78	11,564.92	168.67	-269.71	-169.71	10.00	10.00	0.00
11,750.00	65.75	179.78	11,587.43	124.04	-269.54	-125.07	10.00	10.00	0.00
11,800.00	70.75	179.78	11,605.95	77.61	-269.36	-78.65	10.00	10.00	0.00
11,850.00	75.75	179.78	11,620.36	29.75	-269.18	-30.79	10.00	10.00	0.00
11,900.00	80.75	179.78	11,630.54	-19.18	-268.99	18.15	10.00	10.00	0.00

Planning Report

Database:	PREDATOR_EDM	Local Co-ordinate Reference:	Well 13-705H
Company:	XTO Energy	TVD Reference:	3471+27 @ 3498.00usft (GL+KB)
Project:	Eddy County, NM (NAD27) NMEZ Grid	MD Reference:	3471+27 @ 3498.00usft (GL+KB)
Site:	PLU 13 Dog Town Draw	North Reference:	Grid
Well:	13-705H	Survey Calculation Method:	Minimum Curvature
Wellbore:	705H Lateral		
Design:	Plan #2		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
11,950.00	85.75	179.78	11,636.42	-68.82	-268.80	67.79	10.00	10.00	0.00	
11,992.54	90.00	179.78	11,638.00	-111.32	-268.64	110.29	10.00	10.00	0.00	
LP										
12,000.00	90.00	179.78	11,638.00	-118.78	-268.61	117.75	0.00	0.00	0.00	
12,100.00	90.00	179.78	11,638.00	-218.78	-268.23	217.75	0.00	0.00	0.00	
12,200.00	90.00	179.78	11,638.00	-318.78	-267.84	317.75	0.00	0.00	0.00	
12,300.00	90.00	179.78	11,638.00	-418.78	-267.46	417.75	0.00	0.00	0.00	
12,400.00	90.00	179.78	11,638.00	-518.78	-267.08	517.75	0.00	0.00	0.00	
12,500.00	90.00	179.78	11,638.00	-618.78	-266.69	617.75	0.00	0.00	0.00	
12,600.00	90.00	179.78	11,638.00	-718.78	-266.31	717.75	0.00	0.00	0.00	
12,700.00	90.00	179.78	11,638.00	-818.78	-265.93	817.75	0.00	0.00	0.00	
12,800.00	90.00	179.78	11,638.00	-918.78	-265.54	917.75	0.00	0.00	0.00	
12,900.00	90.00	179.78	11,638.00	-1,018.77	-265.16	1,017.75	0.00	0.00	0.00	
13,000.00	90.00	179.78	11,638.00	-1,118.77	-264.78	1,117.75	0.00	0.00	0.00	
13,100.00	90.00	179.78	11,638.00	-1,218.77	-264.39	1,217.75	0.00	0.00	0.00	
13,200.00	90.00	179.78	11,638.00	-1,318.77	-264.01	1,317.75	0.00	0.00	0.00	
13,300.00	90.00	179.78	11,638.00	-1,418.77	-263.63	1,417.75	0.00	0.00	0.00	
13,400.00	90.00	179.78	11,638.00	-1,518.77	-263.24	1,517.75	0.00	0.00	0.00	
13,500.00	90.00	179.78	11,638.00	-1,618.77	-262.86	1,617.75	0.00	0.00	0.00	
13,600.00	90.00	179.78	11,638.00	-1,718.77	-262.48	1,717.75	0.00	0.00	0.00	
13,700.00	90.00	179.78	11,638.00	-1,818.77	-262.09	1,817.75	0.00	0.00	0.00	
13,800.00	90.00	179.78	11,638.00	-1,918.77	-261.71	1,917.75	0.00	0.00	0.00	
13,900.00	90.00	179.78	11,638.00	-2,018.77	-261.33	2,017.75	0.00	0.00	0.00	
