

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

Form C-101
August 1, 2011
Permit 273644

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address XTO PERMIAN OPERATING LLC. 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707		2. OGRID Number 373075
4. Property Code 326236		3. API Number 30-015-46413
5. Property Name BIG EDDY UNIT 32S EL DORADO STATE		6. Well No. 100H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
D	32	21S	29E		250	N	790	W	Eddy

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
M	32	21S	29E	1	50	S	660	W	Eddy

9. Pool Information

U.S.; BONE SPRING	97077
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Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 3297
16. Multiple N	17. Proposed Depth 14881	18. Formation 3rd Bone Spring Sand	19. Contractor	20. Spud Date 2/1/2020
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

☒ We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	17.5	13.375	54.5	400	401	0
Int1	12.25	9.625	40	3000	866	0
Prod	8.75	5.5	17	14881	1587	2500

Casing/Cement Program: Additional Comments

8-3/4": 0 - 10291'. 8-1/2" 10291' - 14881'. DV tool may be set in 9-5/8" from 500' - 2700'. If cement is not circulated to surface on 5-1/2" casing, it will be brought at least 500' into intermediate shoe. Once 9-5/8" casing is set, should wellbore stability become an issue before reaching the end of curve, 7" casing will be set and wellbore will resemble the 4-string contingency attached. XTO requests the option to use OBM in production hole if it becomes unstable while drilling with WBM. XTO requests a variance to have the option to batch drill this well. XTO will set intermediate casing, ensure cement is circulated to surface and well is dead. With floats holding and no flow on annulus, a TA cap will be installed. XTO will contact NMOCD before skidding to the other well. Once all surface and intermediate are completed on the pad, XTO will begin drilling the production hole of each well.

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	5000	5000	Cameron

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify I have complied with 19.15.14.9 (A) NMAC ☒ and/or 19.15.14.9 (B) NMAC ☒ if applicable. Signature:	OIL CONSERVATION DIVISION
Printed Name: Electronically filed by Tracie J Cherry	Approved By: Raymond Podany
Title: Regulatory Analyst	Title: Geologist
Email Address: Tracie_Cherry@xtoenergy.com	Approved Date: 10/23/2019
Date: 10/21/2019	Expiration Date: 10/23/2021
Phone: 432-683-2277	Conditions of Approval Attached

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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-	² Pool Code	³ Pool Name
⁴ Property Code	⁵ Property Name BIG EDDY UNIT 32S EL DORADO STATE	⁶ Well Number 100H
⁷ OGRID No. 373075	⁸ Operator Name XTO PERMIAN OPERATING, LLC.	⁹ Elevation 3,297'

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
D	32	21 S	29 E		250	NORTH	790	WEST	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
L1	32	21 S	29 E		50	SOUTH	660	WEST	EDDY

¹² Dedicated Acres	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.

	SURFACE LOCATION NAD 83 NME Y= 524,844.6 X= 640,249.3 LAT.= 32.442455°N LONG.= 104.012702°W FIRST TAKE POINT NAD 83 NME Y= 524,694.3 X= 640,119.7 LAT.= 32.442043°N LONG.= 104.013124°W CORNER COORDINATES TABLE NAD 83 NME A - Y= 525,092.9 N, X= 639,458.6 E B - Y= 525,095.7 N, X= 640,779.4 E C - Y= 522,451.0 N, X= 639,465.9 E D - Y= 522,454.4 N, X= 640,787.6 E E - Y= 520,059.4 N, X= 639,480.1 E F - Y= 520,058.1 N, X= 639,722.7 E G - Y= 520,050.2 N, X= 640,799.0 E	LAST TAKE POINT NAD 83 NME Y= 520,155.0 X= 640,139.6 LAT.= 32.429565°N LONG.= 104.013103°W BOTTOM HOLE LOCATION NAD 83 NME Y= 520,105.0 X= 640,139.9 LAT.= 32.429428°N LONG.= 103.014173°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. <i>Kelly Kardos</i> Signature _____ Date _____ Printed Name _____ E-mail Address _____
	SURFACE LOCATION NAD 27 NME Y= 524,783.7 X= 599,068.6 LAT.= 32.442334°N LONG.= 104.012201°W FIRST TAKE POINT NAD 27 NME Y= 524,633.4 X= 598,939.0 LAT.= 32.441922°N LONG.= 104.012623°W CORNER COORDINATES TABLE NAD 27 NME A - Y= 525,032.0 N, X= 598,277.9 E B - Y= 525,034.8 N, X= 599,598.6 E C - Y= 522,390.2 N, X= 598,285.1 E D - Y= 522,393.6 N, X= 599,606.8 E E - Y= 519,998.6 N, X= 598,299.3 E F - Y= 519,997.3 N, X= 598,541.8 E G - Y= 519,989.4 N, X= 599,618.1 E	LAST TAKE POINT NAD 27 NME Y= 520,094.2 X= 598,958.7 LAT.= 32.429444°N LONG.= 104.012603°W BOTTOM HOLE LOCATION NAD 27 NME Y= 520,044.2 X= 598,959.0 LAT.= 32.429307°N LONG.= 104.012603°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. 10-08-2019 Date of Survey _____ Signature and Seal of Professional Surveyor: MARK DILLON HARP 23786 Certificate Number _____ RR 2019093192

Intent ☐ As Drilled ☐

API #		
Operator Name:	Property Name:	Well Number

Kick Off Point (KOP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

First Take Point (FTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

Last Take Point (LTP)

UL	Section	Township	Range	Lot	Feet	From N/S	Feet	From E/W	County
Latitude					Longitude				NAD

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

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GAS CAPTURE PLAN

Date: 10/23/2019

☒ Original

Operator & OGRID No.: [373075] XTO PERMIAN OPERATING LLC.

☐ Amended - Reason for
Amendment: _____

This Gas Capture Plan outlines actions to be taken by the Operator to reduce well/production facility flaring/venting for new completion (new drill, recomple to new zone, re-frac) activity.

