

NM STATE DRILLING PERMITTING

MIS AMIGOS STATE 706H

		Deepest TVD		10907	KOP		10369	End of Curve		11355	Measured depth		16487
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	1250	743	289	1032	0	
Intermediate	Brine / OBM	9.0-10.3	12.25	9.625	J-55 LTC	40	0	5039	776	488	1264	1710	1st Stage
DV Tool								1710	394	17	411	0	2nd Stage
Production	FW/Cut Brine / OBM	9.0-10.5	8-3/4" to EOC	5.5	P110 BTC	17	0	16487	1155	1140	2295	4539	
	Cut Brine / OBM	9.3	8-1/2" to TD										

Max Expected Surface Pressure

2875

BOP

Cameron 5M Double Ram BOP

Test Pressure 5000

Total Vertical Section

5132

Contingencies

1. XTO Requests option to use OBM in intermediate hole section
2. Should losses be seen from 9-5/8" shoe to landing point, 4-string contingency may be utilized
3. XTO requests variance to have the option to batch drill this well. XTO will set intermediate csg, ensure cement is circulated to surface and well is dead. With floats holding, and no flow on annulus, a TA cap will be installed as per GE recommendations. XTO will contact the state 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.
4. DV Tool may be set in intermediate fr/ 1300' - 5000'
5. OBM may be used in production hole
6. If cmt is not circulated to surface on 5.5" casing, it will be brought at least 500' into intermediate shoe
7. 8.5" lateral may be drilled if no issues in 8.75" hole



XTO Energy

Lea County, NM (NAD-27)

Mis Amigos

#706H

OH

Plan: PERMIT Rev3

HOBBS OCD

JUL 01 2019

RECEIVED

Standard Planning Report

27 June, 2019



Project: Lea County, NM (NAD-27)
Site: Mls Amigos
Well: #706H
Wellbore: OH
Design: PERMIT Rev3

PROJECT DETAILS: Lea 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: #706H

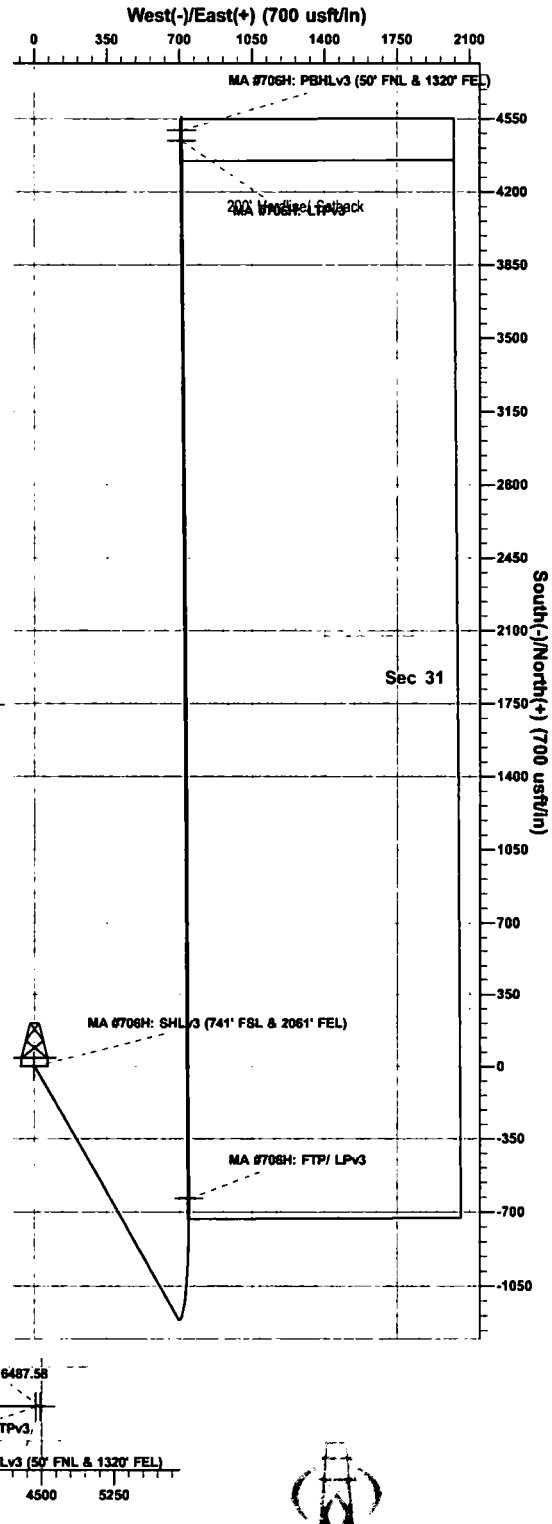
Rig Name: Ref GL @ 3657.00usft
Ground Level: 3657.00
+N/-S +E/-W Northing Easting Latitude Longitude
0.00 0.00 457561.90 723894.50 32.2558784 -103.6080705