14,000.00	90.00	179.78	11,638.00	-2,118.77	-260.94	2,117.75	0.00	0.00	0.00	
14,100.00	90.00	179.78	11,638.00	-2,218.77	-260.56	2,217.75	0.00	0.00	0.00	
14,200.00	90.00	179.78	11,638.00	-2,318.76	-260.18	2,317.75	0.00	0.00	0.00	
14,300.00	90.00	179.78	11,638.00	-2,418.76	-259.79	2,417.75	0.00	0.00	0.00	
14,400.00	90.00	179.78	11,638.00	-2,518.76	-259.41	2,517.75	0.00	0.00	0.00	
14,500.00	90.00	179.78	11,638.00	-2,618.76	-259.03	2,617.75	0.00	0.00	0.00	
14,600.00	90.00	179.78	11,638.00	-2,718.76	-258.64	2,717.75	0.00	0.00	0.00	
14,700.00	90.00	179.78	11,638.00	-2,818.76	-258.26	2,817.75	0.00	0.00	0.00	
14,800.00	90.00	179.78	11,638.00	-2,918.76	-257.88	2,917.75	0.00	0.00	0.00	
14,900.00	90.00	179.78	11,638.00	-3,018.76	-257.49	3,017.75	0.00	0.00	0.00	
15,000.00	90.00	179.78	11,638.00	-3,118.76	-257.11	3,117.75	0.00	0.00	0.00	
15,100.00	90.00	179.78	11,638.00	-3,218.76	-256.73	3,217.75	0.00	0.00	0.00	
15,200.00	90.00	179.78	11,638.00	-3,318.76	-256.34	3,317.75	0.00	0.00	0.00	
15,300.00	90.00	179.78	11,638.00	-3,418.76	-255.96	3,417.75	0.00	0.00	0.00	
15,400.00	90.00	179.78	11,638.00	-3,518.76	-255.58	3,517.75	0.00	0.00	0.00	
15,500.00	90.00	179.78	11,638.00	-3,618.76	-255.19	3,617.75	0.00	0.00	0.00	
15,600.00	90.00	179.78	11,638.00	-3,718.75	-254.81	3,717.75	0.00	0.00	0.00	
15,700.00	90.00	179.78	11,638.00	-3,818.75	-254.43	3,817.75	0.00	0.00	0.00	
15,800.00	90.00	179.78	11,638.00	-3,918.75	-254.04	3,917.75	0.00	0.00	0.00	
15,900.00	90.00	179.78	11,638.00	-4,018.75	-253.66	4,017.75	0.00	0.00	0.00	
16,000.00	90.00	179.78	11,638.00	-4,118.75	-253.28	4,117.75	0.00	0.00	0.00	
16,100.00	90.00	179.78	11,638.00	-4,218.75	-252.89	4,217.75	0.00	0.00	0.00	
16,200.00	90.00	179.78	11,638.00	-4,318.75	-252.51	4,317.75	0.00	0.00	0.00	
16,300.00	90.00	179.78	11,638.00	-4,418.75	-252.13	4,417.75	0.00	0.00	0.00	
16,400.00	90.00	179.78	11,638.00	-4,518.75	-251.74	4,517.75	0.00	0.00	0.00	
16,500.00	90.00	179.78	11,638.00	-4,618.75	-251.36	4,617.75	0.00	0.00	0.00	
16,600.00	90.00	179.78	11,638.00	-4,718.75	-250.97	4,717.75	0.00	0.00	0.00	
16,700.00	90.00	179.78	11,638.00	-4,818.75	-250.59	4,817.75	0.00	0.00	0.00	
16,800.00	90.00	179.78	11,638.00	-4,918.75	-250.21	4,917.75	0.00	0.00	0.00	
16,900.00	90.00	179.78	11,638.00	-5,018.75	-249.82	5,017.75	0.00	0.00	0.00	
17,000.00	90.00	179.78	11,638.00	-5,118.74	-249.44	5,117.75	0.00	0.00	0.00	