Note: Form C-129 must be submitted and approved prior to exceeding 60 days allowed by Rule (Subsection A of 19.15.18.12 NMAC).

Well(s)/Production Facility – Name of facility

The well(s) that will be located at the production facility are shown in the table below.

Well Name	API	Well Location (ULSTR)	Footages	Expected MCF/D	Flared or Vented	Comments
BIG EDDY UNIT 32S EL DORADO STATE #100H	30-015-46413	D-32-21S-29E	0250N 0790W	2500	None	

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, if gas transporter system is in place. The gas produced from production facility is dedicated to SUMMIT TRANSPORATION CO. and will be connected to SUMMIT TRANSPORATION CO. High Pressure gathering system located in Eddy County, New Mexico. It will require 0' of pipeline to connect the facility to High Pressure gathering system. XTO PERMIAN OPERATING LLC. provides (periodically) to SUMMIT TRANSPORATION CO. a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, XTO PERMIAN OPERATING LLC. and SUMMIT TRANSPORATION CO. have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at SUMMIT TRANSPORATION CO. Processing Plant located in Sec. 36, Twn. 20S, Rng. 31E, Eddy County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on SUMMIT TRANSPORATION CO. system at that time. Based on current information, it is XTO PERMIAN OPERATING LLC.'s belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

Alternatives to Reduce Flaring

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

- Power Generation – On lease
 - Only a portion of gas is consumed operating the generator, remainder of gas will be flared
- Compressed Natural Gas – On lease
 - Gas flared would be minimal, but might be uneconomical to operate when gas volume declines
- NGL Removal – On lease
 - Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

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Form APD Comments

Permit 273644

PERMIT COMMENTS

Operator Name and Address: XTO PERMIAN OPERATING LLC. [373075] 6401 HOLIDAY HILL ROAD MIDLAND, TX 79707		API Number: 30-015-46413
		Well: BIG EDDY UNIT 32S EL DORADO STATE #100H

Created By	Comment	Comment Date
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Form APD Conditions

Permit 273644

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address:		API Number:
XTO PERMIAN OPERATING LLC. [373075]		30-015-46413
6401 HOLIDAY HILL ROAD		Well:
MIDLAND, TX 79707		BIG EDDY UNIT 32S EL DORADO STATE #100H
OCD Reviewer	Condition	
rpodany	Will require a directional survey with the C-104	
rpodany	Cement is required to circulate on both surface and intermediate1 strings of casing	

Big Eddy Unit 32S El Dorado State 100H

NM STATE DRILLING PERMITTING

4-String Contingency

KB 3317		Deepest TVD	9972		KOP	9346		End of Curve	10291		Measured depth	14881
Casing Type	Fluid Type	Mud Weight	Hole Size	Casing Size	Casing Grade	Casing Weight	Top MD	Setting Depth	Lead Cement	Tail Cement	Total Sks Cement	TOC
Surface	FW/Native	8.5 - 10.0	17.5	13.375	J-55 LTC	54.5	0	400	119	237	356	0
1st Intermediate	Brine	9.0-10.3	12.25	9.625	J-55 LTC	40	0	3000	728	120	848	0
2nd Intermediate (Contingency*)	FW/Native	9.0-10.3	10.875	7	P110 BTC	32	0	10291	2383	125	2507	0
Production	FW/Cut Brine	9.5-10.5	6	4.5	P110 BTC	13.5	9346	14881	0	661	661	9791
	OBM	9.4	6									

Max Expected Surface Pressure

2680

BOP

Cameron 5M Double Ram BOP

Test Pressure 5000

Total Vertical Section

4590

Contingencies

- 1. Requesting Exception to not get cmt to surface if 7" production string is set. Cement will be brought 500' in intermediate Shoe if not circulated to surface
- 2. 7" csg may be set between KOP and Landing Point
- 3. DV Tool may be set in 9-5/8" fr/ 500' - 2700'
- 4. 4.5" liner will be brought kick-off point or 300' above end of 7" (Whichever is higher)



XTO Energy

Eddy County, NM (NAD-27)

Big Eddy Unit 32S El Dorado

#100H

OH

Plan: PERMIT

Standard Planning Report

09 October, 2019



Project: Eddy County, NM (NAD-27)
Site: Big Eddy Unit 32S El Dorado
Well: #100H
Wellbore: OH
Design: PERMIT

PROJECT DETAILS: Eddy County, NM (NAD-27)
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

WELL DETAILS: #100H

Rig Name:		RKB=25' @ 3322.00usft		Ground Level: 3297.00	
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
0.00	0.00	524783.70	599068.60	32.442334	-104.012201

