

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

FORM APPROVED
OMB NO. 1004-0137
Expires: January 31, 2018**SUNDRY NOTICES AND REPORTS ON WELLS**
Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.

SEP 06 2018

SUBMIT IN TRIPLICATE - Other instructions on page 2

1. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other	5. Lease Serial No. NMNM17225A
2. Name of Operator XTO ENERGY INCORPORATED	6. If Indian, Allottee or Tribe Name
3a. Address 6401 HOLIDAY HILL ROAD BLDG 5 MIDLAND, TX 79707	7. If Unit or CA/Agreement, Name and/or No. 319620
3b. Phone No. (include area code) Carlsbad Field Office	8. Well Name and No. ROSS DRAW 3031 FEDERAL 6H
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 31 T26S R30E 170FSL 430FEL 32.000587 N Lat, 103.913368 W Lon	9. API Well No. 30-015-45121-00-X1
	10. Field and Pool or Exploratory Area PURPLE SAGE-WOLFCAMP (GAS)
	11. County or Parish, State EDDY COUNTY, NM

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

TYPE OF SUBMISSION	TYPE OF ACTION			
☒ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Hydraulic Fracturing	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☐ Recomplete	☒ Other
	☐ Change 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 recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.

XTO Energy, Inc respectfully requests to amend the following on the referenced well:

- Well Name Change to: Ross Draw 31 Federal WAL Com #6H - 322644
- Extend Lateral fr/1.5 mile to 2-mile.

GC 9-7-18
Accepted for record - NMOC

An updated directional drill survey, C-102 and drilling program is attached.

All previous COA still apply except filled 50% of intermediate casing with fluid and fill of 1/3 cas production casing with fluid while running both casing.
Cement Excess for production casing calculates to be 21%.

14. I hereby certify that the foregoing is true and correct. Electronic Submission #429117 verified by the BLM Well Information System For XTO ENERGY INCORPORATED, sent to the Carlsbad Committed to AFMS for processing by PRISCILLA PEREZ on 08/01/2018 (18PP2378SE)	
Name (Printed/Typed) STEPHANIE RABADUE	Title REGULATORY ANALYST
Signature (Electronic Submission)	Date 07/30/2018

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By <u>/s/Zota Stevens</u>	Title Petroleum Engineer Carlsbad Field Office	Date <u>8-20-18</u>
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.		

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 **

10/11/18

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) 748-1285 Fax (575) 748-9720

DISTRICT III
1000 Rio Brazos Road, Aztec, NM 87410
Phone (505) 734-6178 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, New Mexico 87505

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

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015- 45121	Pool Code 98220	Pool Name PURPLE SAGE, WOLFCAMP
Property Code 30-015- 322644	Property Name ROSS Draw 31 Federal WAC COM	Well Number 6H
OGRID No 005380	Operator Name XTO ENERGY, INC.	Elevation 3001'

Surface Location

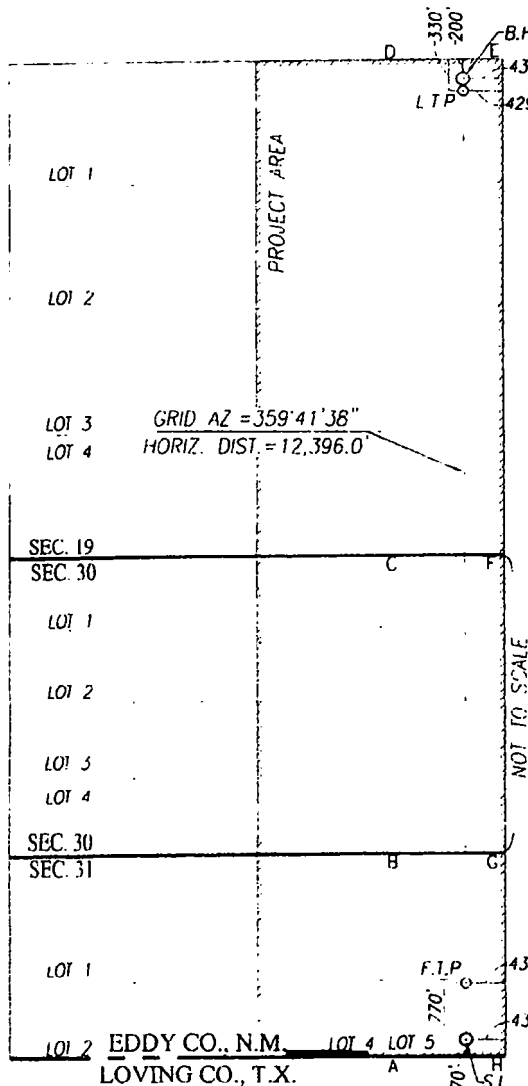
UL or lot No	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H 5	31	26-S	30-E		170	SOUTH	430	EAST	EDDY

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
A	19	26-S	30-E		200	NORTH	430	EAST	EDDY

Dedicated Acres 720	Joint or Infill	Consolidation Code	Order No
------------------------	-----------------	--------------------	----------

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



SCALE: 1"=2000'

GEODETIC COORDINATES NAD 27 NME BOTTOM HOLE LOCATION Y=376541.7 N X=630269.0 E LAT.=32.034531° N LONG.=103.912947° W GEODETIC COORDINATES NAD 27 NME LAST TAKE POINT Y=376411.7 N X=630269.7 E LAT.=32.034173° N LONG.=103.912947° W	GEODETIC COORDINATES NAD 83 NME BOTTOM HOLE LOCATION Y=376599.1 N X=671455.0 E LAT.=32.034656° N LONG.=103.913427° W GEODETIC COORDINATES NAD 83 NME LAST TAKE POINT Y=376469.2 N X=671455.7 E LAT.=32.034298° N LONG.=103.913426° W
--	--