Planning Report

Database:	PREDATOR_EDM	Local Co-ordinate Reference:	Well 13-705H
Company:	XTO Energy	TVD Reference:	3471+27 @ 3498.00usft (GL+KB)
Project:	Eddy County, NM (NAD27) NMEZ Grid	MD Reference:	3471+27 @ 3498.00usft (GL+KB)
Site:	PLU 13' Dog Town Draw	North Reference:	Grid
Well:	13-705H	Survey Calculation Method:	Minimum Curvature
Wellbore:	705H Lateral		
Design:	Plan #2		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/S (usft)	+E/W (usft)	Vertical Section (usft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
17,100.00	90.00	179.78	11,638.00	-5,218.74	-249.06	5,217.75	0.00	0.00	0.00	
17,200.00	90.00	179.78	11,638.00	-5,318.74	-248.67	5,317.75	0.00	0.00	0.00	
17,300.00	90.00	179.78	11,638.00	-5,418.74	-248.29	5,417.75	0.00	0.00	0.00	
17,400.00	90.00	179.78	11,638.00	-5,518.74	-247.91	5,517.75	0.00	0.00	0.00	
17,500.00	90.00	179.78	11,638.00	-5,618.74	-247.52	5,617.75	0.00	0.00	0.00	
17,600.00	90.00	179.78	11,638.00	-5,718.74	-247.14	5,717.75	0.00	0.00	0.00	
17,700.00	90.00	179.78	11,638.00	-5,818.74	-246.76	5,817.75	0.00	0.00	0.00	
17,800.00	90.00	179.78	11,638.00	-5,918.74	-246.37	5,917.75	0.00	0.00	0.00	
17,900.00	90.00	179.78	11,638.00	-6,018.74	-245.99	6,017.75	0.00	0.00	0.00	
18,000.00	90.00	179.78	11,638.00	-6,118.74	-245.61	6,117.75	0.00	0.00	0.00	
18,100.00	90.00	179.78	11,638.00	-6,218.74	-245.22	6,217.75	0.00	0.00	0.00	
18,200.00	90.00	179.78	11,638.00	-6,318.74	-244.84	6,317.75	0.00	0.00	0.00	
18,300.00	90.00	179.78	11,638.00	-6,418.73	-244.46	6,417.75	0.00	0.00	0.00	
18,400.00	90.00	179.78	11,638.00	-6,518.73	-244.07	6,517.75	0.00	0.00	0.00	
18,500.00	90.00	179.78	11,638.00	-6,618.73	-243.69	6,617.75	0.00	0.00	0.00	
18,600.00	90.00	179.78	11,638.00	-6,718.73	-243.31	6,717.75	0.00	0.00	0.00	
18,700.00	90.00	179.78	11,638.00	-6,818.73	-242.92	6,817.75	0.00	0.00	0.00	
18,800.00	90.00	179.78	11,638.00	-6,918.73	-242.54	6,917.75	0.00	0.00	0.00	
18,900.00	90.00	179.78	11,638.00	-7,018.73	-242.16	7,017.75	0.00	0.00	0.00	
19,000.00	90.00	179.78	11,638.00	-7,118.73	-241.77	7,117.75	0.00	0.00	0.00	
19,100.00	90.00	179.78	11,638.00	-7,218.73	-241.39	7,217.75	0.00	0.00	0.00	
19,200.00	90.00	179.78	11,638.00	-7,318.73	-241.01	7,317.75	0.00	0.00	0.00	
19,300.00	90.00	179.78	11,638.00	-7,418.73	-240.62	7,417.75	0.00	0.00	0.00	
19,400.00	90.00	179.78	11,638.00	-7,518.73	-240.24	7,517.75	0.00	0.00	0.00	
19,500.00	90.00	179.78	11,638.00	-7,618.73	-239.86	7,617.75	0.00	0.00	0.00	
19,600.00	90.00	179.78	11,638.00	-7,718.73	-239.47	7,717.75	0.00	0.00	0.00	
19,700.00	90.00	179.78	11,638.00	-7,818.72	-239.09	7,817.75	0.00	0.00	0.00	
19,800.00	90.00	179.78	11,638.00	-7,918.72	-238.71	7,917.75	0.00	0.00	0.00	
19,900.00	90.00	179.78	11,638.00	-8,018.72	-238.32	8,017.75	0.00	0.00	0.00	
20,000.00	90.00	179.78	11,638.00	-8,118.72	-237.94	8,117.75	0.00	0.00	0.00	
20,100.00	90.00	179.78	11,638.00	-8,218.72	-237.56	8,217.75	0.00	0.00	0.00	
20,200.00	90.00	179.78	11,638.00	-8,318.72	-237.17	8,317.75	0.00	0.00	0.00	
20,300.00	90.00	179.78	11,638.00	-8,418.72	-236.79	8,417.75	0.00	0.00	0.00	
20,400.00	90.00	179.78	11,638.00	-8,518.72	-236.41	8,517.75	0.00	0.00	0.00	
20,500.00	90.00	179.78	11,638.00	-8,618.72	-236.02	8,617.75	0.00	0.00	0.00	
20,600.00	90.00	179.78	11,638.00	-8,718.72	-235.64	8,717.75	0.00	0.00	0.00	
20,700.00	90.00	179.78	11,638.00	-8,818.72	-235.26	8,817.75	0.00	0.00	0.00	
20,800.00	90.00	179.78	11,638.00	-8,918.72	-234.87	8,917.75	0.00	0.00	0.00	
20,900.00	90.00	179.78	11,638.00	-9,018.72	-234.49	9,017.75	0.00	0.00	0.00	
21,000.00	90.00	179.78	11,638.00	-9,118.72	-234.11	9,117.75	0.00	0.00	0.00	
21,100.00	90.00	179.78	11,638.00	-9,218.71	-233.72	9,217.75	0.00	0.00	0.00	
21,200.00	90.00	179.78	11,638.00	-9,318.71	-233.34	9,317.75	0.00	0.00	0.00	
21,300.00	90.00	179.78	11,638.00	-9,418.71	-232.96	9,417.75	0.00	0.00	0.00	
21,400.00	90.00	179.78	11,638.00	-9,518.71	-232.57	9,517.75	0.00	0.00	0.00	
21,500.00	90.00	179.78	11,638.00	-9,618.71	-232.19	9,617.75	0.00	0.00	0.00	
21,600.00	90.00	179.78	11,638.00	-9,718.71	-231.80	9,717.75	0.00	0.00	0.00	
21,700.00	90.00	179.78	11,638.00	-9,818.71	-231.42	9,817.75	0.00	0.00	0.00	
21,731.69	90.00	179.78	11,638.00	-9,850.40	-231.30	9,849.44	0.00	0.00	0.00	