DESIGN TARGET DETAILS

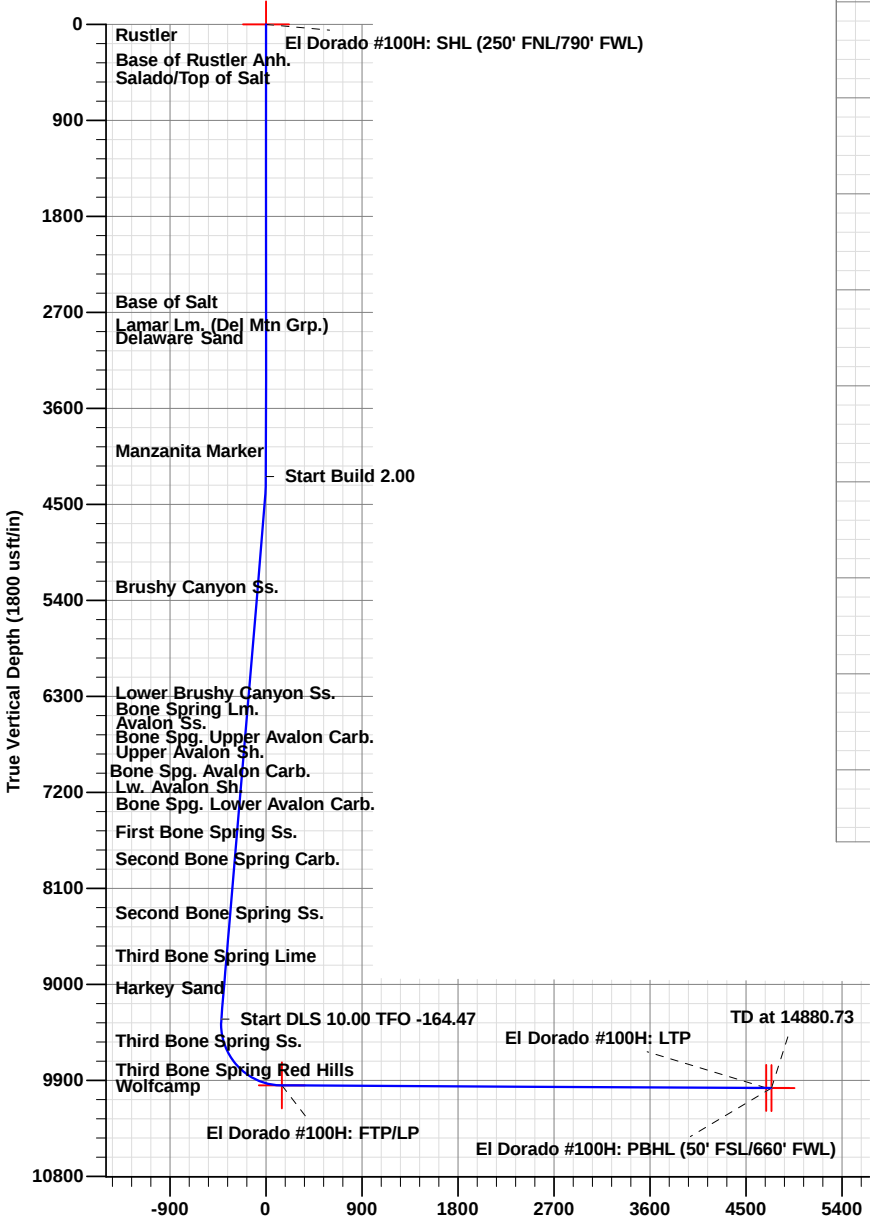
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
El Dorado #100H: SHL (250' FNL/790' FWL)	0.00	0.00	0.00	524783.70	599068.60	32.442334	-104.012201	Point
El Dorado #100H: FTP/LP	9948.00	-150.31	-129.61	524633.40	598939.00	32.441922	-104.012623	Point
El Dorado #100H: LTP	9971.74	-4689.87	-109.91	520094.20	598958.70	32.429444	-104.012603	Point
El Dorado #100H: PBHL (50' FSL/660' FWL)	9972.00	-4739.88	-109.61	520044.20	598959.00	32.429307	-104.012603	Point

SECTION DETAILS

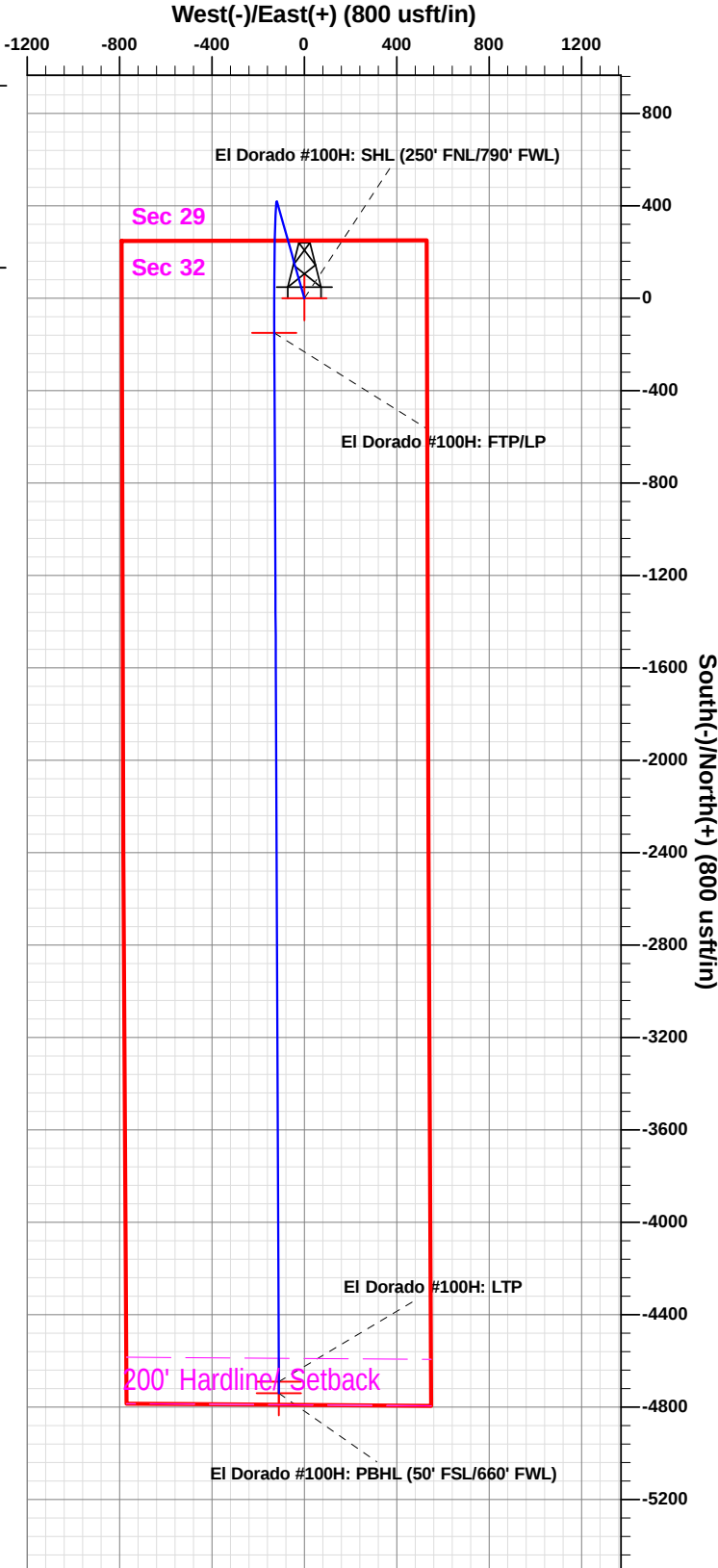
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSec
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	4240.00	0.00	0.00	4240.00	0.00	0.00	0.00	0.00	0.00
3	4489.89	5.00	344.27	4489.58	10.48	-2.95	2.00	344.27	-10.50
4	9345.89	5.00	344.27	9327.11	417.69	-117.67	0.00	0.00	-418.19
5	10291.06	89.70	179.75	9948.00	-150.31	-129.61	10.00	-164.47	149.75
6	14830.73	89.70	179.75	9971.74	-4689.87	-109.83	0.00	0.00	4689.35
7	14880.73	89.70	179.75	9972.00	-4739.88	-109.61	0.00	0.00	4739.35