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
MA #706H: SHLv3 (741' FSL & 2061' FEL)	0.00	0.00	0.00	457561.90	723894.50	32.2558784	-103.6080705	Point
MA #706H: FTP/ LPv3	10907.00	-637.40	745.50	456924.50	724640.00	32.2541125	-103.6086730	Point
MA #706H: LTPv3	10907.00	4444.80	711.20	462006.70	724605.40	32.2680829	-103.6086727	Point
MA #706H: PBHLv3 (50' FNL & 1320' FEL)	10907.00	4494.80	710.90	462056.70	724605.40	32.2682203	-103.6086725	Point

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Diag	TFace	VSec
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	0.00
3	2492.43	9.85	150.08	2490.01	-36.59	21.06	2.00	150.08	-36.73
4	10389.68	9.85	150.08	10251.17	-1204.34	693.19	0.00	0.00	-1209.03
5	11355.27	90.00	359.61	10907.00	-637.40	745.50	10.00	-150.10	-642.46
6	16437.58	90.00	359.61	10907.00	4444.80	711.24	0.00	0.00	4439.88
7	16487.58	90.00	359.61	10907.00	4494.80	710.90	0.00	0.00	4489.86



FORMATION TOP DETAILS

TVDPath	Formation
1207.00	Rustler
1707.00	Top Salt
4557.00	Base Salt
5057.00	Delaware
8957.00	Bone Spring
9077.00	Avalon
10082.00	1st Bone Spring Ss
10707.00	2nd Bone Spring Ss
10907.00	LP

Vertical Section at 359.61° (1500 usft/in)

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

Plan: PERMIT Rev3 (#706H/OH)

Created By: Matthew May Date: 16:12, June 27 2019

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 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 30-025-	² Pool Code	³ Pool Name
⁴ Property Code	⁵ Property Name MIS AMIGOS	⁶ Well Number 706H
⁷ OGRID No. 005380	⁸ Operator Name XTO ENERGY, INC.	⁹ Elevation 3,657'

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
O	31	23 S	33 E		741	SOUTH	2,061	EAST	LEA

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
B	31	23 S	33 E		50	NORTH	1,320	EAST	LEA

¹² Dedicated Acres	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ 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.

16

CORNER COORDINATES TABLE
NAD 83 NME

A - Y=	456,878.5 N, X=	764,505.6 E
B - Y=	456,883.2 N, X=	765,825.0 E
C - Y=	459,517.1 N, X=	764,488.1 E
D - Y=	459,523.7 N, X=	765,807.1 E
E - Y=	462,158.2 N, X=	764,470.7 E
F - Y=	462,165.5 N, X=	765,789.7 E

CORNER COORDINATES TABLE
NAD 27 NME

A - Y=	456,817.8 N, X=	723,321.8 E
B - Y=	456,824.5 N, X=	724,641.2 E
C - Y=	459,458.3 N, X=	723,304.4 E
D - Y=	459,464.9 N, X=	724,623.4 E
E - Y=	462,100.4 N, X=	723,287.0 E
F - Y=	462,106.7 N, X=	724,606.0 E

GRID AZ.=359°36'45"
HORIZ. DIST.=5,132.41'

GRID AZ.=130°31'54"
HORIZ. DIST.=980.84'