Planning Report

Database:	PREDATOR_EDM	Local Co-ordinate Reference:	Well 13-705H
Company:	XTO Energy	TVD Reference:	3471+27 @ 3498.00usft (GL+KB)
Project:	Eddy County, NM (NAD27) NMEZ Grid	MD Reference:	3471+27 @ 3498.00usft (GL+KB)
Site:	PLU 13 Dog Town Draw	North Reference:	Grid
Well:	13-705H	Survey Calculation Method:	Minimum Curvature
Wellbore:	705H Lateral		
Design:	Plan #2		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(usft)	(usft)	(usft)	(usft)	(usft)		
- Shape									
PLU 13 DTD 705H SHL	0.00	0.00	0.00	0.00	0.00	440,149.60	654,957.80	32.20909563	-103.83232339
- plan hits target center									
- Point									
PLU 13 DTD 705H LTP	0.00	0.00	11,638.00	-9,720.40	-231.80	430,429.20	654,726.00	32.18237816	-103.83321898
- plan hits target center									
- Point									
PLU 13 DTD 705H FTP	0.00	0.00	11,638.00	180.90	-270.70	440,330.50	654,687.10	32.20959637	-103.83319586
- plan misses target center by 70.23usft at 11721.98usft MD (11575.30 TVD, 149.29 N, -269.64 E)									
- Point									
PLU 13 DTD 705H PBH	0.00	0.00	11,638.00	-9,850.40	-231.30	430,299.20	654,726.50	32.18202080	-103.83321932
- plan hits target center									
- Rectangle (sides W100.00 H10,031.00 D0.00)									

Formations							
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction		
(usft)	(usft)			(°)	(°)		
508.00	508.00	Rustler					
598.00	598.00	Magenta Dolomite					
918.00	918.00	Top Salt					
3,980.01	3,973.00	Base Salt					
4,201.22	4,193.00	Delaware					
8,195.50	8,168.00	Bone Spring					
9,145.50	9,118.00	1st Bone Spring Ss					
9,825.50	9,798.00	2nd Bone Spring Ss					
10,220.50	10,193.00	3rd Bone Spring Lm					
10,955.50	10,928.00	3rd Bone Spring Ss					
11,382.75	11,343.00	Wolfcamp					
11,435.64	11,388.00	Wolfcamp X					
11,532.47	11,463.00	Wolfcamp Y					
11,648.90	11,538.00	Wolfcamp A					
11,992.54	11,638.00	LP					