CORNER COORDINATES TABLE

NAD 27 NME

A) Y=363974.8 N, X=629436.1 E
B) Y=366107.1 N, X=629425.9 E
C) Y=371420.8 N, X=629390.5 E
D) Y=376734.3 N, X=629367.3 E
E) Y=376745.1 N, X=630698.2 E
F) Y=363980.7 N, X=630755.7 E
G) Y=366117.3 N, X=630755.8 E
H) Y=363980.7 N, X=630756.7 E

CORNER COORDINATES TABLE

NAD 83 NME

A) Y=364032.0 N, X=670622.5 E
B) Y=366164.3 N, X=670612.2 E
C) Y=371478.1 N, X=670576.6 E
D) Y=376791.8 N, X=670553.2 E
E) Y=376802.6 N, X=671884.1 E
F) Y=364037.9 N, X=671952.0 E
G) Y=366174.6 N, X=671942.1 E
H) Y=364037.9 N, X=671952.0 E

GEODETIC COORDINATES NAD 27 NME FIRST TAKE POINT Y=364148.4 N X=630331.5 E LAT.=32.002110° N LONG.=103.912894° W GEODETIC COORDINATES NAD 27 NME SURFACE LOCATION Y=364148.7 N X=630334.9 E LAT.=32.000462° N LONG.=103.912891° W	GEODETIC COORDINATES NAD 83 NME FIRST TAKE POINT Y=364805.7 N X=671518.0 E LAT.=32.002236° N LONG.=103.913372° W GEODETIC COORDINATES NAD 83 NME SURFACE LOCATION Y=364206.0 N X=671521.2 E LAT.=32.000587° N LONG.=103.913369° W
---	---

OPERATOR CERTIFICATION

I hereby certify that the information 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 mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division

Stephanie Rabadue 6-12-18
Signature Date

Stephanie Rabadue
Printed Name

Stephanie.Rabadue@xtoenergy.com
E-mail Address

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.

SEPTEMBER 25, 2015

Date of Survey
Signature & Seal of Professional Surveyor

Professional Surveyor Seal
3239

Ronald J. Eidson 7/10/2018
Certificate Number
Ronald J. Eidson 3239

ACK REL W/O 15110918 JWSC W/O 15.13.0763

10/11/18

Operator Name: XTO Energy, Inc	Property Name: Ross Draw 31 Federal WAL <i>CDM</i>	Well Number 6H
-----------------------------------	---	-------------------

Kick Off Point (KOP)

UL	Section 31	Township 26S	Range 30E	Lot 5	Feet 170	From N/S South	Feet 430	From E/W East	County Eddy
Latitude 32.000587					Longitude -103.913369			NAD 83	

First Take Point (FTP)

UL	Section 31	Township 26S	Range 30E	Lot 5	Feet 770	From N/S South	Feet 430	From E/W East	County Eddy
Latitude 32.002236					Longitude -103.913372			NAD 83	

Last Take Point (LTP)

UL A	Section 19	Township 26S	Range 30E	Lot	Feet 200	From N/S North	Feet 430	From E/W East	County Eddy
Latitude 32.034298					Longitude -103.913426			NAD 83	

Is this well the defining well for the Horizontal Spacing Unit? ☒

Is this well an infill well? ☐

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

API #		
Operator Name:	Property Name:	Well Number

KZ 06/27/2018

10/11/18

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

XTO Energy Inc.
Ross Draw 31 Federal WAL #6H
Projected TD: 22839' MD / 10692' TVD
SHL: 170' FSL & 430' FEL , Section 31, T26S, R30E
BHL: 200' FNL & 430' FEL , Section 19, T26S, R30E
Eddy County, NM

1. Geologic Name of Surface Formation

A. Quaternary

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

Formation	Well Depth (TVD)	Water/Oil/Gas
Rustler	679'	Water
Top of Salt	839'	Water
Base of Salt	3085'	Water
Delaware	3274'	Water
Bone Spring	7079'	Water/Oil/Gas
1st Bone Spring Ss	7997'	Water/Oil/Gas
2nd Bone Spring Ss	8694'	Water/Oil/Gas
3rd Bone Spring Ss	9929'	Water/Oil/Gas
Wolfcamp X/Y	10302'	Water/Oil/Gas
Wolfcamp A	10420'	Water/Oil/Gas
Target/Land Curve	10692'	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 @ 720' (119' above the salt) and circulating cement back to surface. The salt will be isolated by setting 9-5/8 inch casing at 9760' and circulating cement to surface. An 8-3/4 inch curve and 8-1/2 inch lateral hole will be drilled to MD/TD and 5-1/2 inch casing will be set at TD and cemented back up to the 9-5/8 inch casing shoe.

3. Casing Design

Hole Size	Depth	OD Csg	Weight	Collar	Grade	New/Used	SF Burst	SF Collapse	SF Tension
17-1/2"	0' - 720' 820'	13-3/8"	54.5	STC	J-55	New	1.23	3.51	14.87
12-1/4"	0' - 9760'	9-5/8"	40	LTC	L-80	New	1.37	1.37	1.86
8-3/4" x 8-1/2"	0' - 22839'	5-1/2"	17	BTC	P-110	New	1.12	1.14	2.20

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

WELLHEAD:

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

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.
- Manufacturer will witness installation of test plug for initial test.
- Operator will test the 9-5/8" casing to 70% of casing burst before drilling out.