GEODETIC COORDINATES
NAD 83 NME
SURFACE LOCATION
Y= 457,620.6
X= 765,078.3
LAT.= 32.256001°N
LONG.= 103.609551°W

LAST TAKE POINT
NAD 83 NME
Y= 462,085.5
X= 765,789.4
LAT.= 32.268205°N
LONG.= 103.607154°W

FIRST TAKE POINT
NAD 83 NME
Y= 456,983.2
X= 765,823.8
LAT.= 32.254235°N
LONG.= 103.607154°W

GEODETIC COORDINATES
NAD 27 NME
SURFACE LOCATION
Y= 457,561.9
X= 723,894.5
LAT.= 32.255878°N
LONG.= 103.609070°W

LAST TAKE POINT
NAD 27 NME
Y= 462,008.7
X= 724,605.7
LAT.= 32.268083°N
LONG.= 103.606673°W

FIRST TAKE POINT
NAD 27 NME
Y= 456,824.5
X= 724,640.0
LAT.= 32.254112°N
LONG.= 103.606673°W

BOTTOM HOLE LOCATION
NAD 27 NME
Y= 462,056.7
X= 724,605.4
LAT.= 32.268220°N
LONG.= 103.606672°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.

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.

05-21-2019
Date of Survey

Signature and Seal of Professional Surveyor: _____

MARK DILLON HARP 23786
Certificate Number

RR 2018020573



Planning Report

Database:	EDM 5000.1.13 Single User Db	Local Co-ordinate Reference:	Well #706H
Company:	XTO Energy	TVD Reference:	Ref GL @ 3657.00usft
Project:	Lea County, NM (NAD-27)	MD Reference:	Ref GL @ 3657.00usft
Site:	Mis Amigos	North Reference:	Grid
Well:	#706H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PERMIT Rev3		

Project	Lea 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		

Site		Mis Amigos				
Site Position:		Northing:	457,160.50 usft	Latitude:	32.2547479	
From:	Map	Easting:	725,352.60 usft	Longitude:	-103.6043629	
Position Uncertainty:		0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.39 °

Well	#706H					
Well Position	+N/-S	401.40 usft	Northing:	457,561.90 usft	Latitude:	32.2558784
	+E/-W	-1,458.10 usft	Easting:	723,894.50 usft	Longitude:	-103.6090704
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	3,657.00 usft

Wellbore	OH				
-----------------	----	--	--	--	--

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	06/24/18	6.86	60.07	47,847

Design	PERMIT Rev3				
---------------	-------------	--	--	--	--

Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	-25.00	0.00	0.00	359.61

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	
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,492.43	9.85	150.08	2,490.01	-36.59	21.06	2.00	2.00	0.00	150.08	
10,369.68	9.85	150.08	10,251.17	-1,204.34	693.19	0.00	0.00	0.00	0.00	
11,355.27	90.00	359.61	10,907.00	-637.40	745.50	10.00	8.13	-15.27	-150.10	MA #706H: FTP/ LF
16,437.58	90.00	359.61	10,907.00	4,444.80	711.24	0.00	0.00	0.00	0.00	MA #706H: LTPv3
16,487.58	90.00	359.61	10,907.00	4,494.80	710.90	0.00	0.00	0.00	0.00	MA #706H: PBHLV



Planning Report

Database: EDM 5000.1.13 Single User Db
Company: XTO Energy
Project: Lea County, NM (NAD-27)
Site: Mis Amigos
Well: #706H
Wellbore: OH
Design: PERMIT Rev3