FORMATION TOP DETAILS

TVDPath	Formation
193.00	Rustler
487.00	Base of Rustler Anh.
558.00	Salado/Top of Salt
2695.00	Base of Salt
2912.00	Lamar Lm. (Del Mtn Grp.)
3032.00	Delaware Sand
4092.00	Manzanita Marker
5370.00	Brushy Canyon Ss.
6364.00	Lower Brushy Canyon Ss.
6655.00	Bone Spring Lm.
6747.00	Avalon Ss.
6782.00	Bone Spg. Upper Avalon Carb.
6847.00	Upper Avalon Sh.
7112.00	Bone Spg. Avalon Carb.
7250.00	Lw. Avalon Sh.
7332.00	Bone Spg. Lower Avalon Carb.
7671.00	First Bone Spring Ss.
7922.00	Second Bone Spring Carb.
8431.00	Second Bone Spring Ss.
8828.00	Third Bone Spring Lime
9127.00	Harkey Sand
9625.00	Third Bone Spring Ss.
9908.00	Third Bone Spring Red Hills
9970.00	Wolfcamp



Vertical Section at 179.75° (1800 usft/in)



The customer should only rely on this document after independently verifying all paths, targets, coordinates, lease and hard lines represented. Any decisions made or wells drilled utilizing this or any other information supplied by Prototype are at the sole risk and responsibility of the user.

Plan: PERMIT (#100H/OH)

Created By: Matthew May Date: 11:43, October 09 2019

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¹² Dedicated Acres	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.

¹⁶ SEC. 30 SEC. 29 SEC. 31 SEC. 32 T21S R29E SEC. 6 SEC. 5 T22S R29E LOT 1 32.58 ACRES LOT ACREAGE TABLE SECTION 32	SURFACE LOCATION NAD 83 NME Y= 524,844.6 X= 640,249.3 LAT.= 32.442455°N LONG.= 104.012702°W LAST TAKE POINT NAD 83 NME Y= 520,155.0 X= 640,139.6 LAT.= 32.429565°N LONG.= 104.013103°W FIRST TAKE POINT NAD 83 NME Y= 524,694.3 X= 640,119.7 LAT.= 32.442043°N LONG.= 104.013124°W BOTTOM HOLE LOCATION NAD 83 NME Y= 520,105.0 X= 640,139.9 LAT.= 32.429428°N LONG.= 103.014173°W CORNER COORDINATES TABLE NAD 83 NME A - Y= 525,092.9 N, X= 639,458.6 E B - Y= 525,095.7 N, X= 640,779.4 E C - Y= 522,451.0 N, X= 639,465.9 E D - Y= 522,454.4 N, X= 640,787.6 E E - Y= 520,059.4 N, X= 639,480.1 E F - Y= 520,058.1 N, X= 639,722.7 E G - Y= 520,050.2 N, X= 640,799.0 E SURFACE LOCATION NAD 27 NME Y= 524,783.7 X= 599,068.6 LAT.= 32.442334°N LONG.= 104.012201°W LAST TAKE POINT NAD 27 NME Y= 520,094.2 X= 598,958.7 LAT.= 32.429444°N LONG.= 104.012603°W FIRST TAKE POINT NAD 27 NME Y= 524,633.4 X= 598,939.0 LAT.= 32.441922°N LONG.= 104.012623°W BOTTOM HOLE LOCATION NAD 27 NME Y= 520,044.2 X= 598,959.0 LAT.= 32.429307°N LONG.= 104.012603°W CORNER COORDINATES TABLE NAD 27 NME A - Y= 525,032.0 N, X= 598,277.9 E B - Y= 525,034.8 N, X= 599,598.6 E C - Y= 522,390.2 N, X= 598,285.1 E D - Y= 522,393.6 N, X= 599,606.8 E E - Y= 519,998.6 N, X= 598,299.3 E F - Y= 519,997.3 N, X= 598,541.8 E G - Y= 519,989.4 N, X= 599,618.1 E	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. Signature _____ Date _____ Printed Name _____ E-mail Address _____ 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. 10-02-2019 Date of Survey Signature and Seal of Professional Surveyor: _____ PRELIMINARY, THIS DOCUMENT SHALL NOT BE RECORDED FOR ANY PURPOSE AND SHALL NOT BE USED OR VIEWED OR RELIED UPON AS A FINAL SURVEY DOCUMENT MARK DILLON HARP 23786 Certificate Number RR 2019093192
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Prototype Well Planning LLC

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well #100H
Company:	XTO Energy	TVD Reference:	RKB=25' @ 3322.00usft
Project:	Eddy County, NM (NAD-27)	MD Reference:	RKB=25' @ 3322.00usft
Site:	Big Eddy Unit 32S El Dorado	North Reference:	Grid
Well:	#100H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PERMIT		

Project	Eddy County, NM (NAD-27)		
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		Using geodetic scale factor