4. Cement Program -- List Depth of DVT in Csg String, include Cmt Vols for Stages Above & Below DVT

Surface Casing: 13-3/8", 54.5 New J-55, STC casing to be set at +/- 720'

Tail: 750 sxs Class C + 2% CaCl (mixed at 14.8 ppg, 1.32 ft³/sx, 6.35 gal/sx water)

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

Intermediate Casing: 9-5/8", 40 New L-80, LTC casing to be set at +/- 9760'

1st Stage:

Lead: 2090 sxs Class C + 2% CaCl (mixed at 12.2 ppg, 2.12 ft³/sx, 11.63 gal/sx water)

Tail: 500 sxs Class C + 2% CaCl (mixed at 14.5 ppg, 1.19 ft³/sx, 4.76 gal/sx water)

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

2nd Stage: (ECP/DV Tool set at 820'. Will pump if cement does not come to surface on 1st stage)

385 sxs Class C + 2% CaCl (mixed at 14.8 ppg, 1.32 ft³/sx, 6.35 gal/sx water) *1.32 ft³/sx*

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

Production Casing: 5-1/2", 17 New P-110, BTC casing to be set at +/- 22839'

Lead: 40 sxs NeoCem (mixed at 10.5 ppg, 2.69 ft³/sx, 12.26 gal/sx water)

Tail: 2450 sxs VersaCem (mixed at 13.2 ppg, 1.62 ft³/sx, 8.26 gal/sx water)

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

5. Pressure Control Equipment -- Review on Original Permit Only

The blow out preventer equipment (BOP) for this well consists of a 13-5/8" minimum 5M Hydriil and a 13-5/8" minimum 5M Double Ram BOP. MASP should not exceed 4208 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 nipping up on the 9-5/8", the BOP 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 720'	17-1/2"	FW/Native	8.4-8.8	32-36	NC
720' to 9760'	12-1/4"	OBM	8.4-8.9	40-50	NC
9760' to 22839'	8-3/4" x 8-1/2"	OBM	11.5 - 12	45-55	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 an 8.4ppg-8.9ppg oil base mud which 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. 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 include Triple Combo thru curve to Intermediate casing.

9. Abnormal Pressures and Temperatures / Potential Hazards

None Anticipated. BHT of 150 to 170 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 6561 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

Eddy County, NM (NAD27 NME)

Ross Draw 3031 Federal

Ross Draw 3031 Federal 6H

OH

Plan: Plan #2 07-13-18

Standard Planning Report

13 July, 2018



Windows User Planning Report

Database: EDM 5000.14 Single User Db
Company: XTO Energy
Project: Eddy County, NM (NAD27 NME)
Site: Ross Draw 3031 Federal
Well: Ross Draw 3031 Federal 6H
Wellbore: OH
Design: Plan #2 07-13-18

Local Co-ordinate Reference: Well Ross Draw 3031 Federal 6H
TVD Reference: KB @ 3033.00usft (Scan Producer)
MD Reference: KB @ 3033.00usft (Scan Producer)
North Reference: True
Survey Calculation Method: Minimum Curvature

Project	Eddy County, NM (NAD27 NME)		
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	Ross Draw 3031 Federal			
Site Position:		Northing:	364,148.70 usft	Latitude: 32° 0' 1.662 N
From: Map		Easting:	630,334.90 usft	Longitude: 103° 54' 46.406 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence: 0.22 °

Well	Ross Draw 3031 Federal 6H			
Well Position	+N/-S	0.00 usft	Northing:	364,148.70 usft
	+E/-W	0.00 usft	Easting:	630,334.90 usft
Position Uncertainty	0.00 usft		Wellhead Elevation:	Ground Level: 3,001.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	07/12/18	6.98	59.79	47,662.53822487

Design	Plan #2 07-13-18			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	359.92

Plan Survey Tool Program	Date 07/13/18			
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	22,839.26 Plan #2 07-13-18 (OH)	MWD	
			MWD - Standard	

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
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10,119.04	0.00	0.00	10,119.04	0.00	0.00	0.00	0.00	0.00	0.00	
11,019.04	90.00	359.92	10,692.00	572.96	-0.82	10.00	10.00	0.00	359.92	
22,839.26	90.00	359.92	10,692.00	12,393.16	-17.70	0.00	0.00	0.00	0.00	PBHL(RD 31 Fed #6H



Windows User

Planning Report

Database: EDM 5000.14 Single User Db
Company: XTO Energy
Project: Eddy County, NM (NAD27 NME)
Site: Ross Draw 3031 Federal
Well: Ross Draw 3031 Federal 6H
Wellbore: OH
Design: Plan #2 07-13-18

Local Co-ordinate Reference: Well Ross Draw 3031 Federal 6H
TVD Reference: KB @ 3033.00usft (Scan Producer)
MD Reference: KB @ 3033.00usft (Scan Producer)
North Reference: True
Survey Calculation Method: Minimum Curvature

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)
0.00	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
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
679.00	0.00	0.00	679.00	0.00	0.00	0.00	0.00	0.00	0.00
Rustler									
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
839.00	0.00	0.00	839.00	0.00	0.00	0.00	0.00	0.00	0.00
Salado (Top of Salt)									
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
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	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,085.00	0.00	0.00	3,085.00	0.00	0.00	0.00	0.00	0.00	0.00
Base of Salt									
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,274.00	0.00	0.00	3,274.00	0.00	0.00	0.00	0.00	0.00	0.00
Delaware (Bell Canyon)									
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
3,900.00	0.00	0.00	3,900.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00	0.00	0.00	4,200.00	0.00	0.00	0.00	0.00	0.00	0.00
4,220.00	0.00	0.00	4,220.00	0.00	0.00	0.00	0.00	0.00	0.00
Cherry Canyon									
4,300.00	0.00	0.00	4,300.00	0.00	0.00	0.00	0.00	0.00	0.00



Windows User Planning Report

Database: EDM 5000.14 Single User Db
Company: XTO Energy
Project: Eddy County, NM (NAD27 NME)
Site: Ross Draw 3031 Federal
Well: Ross Draw 3031 Federal 6H
Wellbore: OH
Design: Plan #2 07-13-18