Local Co-ordinate Reference: Well #706H
TVD Reference: Ref GL @ 3657.00usft
MD Reference: Ref GL @ 3657.00usft
North Reference: Grid
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
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
1,207.00	0.00	0.00	1,207.00	0.00	0.00	0.00	0.00	0.00	0.00
Rustler									
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
1,707.00	0.00	0.00	1,707.00	0.00	0.00	0.00	0.00	0.00	0.00
Top Salt									
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	2.00	150.08	2,099.98	-1.51	0.87	-1.52	2.00	2.00	0.00
2,200.00	4.00	150.08	2,199.84	-6.05	3.48	-6.07	2.00	2.00	0.00
2,300.00	6.00	150.08	2,299.45	-13.60	7.83	-13.65	2.00	2.00	0.00
2,400.00	8.00	150.08	2,398.70	-24.16	13.91	-24.26	2.00	2.00	0.00
2,492.43	9.85	150.08	2,490.01	-36.59	21.06	-36.73	2.00	2.00	0.00
2,500.00	9.85	150.08	2,497.47	-37.71	21.71	-37.86	0.00	0.00	0.00
2,600.00	9.85	150.08	2,595.99	-52.54	30.24	-52.74	0.00	0.00	0.00
2,700.00	9.85	150.08	2,694.52	-67.36	38.77	-67.62	0.00	0.00	0.00
2,800.00	9.85	150.08	2,793.05	-82.19	47.30	-82.51	0.00	0.00	0.00
2,900.00	9.85	150.08	2,891.57	-97.01	55.84	-97.39	0.00	0.00	0.00
3,000.00	9.85	150.08	2,990.10	-111.83	64.37	-112.27	0.00	0.00	0.00
3,100.00	9.85	150.08	3,088.63	-126.66	72.90	-127.15	0.00	0.00	0.00
3,200.00	9.85	150.08	3,187.15	-141.48	81.43	-142.03	0.00	0.00	0.00
3,300.00	9.85	150.08	3,285.68	-156.31	89.97	-156.92	0.00	0.00	0.00
3,400.00	9.85	150.08	3,384.20	-171.13	98.50	-171.80	0.00	0.00	0.00
3,500.00	9.85	150.08	3,482.73	-185.96	107.03	-186.68	0.00	0.00	0.00
3,600.00	9.85	150.08	3,581.26	-200.78	115.56	-201.56	0.00	0.00	0.00
3,700.00	9.85	150.08	3,679.78	-215.60	124.10	-216.44	0.00	0.00	0.00
3,800.00	9.85	150.08	3,778.31	-230.43	132.63	-231.33	0.00	0.00	0.00
3,900.00	9.85	150.08	3,876.84	-245.25	141.16	-246.21	0.00	0.00	0.00
4,000.00	9.85	150.08	3,975.36	-260.08	149.69	-261.09	0.00	0.00	0.00
4,100.00	9.85	150.08	4,073.89	-274.90	158.23	-275.97	0.00	0.00	0.00
4,200.00	9.85	150.08	4,172.41	-289.73	166.76	-290.85	0.00	0.00	0.00
4,300.00	9.85	150.08	4,270.94	-304.55	175.29	-305.74	0.00	0.00	0.00
4,400.00	9.85	150.08	4,369.47	-319.38	183.82	-320.62	0.00	0.00	0.00
4,500.00	9.85	150.08	4,467.99	-334.20	192.36	-335.50	0.00	0.00	0.00
4,590.34	9.85	150.08	4,557.00	-347.59	200.07	-348.95	0.00	0.00	0.00
Base Salt									



Planning Report

Database: EDM 5000.1.13 Single User Db
Company: XTO Energy
Project: Lea County, NM (NAD-27)
Site: Mis Amigos
Well: #706H
Wellbore: OH
Design: PERMIT Rev3