Site	Big Eddy Unit 32S El Dorado		
Site Position:		Northing:	524,783.70 usft
From:	Map	Easting:	599,068.60 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32.442334
		Longitude:	-104.012202
		Grid Convergence:	0.17 °

Well	#100H		
Well Position	+N/-S	0.00 usft	Northing: 524,783.70 usft
	+E/-W	0.00 usft	Easting: 599,068.60 usft
Position Uncertainty	0.00 usft	Wellhead Elevation:	0.00 usft
		Latitude:	32.442334
		Longitude:	-104.012202
		Ground Level:	3,297.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	10/9/2019	6.93	60.16	47,784

Design	PERMIT			
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	179.75

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	
4,240.00	0.00	0.00	4,240.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,489.89	5.00	344.27	4,489.58	10.48	-2.95	2.00	2.00	0.00	344.27	
9,345.89	5.00	344.27	9,327.11	417.69	-117.67	0.00	0.00	0.00	0.00	
10,291.06	89.70	179.75	9,948.00	-150.31	-129.61	10.00	8.96	-17.41	-164.47	El Dorado #100H: FTI
14,830.73	89.70	179.75	9,971.74	-4,689.87	-109.83	0.00	0.00	0.00	0.00	El Dorado #100H: LTF
14,880.73	89.70	179.75	9,972.00	-4,739.88	-109.61	0.00	0.00	0.00	0.00	El Dorado #100H: PB



Prototype Well Planning LLC

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well #100H
Company:	XTO Energy	TVD Reference:	RKB=25' @ 3322.00usft
Project:	Eddy County, NM (NAD-27)	MD Reference:	RKB=25' @ 3322.00usft
Site:	Big Eddy Unit 32S EI Dorado	North Reference:	Grid
Well:	#100H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PERMIT		

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
193.00	0.00	0.00	193.00	0.00	0.00	0.00	0.00	0.00	0.00
Rustler									
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
487.00	0.00	0.00	487.00	0.00	0.00	0.00	0.00	0.00	0.00
Base of Rustler Anh.									
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
558.00	0.00	0.00	558.00	0.00	0.00	0.00	0.00	0.00	0.00
Salado/Top of Salt									
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
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
2,695.00	0.00	0.00	2,695.00	0.00	0.00	0.00	0.00	0.00	0.00
Base of Salt									
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
2,912.00	0.00	0.00	2,912.00	0.00	0.00	0.00	0.00	0.00	0.00
Lamar Lm. (Del Mtn Grp.)									
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,032.00	0.00	0.00	3,032.00	0.00	0.00	0.00	0.00	0.00	0.00
Delaware Sand									
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
3,300.00	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



Prototype Well Planning LLC

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well #100H
Company:	XTO Energy	TVD Reference:	RKB=25' @ 3322.00usft
Project:	Eddy County, NM (NAD-27)	MD Reference:	RKB=25' @ 3322.00usft
Site:	Big Eddy Unit 32S EI Dorado	North Reference:	Grid
Well:	#100H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PERMIT		

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)	
4,092.00	0.00	0.00	4,092.00	0.00	0.00	0.00	0.00	0.00	0.00	
Manzanita Marker										
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	
4,240.00	0.00	0.00	4,240.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,300.00	1.20	344.27	4,300.00	0.60	-0.17	-0.61	2.00	2.00	0.00	
4,400.00	3.20	344.27	4,399.92	4.30	-1.21	-4.30	2.00	2.00	0.00	
4,489.89	5.00	344.27	4,489.58	10.48	-2.95	-10.50	2.00	2.00	0.00	
4,500.00	5.00	344.27	4,499.64	11.33	-3.19	-11.35	0.00	0.00	0.00	
4,600.00	5.00	344.27	4,599.26	19.72	-5.55	-19.74	0.00	0.00	0.00	
4,700.00	5.00	344.27	4,698.88	28.10	-7.92	-28.14	0.00	0.00	0.00	
4,800.00	5.00	344.27	4,798.50	36.49	-10.28	-36.53	0.00	0.00	0.00	
4,900.00	5.00	344.27	4,898.12	44.87	-12.64	-44.93	0.00	0.00	0.00	
5,000.00	5.00	344.27	4,997.74	53.26	-15.00	-53.32	0.00	0.00	0.00	
5,100.00	5.00	344.27	5,097.36	61.64	-17.37	-61.72	0.00	0.00	0.00	
5,200.00	5.00	344.27	5,196.98	70.03	-19.73	-70.12	0.00	0.00	0.00	
5,300.00	5.00	344.27	5,296.60	78.42	-22.09	-78.51	0.00	0.00	0.00	
5,373.68	5.00	344.27	5,370.00	84.59	-23.83	-84.70	0.00	0.00	0.00	
Brushy Canyon Ss.										
5,400.00	5.00	344.27	5,396.22	86.80	-24.45	-86.91	0.00	0.00	0.00	
5,500.00	5.00	344.27	5,495.84	95.19	-26.82	-95.30	0.00	0.00	0.00	
5,600.00	5.00	344.27	5,595.46	103.57	-29.18	-103.70	0.00	0.00	0.00	
5,700.00	5.00	344.27	5,695.08	111.96	-31.54	-112.09	0.00	0.00	0.00	
5,800.00	5.00	344.27	5,794.70	120.34	-33.90	-120.49	0.00	0.00	0.00	
5,900.00	5.00	344.27	5,894.32	128.73	-36.26	-128.89	0.00	0.00	0.00	
6,000.00	5.00	344.27	5,993.94	137.11	-38.63	-137.28	0.00	0.00	0.00	
6,100.00	5.00	344.27	6,093.56	145.50	-40.99	-145.68	0.00	0.00	0.00	
6,200.00	5.00	344.27	6,193.18	153.89	-43.35	-154.07	0.00	0.00	0.00	
6,300.00	5.00	344.27	6,292.80	162.27	-45.71	-162.47	0.00	0.00	0.00	
6,371.47	5.00	344.27	6,364.00	168.26	-47.40	-168.47	0.00	0.00	0.00	
Lower Brushy Canyon Ss.										
6,400.00	5.00	344.27	6,392.42	170.66	-48.08	-170.86	0.00	0.00	0.00	
6,500.00	5.00	344.27	6,492.04	179.04	-50.44	-179.26	0.00	0.00	0.00	
6,600.00	5.00	344.27	6,591.66	187.43	-52.80	-187.66	0.00	0.00	0.00	
6,663.58	5.00	344.27	6,655.00	192.76	-54.30	-192.99	0.00	0.00	0.00	
Bone Spring Lm.										
6,700.00	5.00	344.27	6,691.28	195.81	-55.16	-196.05	0.00	0.00	0.00	
6,755.93	5.00	344.27	6,747.00	200.50	-56.48	-200.75	0.00	0.00	0.00	
Avalon Ss.										
6,791.07	5.00	344.27	6,782.00	203.45	-57.31	-203.70	0.00	0.00	0.00	
Bone Spg. Upper Avalon Carb.										
6,800.00	5.00	344.27	6,790.90	204.20	-57.52	-204.45	0.00	0.00	0.00	
6,856.31	5.00	344.27	6,847.00	208.92	-58.86	-209.18	0.00	0.00	0.00	
Upper Avalon Sh.										
6,900.00	5.00	344.27	6,890.52	212.58	-59.89	-212.84	0.00	0.00	0.00	
7,000.00	5.00	344.27	6,990.14	220.97	-62.25	-221.24	0.00	0.00	0.00	
7,100.00	5.00	344.27	7,089.76	229.36	-64.61	-229.63	0.00	0.00	0.00	
7,122.33	5.00	344.27	7,112.00	231.23	-65.14	-231.51	0.00	0.00	0.00	
Bone Spg. Avalon Carb.										
7,200.00	5.00	344.27	7,189.38	237.74	-66.97	-238.03	0.00	0.00	0.00	
7,260.85	5.00	344.27	7,250.00	242.84	-68.41	-243.14	0.00	0.00	0.00	
Lw. Avalon Sh.										
7,300.00	5.00	344.27	7,289.00	246.13	-69.34	-246.43	0.00	0.00	0.00	