Local Co-ordinate Reference: Well Ross Draw 3031 Federal 6H
TVD Reference: KB @ 3033.00usft (Scan Producer)
MD Reference: KB @ 3033.00usft (Scan Producer)
North Reference: True
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Bulld Rate (°/100usft)	Turn Rate (°/100usft)
4,400.00	0.00	0.00	4,400.00	0.00	0.00	0.00	0.00	0.00	0.00
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5,100.00	0.00	0.00	5,100.00	0.00	0.00	0.00	0.00	0.00	0.00
5,200.00	0.00	0.00	5,200.00	0.00	0.00	0.00	0.00	0.00	0.00
5,300.00	0.00	0.00	5,300.00	0.00	0.00	0.00	0.00	0.00	0.00
5,400.00	0.00	0.00	5,400.00	0.00	0.00	0.00	0.00	0.00	0.00
5,500.00	0.00	0.00	5,500.00	0.00	0.00	0.00	0.00	0.00	0.00
5,600.00	0.00	0.00	5,600.00	0.00	0.00	0.00	0.00	0.00	0.00
5,700.00	0.00	0.00	5,700.00	0.00	0.00	0.00	0.00	0.00	0.00
5,800.00	0.00	0.00	5,800.00	0.00	0.00	0.00	0.00	0.00	0.00
5,883.00	0.00	0.00	5,883.00	0.00	0.00	0.00	0.00	0.00	0.00
Brushy Canyon									
5,900.00	0.00	0.00	5,900.00	0.00	0.00	0.00	0.00	0.00	0.00
6,000.00	0.00	0.00	6,000.00	0.00	0.00	0.00	0.00	0.00	0.00
6,100.00	0.00	0.00	6,100.00	0.00	0.00	0.00	0.00	0.00	0.00
6,200.00	0.00	0.00	6,200.00	0.00	0.00	0.00	0.00	0.00	0.00
6,300.00	0.00	0.00	6,300.00	0.00	0.00	0.00	0.00	0.00	0.00
6,400.00	0.00	0.00	6,400.00	0.00	0.00	0.00	0.00	0.00	0.00
6,500.00	0.00	0.00	6,500.00	0.00	0.00	0.00	0.00	0.00	0.00
6,600.00	0.00	0.00	6,600.00	0.00	0.00	0.00	0.00	0.00	0.00
6,700.00	0.00	0.00	6,700.00	0.00	0.00	0.00	0.00	0.00	0.00
6,800.00	0.00	0.00	6,800.00	0.00	0.00	0.00	0.00	0.00	0.00
6,817.00	0.00	0.00	6,817.00	0.00	0.00	0.00	0.00	0.00	0.00
Basal Brushy Canyon									
6,900.00	0.00	0.00	6,900.00	0.00	0.00	0.00	0.00	0.00	0.00
7,000.00	0.00	0.00	7,000.00	0.00	0.00	0.00	0.00	0.00	0.00
7,079.00	0.00	0.00	7,079.00	0.00	0.00	0.00	0.00	0.00	0.00
Bone Spring Lime									
7,100.00	0.00	0.00	7,100.00	0.00	0.00	0.00	0.00	0.00	0.00
7,200.00	0.00	0.00	7,200.00	0.00	0.00	0.00	0.00	0.00	0.00
7,300.00	0.00	0.00	7,300.00	0.00	0.00	0.00	0.00	0.00	0.00
7,400.00	0.00	0.00	7,400.00	0.00	0.00	0.00	0.00	0.00	0.00
7,500.00	0.00	0.00	7,500.00	0.00	0.00	0.00	0.00	0.00	0.00
7,600.00	0.00	0.00	7,600.00	0.00	0.00	0.00	0.00	0.00	0.00
7,700.00	0.00	0.00	7,700.00	0.00	0.00	0.00	0.00	0.00	0.00
7,800.00	0.00	0.00	7,800.00	0.00	0.00	0.00	0.00	0.00	0.00
7,900.00	0.00	0.00	7,900.00	0.00	0.00	0.00	0.00	0.00	0.00
7,997.00	0.00	0.00	7,997.00	0.00	0.00	0.00	0.00	0.00	0.00
1st Bone Spring Sand									
8,000.00	0.00	0.00	8,000.00	0.00	0.00	0.00	0.00	0.00	0.00
8,100.00	0.00	0.00	8,100.00	0.00	0.00	0.00	0.00	0.00	0.00
8,200.00	0.00	0.00	8,200.00	0.00	0.00	0.00	0.00	0.00	0.00
8,300.00	0.00	0.00	8,300.00	0.00	0.00	0.00	0.00	0.00	0.00
8,400.00	0.00	0.00	8,400.00	0.00	0.00	0.00	0.00	0.00	0.00
8,497.00	0.00	0.00	8,497.00	0.00	0.00	0.00	0.00	0.00	0.00
2nd Bone Spring Lime									
8,500.00	0.00	0.00	8,500.00	0.00	0.00	0.00	0.00	0.00	0.00
8,600.00	0.00	0.00	8,600.00	0.00	0.00	0.00	0.00	0.00	0.00



Windows User Planning Report

Database: EDM 5000.14 Single User Db
Company: XTO Energy
Project: Eddy County, NM (NAD27 NME)
Site: Ross Draw 3031 Federal
Well: Ross Draw 3031 Federal 6H
Wellbore: OH
Design: Plan #2 07-13-18

Local Co-ordinate Reference: Well Ross Draw 3031 Federal 6H
TVD Reference: KB @ 3033.00usft (Scan Producer)
MD Reference: KB @ 3033.00usft (Scan Producer)
North Reference: True
Survey Calculation Method: Minimum Curvature