Prototype Well Planning LLC

Planning Report

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Company:	XTO Energy	TVD Reference:	RKB=25' @ 3322.00usft
Project:	Eddy County, NM (NAD-27)	MD Reference:	RKB=25' @ 3322.00usft
Site:	Big Eddy Unit 32S EI Dorado	North Reference:	Grid
Well:	#100H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PERMIT		

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)
7,343.17	5.00	344.27	7,332.00	249.75	-70.36	-250.05	0.00	0.00	0.00
Bone Spg. Lower Avalon Carb.									
7,400.00	5.00	344.27	7,388.62	254.51	-71.70	-254.82	0.00	0.00	0.00
7,500.00	5.00	344.27	7,488.24	262.90	-74.06	-263.22	0.00	0.00	0.00
7,600.00	5.00	344.27	7,587.86	271.28	-76.42	-271.61	0.00	0.00	0.00
7,683.46	5.00	344.27	7,671.00	278.28	-78.39	-278.62	0.00	0.00	0.00
First Bone Spring Ss.									
7,700.00	5.00	344.27	7,687.48	279.67	-78.79	-280.01	0.00	0.00	0.00
7,800.00	5.00	344.27	7,787.10	288.05	-81.15	-288.41	0.00	0.00	0.00
7,900.00	5.00	344.27	7,886.72	296.44	-83.51	-296.80	0.00	0.00	0.00
7,935.42	5.00	344.27	7,922.00	299.41	-84.35	-299.77	0.00	0.00	0.00
Second Bone Spring Carb.									
8,000.00	5.00	344.27	7,986.34	304.82	-85.87	-305.20	0.00	0.00	0.00
8,100.00	5.00	344.27	8,085.96	313.21	-88.23	-313.59	0.00	0.00	0.00
8,200.00	5.00	344.27	8,185.58	321.60	-90.60	-321.99	0.00	0.00	0.00
8,300.00	5.00	344.27	8,285.20	329.98	-92.96	-330.38	0.00	0.00	0.00
8,400.00	5.00	344.27	8,384.82	338.37	-95.32	-338.78	0.00	0.00	0.00
8,446.36	5.00	344.27	8,431.00	342.25	-96.42	-342.67	0.00	0.00	0.00
Second Bone Spring Ss.									
8,500.00	5.00	344.27	8,484.44	346.75	-97.68	-347.18	0.00	0.00	0.00
8,600.00	5.00	344.27	8,584.06	355.14	-100.05	-355.57	0.00	0.00	0.00
8,700.00	5.00	344.27	8,683.68	363.52	-102.41	-363.97	0.00	0.00	0.00
8,800.00	5.00	344.27	8,783.30	371.91	-104.77	-372.36	0.00	0.00	0.00
8,844.88	5.00	344.27	8,828.00	375.67	-105.83	-376.13	0.00	0.00	0.00
Third Bone Spring Lime									
8,900.00	5.00	344.27	8,882.92	380.29	-107.13	-380.76	0.00	0.00	0.00
9,000.00	5.00	344.27	8,982.54	388.68	-109.50	-389.15	0.00	0.00	0.00
9,100.00	5.00	344.27	9,082.16	397.07	-111.86	-397.55	0.00	0.00	0.00
9,145.02	5.00	344.27	9,127.00	400.84	-112.92	-401.33	0.00	0.00	0.00
Harkey Sand									
9,200.00	5.00	344.27	9,181.78	405.45	-114.22	-405.95	0.00	0.00	0.00
9,300.00	5.00	344.27	9,281.39	413.84	-116.58	-414.34	0.00	0.00	0.00
9,345.89	5.00	344.27	9,327.11	417.69	-117.67	-418.19	0.00	0.00	0.00
9,350.00	4.60	342.90	9,331.21	418.01	-117.76	-418.52	10.00	-9.60	-33.37
9,400.00	1.46	245.77	9,381.15	419.67	-118.94	-420.19	10.00	-6.28	-194.26
9,450.00	5.75	193.14	9,431.05	416.97	-120.09	-417.49	10.00	8.58	-105.25
9,500.00	10.68	186.85	9,480.52	409.93	-121.21	-410.45	10.00	9.85	-12.57
9,550.00	15.65	184.52	9,529.19	398.60	-122.30	-399.13	10.00	9.95	-4.66
9,600.00	20.64	183.30	9,576.69	383.07	-123.34	-383.60	10.00	9.97	-2.45
9,650.00	25.63	182.53	9,622.66	363.46	-124.32	-363.99	10.00	9.98	-1.53
9,652.60	25.89	182.50	9,625.00	362.33	-124.37	-362.87	10.00	9.99	-1.24
Third Bone Spring Ss.									
9,700.00	30.62	182.00	9,666.74	339.91	-125.24	-340.46	10.00	9.99	-1.05
9,750.00	35.62	181.61	9,708.60	312.62	-126.10	-313.16	10.00	9.99	-0.79
9,800.00	40.61	181.30	9,747.93	281.77	-126.88	-282.33	10.00	9.99	-0.61
9,850.00	45.61	181.05	9,784.42	247.62	-127.58	-248.18	10.00	9.99	-0.50
9,900.00	50.61	180.84	9,817.79	210.42	-128.19	-210.98	10.00	10.00	-0.42
9,950.00	55.61	180.66	9,847.80	170.45	-128.71	-171.01	10.00	10.00	-0.37
10,000.00	60.60	180.50	9,874.21	128.01	-129.14	-128.57	10.00	10.00	-0.32
10,050.00	65.60	180.35	9,896.82	83.44	-129.46	-84.00	10.00	10.00	-0.29
10,078.64	68.47	180.27	9,908.00	57.07	-129.61	-57.63	10.00	10.00	-0.28
Third Bone Spring Red Hills									
10,100.00	70.60	180.21	9,915.47	37.06	-129.69	-37.62	10.00	10.00	-0.27