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)
8,694.00	0.00	0.00	8,694.00	0.00	0.00	0.00	0.00	0.00	0.00
2nd Bone Spring Sand									
8,700.00	0.00	0.00	8,700.00	0.00	0.00	0.00	0.00	0.00	0.00
8,800.00	0.00	0.00	8,800.00	0.00	0.00	0.00	0.00	0.00	0.00
8,900.00	0.00	0.00	8,900.00	0.00	0.00	0.00	0.00	0.00	0.00
9,000.00	0.00	0.00	9,000.00	0.00	0.00	0.00	0.00	0.00	0.00
9,100.00	0.00	0.00	9,100.00	0.00	0.00	0.00	0.00	0.00	0.00
9,200.00	0.00	0.00	9,200.00	0.00	0.00	0.00	0.00	0.00	0.00
9,211.00	0.00	0.00	9,211.00	0.00	0.00	0.00	0.00	0.00	0.00
3rd Bone Spring Lime									
9,300.00	0.00	0.00	9,300.00	0.00	0.00	0.00	0.00	0.00	0.00
9,400.00	0.00	0.00	9,400.00	0.00	0.00	0.00	0.00	0.00	0.00
9,451.00	0.00	0.00	9,451.00	0.00	0.00	0.00	0.00	0.00	0.00
Harkey sand									
9,500.00	0.00	0.00	9,500.00	0.00	0.00	0.00	0.00	0.00	0.00
9,600.00	0.00	0.00	9,600.00	0.00	0.00	0.00	0.00	0.00	0.00
9,700.00	0.00	0.00	9,700.00	0.00	0.00	0.00	0.00	0.00	0.00
9,713.00	0.00	0.00	9,713.00	0.00	0.00	0.00	0.00	0.00	0.00
Lower 3rd Bone Spring Lime									
9,754.00	0.00	0.00	9,754.00	0.00	0.00	0.00	0.00	0.00	0.00
Lower 3rd Bone Spring Shale									
9,800.00	0.00	0.00	9,800.00	0.00	0.00	0.00	0.00	0.00	0.00
9,900.00	0.00	0.00	9,900.00	0.00	0.00	0.00	0.00	0.00	0.00
9,929.00	0.00	0.00	9,929.00	0.00	0.00	0.00	0.00	0.00	0.00
3rd Bone Spring Sand									
10,000.00	0.00	0.00	10,000.00	0.00	0.00	0.00	0.00	0.00	0.00
10,100.00	0.00	0.00	10,100.00	0.00	0.00	0.00	0.00	0.00	0.00
10,119.04	0.00	0.00	10,119.04	0.00	0.00	0.00	0.00	0.00	0.00
KOP, Start 10°/100' Build									
10,200.00	8.10	359.92	10,199.73	5.71	-0.01	5.71	10.00	10.00	0.00
10,200.27	8.12	359.92	10,200.00	5.75	-0.01	5.75	10.00	10.00	0.00
3rd Bone Spring Red Hills Sand									
10,269.73	15.07	359.92	10,268.00	19.70	-0.03	19.70	10.00	10.00	0.00
Wolfcamp									
10,300.00	18.10	359.92	10,297.01	28.34	-0.04	28.34	10.00	10.00	0.00
10,305.26	18.62	359.92	10,302.00	30.00	-0.04	30.00	10.00	10.00	0.00
Wolfcamp X Sand									
10,400.00	28.10	359.92	10,388.88	67.52	-0.10	67.52	10.00	10.00	0.00
10,402.41	28.34	359.92	10,391.00	68.66	-0.10	68.66	10.00	10.00	0.00
Wolfcamp Y Sand									
10,435.91	31.69	359.92	10,420.00	85.41	-0.12	85.41	10.00	10.00	0.00
Wolfcamp A Shale									
10,500.00	38.10	359.92	10,472.54	122.05	-0.17	122.05	10.00	10.00	0.00
10,600.00	48.10	359.92	10,545.47	190.29	-0.27	190.29	10.00	10.00	0.00
10,700.00	58.10	359.92	10,605.45	270.15	-0.39	270.15	10.00	10.00	0.00
10,800.00	68.10	359.92	10,650.64	359.21	-0.51	359.21	10.00	10.00	0.00
10,900.00	78.10	359.92	10,679.68	454.77	-0.65	454.77	10.00	10.00	0.00
11,000.00	88.10	359.92	10,691.68	553.92	-0.79	553.92	10.00	10.00	0.00
11,019.04	90.00	359.92	10,692.00	572.96	-0.82	572.96	10.00	10.00	0.00
LP, Begin 90° Inc Hold, 359.92° Azm - Landing Point									
11,100.00	90.00	359.92	10,692.00	653.91	-0.93	653.92	0.00	0.00	0.00
11,200.00	90.00	359.92	10,692.00	753.91	-1.08	753.92	0.00	0.00	0.00



Windows User

Planning Report

Database: EDM 5000.14 Single User Db
Company: XTO Energy
Project: Eddy County, NM (NAD27 NME)
Site: Ross Draw 3031 Federal
Well: Ross Draw 3031 Federal 6H
Wellbore: OH
Design: Plan #2 07-13-18

Local Co-ordinate Reference: Well Ross Draw 3031 Federal 6H
TVD Reference: KB @ 3033.00usft (Scan Producer)
MD Reference: KB @ 3033.00usft (Scan Producer)
North Reference: True
Survey Calculation Method: Minimum Curvature