Prototype Well Planning LLC

Planning Report

Database:	EDM 5000.1 Single User Db	Local Co-ordinate Reference:	Well #100H
Company:	XTO Energy	TVD Reference:	RKB=25' @ 3322.00usft
Project:	Eddy County, NM (NAD-27)	MD Reference:	RKB=25' @ 3322.00usft
Site:	Big Eddy Unit 32S EI Dorado	North Reference:	Grid
Well:	#100H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PERMIT		

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)
10,150.00	75.60	180.09	9,930.00	-10.77	-129.82	10.20	10.00	10.00	-0.26
10,200.00	80.60	179.96	9,940.31	-59.68	-129.84	59.11	10.00	10.00	-0.24
10,250.00	85.60	179.85	9,946.32	-109.30	-129.75	108.73	10.00	10.00	-0.24
10,291.06	89.70	179.75	9,948.00	-150.31	-129.61	149.75	10.00	10.00	-0.23
10,300.00	89.70	179.75	9,948.05	-159.25	-129.57	158.69	0.00	0.00	0.00
10,400.00	89.70	179.75	9,948.57	-259.25	-129.14	258.68	0.00	0.00	0.00
10,500.00	89.70	179.75	9,949.09	-359.25	-128.70	358.68	0.00	0.00	0.00
10,600.00	89.70	179.75	9,949.62	-459.25	-128.26	458.68	0.00	0.00	0.00
10,700.00	89.70	179.75	9,950.14	-559.24	-127.83	558.68	0.00	0.00	0.00
10,800.00	89.70	179.75	9,950.66	-659.24	-127.39	658.68	0.00	0.00	0.00
10,900.00	89.70	179.75	9,951.18	-759.24	-126.96	758.68	0.00	0.00	0.00
11,000.00	89.70	179.75	9,951.71	-859.24	-126.52	858.68	0.00	0.00	0.00
11,100.00	89.70	179.75	9,952.23	-959.23	-126.08	958.68	0.00	0.00	0.00
11,200.00	89.70	179.75	9,952.75	-1,059.23	-125.65	1,058.67	0.00	0.00	0.00
11,300.00	89.70	179.75	9,953.28	-1,159.23	-125.21	1,158.67	0.00	0.00	0.00
11,400.00	89.70	179.75	9,953.80	-1,259.23	-124.78	1,258.67	0.00	0.00	0.00
11,500.00	89.70	179.75	9,954.32	-1,359.23	-124.34	1,358.67	0.00	0.00	0.00
11,600.00	89.70	179.75	9,954.84	-1,459.22	-123.91	1,458.67	0.00	0.00	0.00
11,700.00	89.70	179.75	9,955.37	-1,559.22	-123.47	1,558.67	0.00	0.00	0.00
11,800.00	89.70	179.75	9,955.89	-1,659.22	-123.03	1,658.67	0.00	0.00	0.00
11,900.00	89.70	179.75	9,956.41	-1,759.22	-122.60	1,758.66	0.00	0.00	0.00
12,000.00	89.70	179.75	9,956.94	-1,859.21	-122.16	1,858.66	0.00	0.00	0.00
12,100.00	89.70	179.75	9,957.46	-1,959.21	-121.73	1,958.66	0.00	0.00	0.00
12,200.00	89.70	179.75	9,957.98	-2,059.21	-121.29	2,058.66	0.00	0.00	0.00
12,300.00	89.70	179.75	9,958.51	-2,159.21	-120.86	2,158.66	0.00	0.00	0.00
12,400.00	89.70	179.75	9,959.03	-2,259.20	-120.42	2,258.66	0.00	0.00	0.00
12,500.00	89.70	179.75	9,959.55	-2,359.20	-119.98	2,358.66	0.00	0.00	0.00
12,600.00	89.70	179.75	9,960.07	-2,459.20	-119.55	2,458.65	0.00	0.00	0.00
12,700.00	89.70	179.75	9,960.60	-2,559.20	-119.11	2,558.65	0.00	0.00	0.00
12,800.00	89.70	179.75	9,961.12	-2,659.20	-118.68	2,658.65	0.00	0.00	0.00
12,900.00	89.70	179.75	9,961.64	-2,759.19	-118.24	2,758.65	0.00	0.00	0.00
13,000.00	89.70	179.75	9,962.17	-2,859.19	-117.80	2,858.65	0.00	0.00	0.00
13,100.00	89.70	179.75	9,962.69	-2,959.19	-117.37	2,958.65	0.00	0.00	0.00
13,200.00	89.70	179.75	9,963.21	-3,059.19	-116.93	3,058.65	0.00	0.00	0.00
13,300.00	89.70	179.75	9,963.73	-3,159.18	-116.50	3,158.65	0.00	0.00	0.00
13,400.00	89.70	179.75	9,964.26	-3,259.18	-116.06	3,258.64	0.00	0.00	0.00
13,500.00	89.70	179.75	9,964.78	-3,359.18	-115.63	3,358.64	0.00	0.00	0.00
13,600.00	89.70	179.75	9,965.30	-3,459.18	-115.19	3,458.64	0.00	0.00	0.00
13,700.00	89.70	179.75	9,965.83	-3,559.17	-114.75	3,558.64	0.00	0.00	0.00
13,800.00	89.70	179.75	9,966.35	-3,659.17	-114.32	3,658.64	0.00	0.00	0.00
13,900.00	89.70	179.75	9,966.87	-3,759.17	-113.88	3,758.64	0.00	0.00	0.00
14,000.00	89.70	179.75	9,967.39	-3,859.17	-113.45	3,858.64	0.00	0.00	0.00
14,100.00	89.70	179.75	9,967.92	-3,959.17	-113.01	3,958.63	0.00	0.00	0.00
14,200.00	89.70	179.75	9,968.44	-4,059.16	-112.58	4,058.63	0.00	0.00	0.00
14,300.00	89.70	179.75	9,968.96	-4,159.16	-112.14	4,158.63	0.00	0.00	0.00
14,400.00	89.70	179.75	9,969.49	-4,259.16	-111.70	4,258.63	0.00	0.00	0.00
14,498.26	89.70	179.75	9,970.00	-4,357.41	-111.28	4,356.89	0.00	0.00	0.00
Wolfcamp									
14,500.00	89.70	179.75	9,970.01	-4,359.16	-111.27	4,358.63	0.00	0.00	0.00
14,600.00	89.70	179.75	9,970.53	-4,459.15	-110.83	4,458.63	0.00	0.00	0.00
14,700.00	89.70	179.75	9,971.06	-4,559.15	-110.40	4,558.63	0.00	0.00	0.00
14,800.00	89.70	179.75	9,971.58	-4,659.15	-109.96	4,658.62	0.00	0.00	0.00
14,830.73	89.70	179.75	9,971.74	-4,689.87	-109.83	4,689.35	0.00	0.00	0.00
14,880.73	89.70	179.75	9,972.00	-4,739.88	-109.61	4,739.35	0.00	0.00	0.00