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)
11,300.00	90.00	359.92	10,692.00	853.91	-1.22	853.92	0.00	0.00	0.00
11,400.00	90.00	359.92	10,692.00	953.91	-1.36	953.92	0.00	0.00	0.00
11,500.00	90.00	359.92	10,692.00	1,053.91	-1.51	1,053.92	0.00	0.00	0.00
11,600.00	90.00	359.92	10,692.00	1,153.91	-1.65	1,153.92	0.00	0.00	0.00
11,700.00	90.00	359.92	10,692.00	1,253.91	-1.79	1,253.92	0.00	0.00	0.00
11,800.00	90.00	359.92	10,692.00	1,353.91	-1.93	1,353.92	0.00	0.00	0.00
11,900.00	90.00	359.92	10,692.00	1,453.91	-2.08	1,453.92	0.00	0.00	0.00
12,000.00	90.00	359.92	10,692.00	1,553.91	-2.22	1,553.92	0.00	0.00	0.00
12,100.00	90.00	359.92	10,692.00	1,653.91	-2.36	1,653.92	0.00	0.00	0.00
12,200.00	90.00	359.92	10,692.00	1,753.91	-2.51	1,753.92	0.00	0.00	0.00
12,300.00	90.00	359.92	10,692.00	1,853.91	-2.65	1,853.92	0.00	0.00	0.00
12,400.00	90.00	359.92	10,692.00	1,953.91	-2.79	1,953.92	0.00	0.00	0.00
12,500.00	90.00	359.92	10,692.00	2,053.91	-2.93	2,053.92	0.00	0.00	0.00
12,600.00	90.00	359.92	10,692.00	2,153.91	-3.08	2,153.92	0.00	0.00	0.00
12,700.00	90.00	359.92	10,692.00	2,253.91	-3.22	2,253.92	0.00	0.00	0.00
12,800.00	90.00	359.92	10,692.00	2,353.91	-3.36	2,353.92	0.00	0.00	0.00
12,900.00	90.00	359.92	10,692.00	2,453.91	-3.51	2,453.92	0.00	0.00	0.00
13,000.00	90.00	359.92	10,692.00	2,553.91	-3.65	2,553.92	0.00	0.00	0.00
13,100.00	90.00	359.92	10,692.00	2,653.91	-3.79	2,653.92	0.00	0.00	0.00
13,200.00	90.00	359.92	10,692.00	2,753.91	-3.93	2,753.92	0.00	0.00	0.00
13,300.00	90.00	359.92	10,692.00	2,853.91	-4.08	2,853.92	0.00	0.00	0.00
13,400.00	90.00	359.92	10,692.00	2,953.91	-4.22	2,953.92	0.00	0.00	0.00
13,500.00	90.00	359.92	10,692.00	3,053.91	-4.36	3,053.92	0.00	0.00	0.00
13,600.00	90.00	359.92	10,692.00	3,153.91	-4.51	3,153.92	0.00	0.00	0.00
13,700.00	90.00	359.92	10,692.00	3,253.91	-4.65	3,253.92	0.00	0.00	0.00
13,800.00	90.00	359.92	10,692.00	3,353.91	-4.79	3,353.92	0.00	0.00	0.00
13,900.00	90.00	359.92	10,692.00	3,453.91	-4.93	3,453.92	0.00	0.00	0.00
14,000.00	90.00	359.92	10,692.00	3,553.91	-5.08	3,553.92	0.00	0.00	0.00
14,100.00	90.00	359.92	10,692.00	3,653.91	-5.22	3,653.92	0.00	0.00	0.00
14,200.00	90.00	359.92	10,692.00	3,753.91	-5.36	3,753.92	0.00	0.00	0.00
14,300.00	90.00	359.92	10,692.00	3,853.91	-5.51	3,853.92	0.00	0.00	0.00
14,400.00	90.00	359.92	10,692.00	3,953.91	-5.65	3,953.92	0.00	0.00	0.00
14,500.00	90.00	359.92	10,692.00	4,053.91	-5.79	4,053.92	0.00	0.00	0.00
14,600.00	90.00	359.92	10,692.00	4,153.91	-5.93	4,153.92	0.00	0.00	0.00
14,700.00	90.00	359.92	10,692.00	4,253.91	-6.08	4,253.92	0.00	0.00	0.00
14,800.00	90.00	359.92	10,692.00	4,353.91	-6.22	4,353.92	0.00	0.00	0.00
14,900.00	90.00	359.92	10,692.00	4,453.91	-6.36	4,453.92	0.00	0.00	0.00
15,000.00	90.00	359.92	10,692.00	4,553.91	-6.51	4,553.92	0.00	0.00	0.00
15,100.00	90.00	359.92	10,692.00	4,653.91	-6.65	4,653.92	0.00	0.00	0.00
15,200.00	90.00	359.92	10,692.00	4,753.91	-6.79	4,753.92	0.00	0.00	0.00
15,300.00	90.00	359.92	10,692.00	4,853.91	-6.93	4,853.92	0.00	0.00	0.00
15,400.00	90.00	359.92	10,692.00	4,953.91	-7.08	4,953.92	0.00	0.00	0.00
15,500.00	90.00	359.92	10,692.00	5,053.91	-7.22	5,053.92	0.00	0.00	0.00
15,600.00	90.00	359.92	10,692.00	5,153.91	-7.36	5,153.92	0.00	0.00	0.00
15,700.00	90.00	359.92	10,692.00	5,253.91	-7.50	5,253.92	0.00	0.00	0.00
15,800.00	90.00	359.92	10,692.00	5,353.91	-7.65	5,353.92	0.00	0.00	0.00
15,900.00	90.00	359.92	10,692.00	5,453.91	-7.79	5,453.92	0.00	0.00	0.00
16,000.00	90.00	359.92	10,692.00	5,553.91	-7.93	5,553.92	0.00	0.00	0.00
16,100.00	90.00	359.92	10,692.00	5,653.91	-8.08	5,653.92	0.00	0.00	0.00
16,200.00	90.00	359.92	10,692.00	5,753.91	-8.22	5,753.92	0.00	0.00	0.00
16,300.00	90.00	359.92	10,692.00	5,853.91	-8.36	5,853.92	0.00	0.00	0.00
16,400.00	90.00	359.92	10,692.00	5,953.91	-8.50	5,953.92	0.00	0.00	0.00
16,500.00	90.00	359.92	10,692.00	6,053.91	-8.65	6,053.92	0.00	0.00	0.00
16,600.00	90.00	359.92	10,692.00	6,153.91	-8.79	6,153.92	0.00	0.00	0.00



Windows User

Planning Report

Database: EDM 5000.14 Single User Db
Company: XTO Energy
Project: Eddy County, NM (NAD27 NME)
Site: Ross Draw 3031 Federal
Well: Ross Draw 3031 Federal 6H
Wellbore: OH
Design: Plan #2 07-13-18

Local Co-ordinate Reference: Well Ross Draw 3031 Federal 6H
TVD Reference: KB @ 3033.00usft (Scan Producer)
MD Reference: KB @ 3033.00usft (Scan Producer)
North Reference: True
Survey Calculation Method: Minimum Curvature

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)
16,700.00	90.00	359.92	10,692.00	6,253.91	-8.93	6,253.92	0.00	0.00	0.00
16,800.00	90.00	359.92	10,692.00	6,353.91	-9.08	6,353.92	0.00	0.00	0.00
16,900.00	90.00	359.92	10,692.00	6,453.91	-9.22	6,453.92	0.00	0.00	0.00
17,000.00	90.00	359.92	10,692.00	6,553.91	-9.36	6,553.92	0.00	0.00	0.00
17,100.00	90.00	359.92	10,692.00	6,653.91	-9.50	6,653.92	0.00	0.00	0.00
17,200.00	90.00	359.92	10,692.00	6,753.91	-9.65	6,753.92	0.00	0.00	0.00
17,300.00	90.00	359.92	10,692.00	6,853.91	-9.79	6,853.92	0.00	0.00	0.00
17,400.00	90.00	359.92	10,692.00	6,953.91	-9.93	6,953.92	0.00	0.00	0.00
17,500.00	90.00	359.92	10,692.00	7,053.91	-10.08	7,053.92	0.00	0.00	0.00
17,600.00	90.00	359.92	10,692.00	7,153.91	-10.22	7,153.92	0.00	0.00	0.00
17,700.00	90.00	359.92	10,692.00	7,253.91	-10.36	7,253.92	0.00	0.00	0.00
17,800.00	90.00	359.92	10,692.00	7,353.91	-10.50	7,353.92	0.00	0.00	0.00
17,900.00	90.00	359.92	10,692.00	7,453.91	-10.65	7,453.92	0.00	0.00	0.00
18,000.00	90.00	359.92	10,692.00	7,553.91	-10.79	7,553.92	0.00	0.00	0.00
18,100.00	90.00	359.92	10,692.00	7,653.91	-10.93	7,653.92	0.00	0.00	0.00
18,200.00	90.00	359.92	10,692.00	7,753.91	-11.08	7,753.92	0.00	0.00	0.00
18,300.00	90.00	359.92	10,692.00	7,853.91	-11.22	7,853.92	0.00	0.00	0.00
18,400.00	90.00	359.92	10,692.00	7,953.91	-11.36	7,953.92	0.00	0.00	0.00
18,500.00	90.00	359.92	10,692.00	8,053.91	-11.50	8,053.92	0.00	0.00	0.00
18,600.00	90.00	359.92	10,692.00	8,153.91	-11.65	8,153.92	0.00	0.00	0.00
18,700.00	90.00	359.92	10,692.00	8,253.91	-11.79	8,253.92	0.00	0.00	0.00
18,800.00	90.00	359.92	10,692.00	8,353.91	-11.93	8,353.92	0.00	0.00	0.00
18,900.00	90.00	359.92	10,692.00	8,453.91	-12.08	8,453.92	0.00	0.00	0.00
19,000.00	90.00	359.92	10,692.00	8,553.91	-12.22	8,553.92	0.00	0.00	0.00
19,100.00	90.00	359.92	10,692.00	8,653.91	-12.36	8,653.92	0.00	0.00	0.00
19,200.00	90.00	359.92	10,692.00	8,753.91	-12.50	8,753.92	0.00	0.00	0.00
19,300.00	90.00	359.92	10,692.00	8,853.91	-12.65	8,853.92	0.00	0.00	0.00
19,400.00	90.00	359.92	10,692.00	8,953.91	-12.79	8,953.92	0.00	0.00	0.00
19,500.00	90.00	359.92	10,692.00	9,053.91	-12.93	9,053.92	0.00	0.00	0.00
19,600.00	90.00	359.92	10,692.00	9,153.91	-13.08	9,153.92	0.00	0.00	0.00
19,700.00	90.00	359.92	10,692.00	9,253.91	-13.22	9,253.92	0.00	0.00	0.00
19,800.00	90.00	359.92	10,692.00	9,353.91	-13.36	9,353.92	0.00	0.00	0.00
19,900.00	90.00	359.92	10,692.00	9,453.91	-13.50	9,453.92	0.00	0.00	0.00
20,000.00	90.00	359.92	10,692.00	9,553.91	-13.65	9,553.92	0.00	0.00	0.00
20,100.00	90.00	359.92	10,692.00	9,653.91	-13.79	9,653.92	0.00	0.00	0.00
20,200.00	90.00	359.92	10,692.00	9,753.91	-13.93	9,753.92	0.00	0.00	0.00
20,300.00	90.00	359.92	10,692.00	9,853.91	-14.08	9,853.92	0.00	0.00	0.00
20,400.00	90.00	359.92	10,692.00	9,953.91	-14.22	9,953.92	0.00	0.00	0.00
20,500.00	90.00	359.92	10,692.00	10,053.91	-14.36	10,053.92	0.00	0.00	0.00
20,600.00	90.00	359.92	10,692.00	10,153.91	-14.50	10,153.92	0.00	0.00	0.00
20,700.00	90.00	359.92	10,692.00	10,253.91	-14.65	10,253.92	0.00	0.00	0.00
20,800.00	90.00	359.92	10,692.00	10,353.91	-14.79	10,353.92	0.00	0.00	0.00
20,900.00	90.00	359.92	10,692.00	10,453.91	-14.93	10,453.92	0.00	0.00	0.00
21,000.00	90.00	359.92	10,692.00	10,553.91	-15.08	10,553.92	0.00	0.00	0.00
21,100.00	90.00	359.92	10,692.00	10,653.90	-15.22	10,653.92	0.00	0.00	0.00
21,200.00	90.00	359.92	10,692.00	10,753.90	-15.36	10,753.92	0.00	0.00	0.00
21,300.00	90.00	359.92	10,692.00	10,853.90	-15.50	10,853.92	0.00	0.00	0.00
21,400.00	90.00	359.92	10,692.00	10,953.90	-15.65	10,953.92	0.00	0.00	0.00
21,500.00	90.00	359.92	10,692.00	11,053.90	-15.79	11,053.92	0.00	0.00	0.00
21,600.00	90.00	359.92	10,692.00	11,153.90	-15.93	11,153.92	0.00	0.00	0.00
21,700.00	90.00	359.92	10,692.00	11,253.90	-16.08	11,253.92	0.00	0.00	0.00
21,800.00	90.00	359.92	10,692.00	11,353.90	-16.22	11,353.92	0.00	0.00	0.00
21,900.00	90.00	359.92	10,692.00	11,453.90	-16.36	11,453.92	0.00	0.00	0.00
22,000.00	90.00	359.92	10,692.00	11,553.90	-16.50	11,553.92	0.00	0.00	0.00