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Planning Report

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Project:	Eddy County, NM (NAD-27)	MD Reference:	RKB=25' @ 3322.00usft
Site:	Big Eddy Unit 32S EI Dorado	North Reference:	Grid
Well:	#100H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PERMIT		

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)

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
EI Dorado #100H: SHL (- plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	524,783.70	599,068.60	32.442334	-104.012202
EI Dorado #100H: FTP/L - plan hits target center - Point	0.00	0.00	9,948.00	-150.31	-129.61	524,633.40	598,939.00	32.441922	-104.012623
EI Dorado #100H: LTP - plan misses target center by 0.08usft at 14830.73usft MD (9971.74 TVD, -4689.87 N, -109.83 E) - Point	0.00	0.00	9,971.74	-4,689.87	-109.91	520,094.20	598,958.70	32.429444	-104.012603
EI Dorado #100H: PBHL - plan hits target center - Point	0.00	0.00	9,972.00	-4,739.88	-109.61	520,044.20	598,959.00	32.429307	-104.012603

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
193.00	193.00	Rustler		0.00		
487.00	487.00	Base of Rustler Anh.		0.00		
558.00	558.00	Salado/Top of Salt		0.00		
2,695.00	2,695.00	Base of Salt		0.00		
2,912.00	2,912.00	Lamar Lm. (Del Mtn Grp.)		0.00		
3,032.00	3,032.00	Delaware Sand		0.00		
4,092.00	4,092.00	Manzanita Marker		0.00		
5,373.68	5,370.00	Brushy Canyon Ss.		0.00		
6,371.47	6,364.00	Lower Brushy Canyon Ss.		0.00		
6,663.58	6,655.00	Bone Spring Lm.		0.00		
6,755.93	6,747.00	Avalon Ss.		0.00		
6,791.07	6,782.00	Bone Spg. Upper Avalon Carb.		0.00		
6,856.31	6,847.00	Upper Avalon Sh.		0.00		
7,122.33	7,112.00	Bone Spg. Avalon Carb.		0.00		
7,260.85	7,250.00	Lw. Avalon Sh.		0.00		
7,343.17	7,332.00	Bone Spg. Lower Avalon Carb.		0.00		
7,683.46	7,671.00	First Bone Spring Ss.		0.00		
7,935.42	7,922.00	Second Bone Spring Carb.		0.00		
8,446.36	8,431.00	Second Bone Spring Ss.		0.00		
8,844.88	8,828.00	Third Bone Spring Lime		0.00		
9,145.02	9,127.00	Harkey Sand		0.00		
9,652.60	9,625.00	Third Bone Spring Ss.		0.00		
10,078.64	9,908.00	Third Bone Spring Red Hills		0.00		
14,498.26	9,970.00	Wolfcamp		0.00		



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Site:	Big Eddy Unit 32S El Dorado	North Reference:	Grid
Well:	#100H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PERMIT		