Windows User Planning Report

Database: EDM 5000.14 Single User Db
Company: XTO Energy
Project: Eddy County, NM (NAD27 NME)
Site: Ross Draw 3031 Federal
Well: Ross Draw 3031 Federal 6H
Wellbore: OH
Design: Plan #2 07-13-18

Local Co-ordinate Reference: Well Ross Draw 3031 Federal 6H
TVD Reference: KB @ 3033.00usft (Scan Producer)
MD Reference: KB @ 3033.00usft (Scan Producer)
North Reference: True
Survey Calculation Method: Minimum Curvature

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)
22,100.00	90.00	359.92	10,692.00	11,653.90	-16.65	11,653.92	0.00	0.00	0.00
22,200.00	90.00	359.92	10,692.00	11,753.90	-16.79	11,753.92	0.00	0.00	0.00
22,300.00	90.00	359.92	10,692.00	11,853.90	-16.93	11,853.92	0.00	0.00	0.00
22,400.00	90.00	359.92	10,692.00	11,953.90	-17.08	11,953.92	0.00	0.00	0.00
22,500.00	90.00	359.92	10,692.00	12,053.90	-17.22	12,053.92	0.00	0.00	0.00
22,600.00	90.00	359.92	10,692.00	12,153.90	-17.36	12,153.92	0.00	0.00	0.00
22,700.00	90.00	359.92	10,692.00	12,253.90	-17.50	12,253.92	0.00	0.00	0.00
22,800.00	90.00	359.92	10,692.00	12,353.90	-17.65	12,353.92	0.00	0.00	0.00
22,839.26	90.00	359.92	10,692.00	12,393.16	-17.70	12,393.18	0.00	0.00	0.00

TD at 22839.26' MD

Design Targets

Target Name

- hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
PBHL(RD 31 Fed #6H) - plan hits target center - Point	0.00	0.22	10,692.00	12,393.16	-17.70	376,541.70	630,269.00	32° 2' 4.311 N	103° 54' 46.611 W
FTP(RD 31 Fed #6H) - plan misses target center by 0.21usft at 11045.79usft MD (10692.00 TVD, 599.71 N, -0.86 E) - Point	0.00	0.22	10,692.00	599.71	-1.07	364,748.40	630,331.50	32° 0' 7.597 N	103° 54' 46.418 W
LTP(RD 31 Fed #6H) - plan misses target center by 0.01usft at 22709.26usft MD (10692.00 TVD, 12263.16 N, -17.52 E) - Point	0.00	0.22	10,692.00	12,263.16	-17.51	376,411.70	630,269.70	32° 2' 3.024 N	103° 54' 46.609 W



Windows User Planning Report

Database: EDM 5000.14 Single User Db
Company: XTO Energy
Project: Eddy County, NM (NAD27 NME)
Site: Ross Draw 3031 Federal
Well: Ross Draw 3031 Federal 6H
Wellbore: OH
Design: Plan #2 07-13-18

Local Co-ordinate Reference: Well Ross Draw 3031 Federal 6H
TVD Reference: KB @ 3033.00usft (Scan Producer)
MD Reference: KB @ 3033.00usft (Scan Producer)
North Reference: True
Survey Calculation Method: Minimum Curvature

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
679.00	679.00	Rustler			
839.00	839.00	Salado (Top of Salt)			
3,085.00	3,085.00	Base of Salt			
3,274.00	3,274.00	Delaware (Bell Canyon)			
4,220.00	4,220.00	Cherry Canyon			
5,883.00	5,883.00	Brushy Canyon			
6,817.00	6,817.00	Basal Brushy Canyon			
7,079.00	7,079.00	Bone Spring Lime			
7,997.00	7,997.00	1st Bone Spring Sand			
8,497.00	8,497.00	2nd Bone Spring Lime			
8,694.00	8,694.00	2nd Bone Spring Sand			
9,211.00	9,211.00	3rd Bone Spring Lime			
9,451.00	9,451.00	Harkey sand			
9,713.00	9,713.00	Lower 3rd Bone Spring Lime			
9,754.00	9,754.00	Lower 3rd Bone Spring Shale			
9,929.00	9,929.00	3rd Bone Spring Sand			
10,200.27	10,200.00	3rd Bone Spring Red Hills Sand			
10,269.73	10,268.00	Wolfcamp			
10,305.26	10,302.00	Wolfcamp X Sand			
10,402.41	10,391.00	Wolfcamp Y Sand			
10,435.91	10,420.00	Wolfcamp A Shale			
11,019.04	10,692.00	Landing Point			

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
10,119.04	10,119.04	0.00	0.00	KOP, Start 10°/100' Build
11,019.04	10,692.00	572.96	-0.82	LP, Begin 90° Inc Hold, 359.92° Azm
22,839.26	10,692.00	12,393.16	-17.70	TD at 22839.26' MD