Local Co-ordinate Reference: Well #706H
TVD Reference: Ref GL @ 3657.00usft
MD Reference: Ref GL @ 3657.00usft
North Reference: Grid
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)
4,600.00	9.85	150.08	4,566.52	-349.02	200.89	-350.38	0.00	0.00	0.00
4,700.00	9.85	150.08	4,665.05	-363.85	209.42	-365.27	0.00	0.00	0.00
4,800.00	9.85	150.08	4,763.57	-378.67	217.96	-380.15	0.00	0.00	0.00
4,900.00	9.85	150.08	4,862.10	-393.50	226.49	-395.03	0.00	0.00	0.00
5,000.00	9.85	150.08	4,960.62	-408.32	235.02	-409.91	0.00	0.00	0.00
5,097.82	9.85	150.08	5,057.00	-422.82	243.37	-424.47	0.00	0.00	0.00
Delaware									
5,100.00	9.85	150.08	5,059.15	-423.15	243.55	-424.79	0.00	0.00	0.00
5,200.00	9.85	150.08	5,157.68	-437.97	252.09	-439.68	0.00	0.00	0.00
5,300.00	9.85	150.08	5,256.20	-452.79	260.62	-454.56	0.00	0.00	0.00
5,400.00	9.85	150.08	5,354.73	-467.62	269.15	-469.44	0.00	0.00	0.00
5,500.00	9.85	150.08	5,453.26	-482.44	277.68	-484.32	0.00	0.00	0.00
5,600.00	9.85	150.08	5,551.78	-497.27	286.22	-499.20	0.00	0.00	0.00
5,700.00	9.85	150.08	5,650.31	-512.09	294.75	-514.09	0.00	0.00	0.00
5,800.00	9.85	150.08	5,748.84	-526.92	303.28	-528.97	0.00	0.00	0.00
5,900.00	9.85	150.08	5,847.36	-541.74	311.81	-543.85	0.00	0.00	0.00
6,000.00	9.85	150.08	5,945.89	-556.57	320.35	-558.73	0.00	0.00	0.00
6,100.00	9.85	150.08	6,044.41	-571.39	328.88	-573.61	0.00	0.00	0.00
6,200.00	9.85	150.08	6,142.94	-586.21	337.41	-588.50	0.00	0.00	0.00
6,300.00	9.85	150.08	6,241.47	-601.04	345.94	-603.38	0.00	0.00	0.00
6,400.00	9.85	150.08	6,339.99	-615.86	354.48	-618.26	0.00	0.00	0.00
6,500.00	9.85	150.08	6,438.52	-630.69	363.01	-633.14	0.00	0.00	0.00
6,600.00	9.85	150.08	6,537.05	-645.51	371.54	-648.03	0.00	0.00	0.00
6,700.00	9.85	150.08	6,635.57	-660.34	380.07	-662.91	0.00	0.00	0.00
6,800.00	9.85	150.08	6,734.10	-675.16	388.61	-677.79	0.00	0.00	0.00
6,900.00	9.85	150.08	6,832.62	-689.98	397.14	-692.67	0.00	0.00	0.00
7,000.00	9.85	150.08	6,931.15	-704.81	405.67	-707.55	0.00	0.00	0.00
7,100.00	9.85	150.08	7,029.68	-719.63	414.20	-722.44	0.00	0.00	0.00
7,200.00	9.85	150.08	7,128.20	-734.46	422.74	-737.32	0.00	0.00	0.00
7,300.00	9.85	150.08	7,226.73	-749.28	431.27	-752.20	0.00	0.00	0.00
7,400.00	9.85	150.08	7,325.26	-764.11	439.80	-767.08	0.00	0.00	0.00
7,500.00	9.85	150.08	7,423.78	-778.93	448.33	-781.96	0.00	0.00	0.00
7,600.00	9.85	150.08	7,522.31	-793.76	456.87	-796.85	0.00	0.00	0.00
7,700.00	9.85	150.08	7,620.84	-808.58	465.40	-811.73	0.00	0.00	0.00
7,800.00	9.85	150.08	7,719.36	-823.40	473.93	-826.61	0.00	0.00	0.00
7,900.00	9.85	150.08	7,817.89	-838.23	482.46	-841.49	0.00	0.00	0.00
8,000.00	9.85	150.08	7,916.41	-853.05	491.00	-856.38	0.00	0.00	0.00
8,100.00	9.85	150.08	8,014.94	-867.88	499.53	-871.26	0.00	0.00	0.00
8,200.00	9.85	150.08	8,113.47	-882.70	508.06	-886.14	0.00	0.00	0.00
8,300.00	9.85	150.08	8,211.99	-897.53	516.59	-901.02	0.00	0.00	0.00
8,400.00	9.85	150.08	8,310.52	-912.35	525.13	-915.90	0.00	0.00	0.00
8,500.00	9.85	150.08	8,409.05	-927.17	533.66	-930.79	0.00	0.00	0.00
8,600.00	9.85	150.08	8,507.57	-942.00	542.19	-945.67	0.00	0.00	0.00
8,700.00	9.85	150.08	8,606.10	-956.82	550.73	-960.55	0.00	0.00	0.00
8,800.00	9.85	150.08	8,704.62	-971.65	559.26	-975.43	0.00	0.00	0.00
8,900.00	9.85	150.08	8,803.15	-986.47	567.79	-990.31	0.00	0.00	0.00
9,000.00	9.85	150.08	8,901.68	-1,001.30	576.32	-1,005.20	0.00	0.00	0.00
9,056.15	9.85	150.08	8,957.00	-1,009.62	581.11	-1,013.55	0.00	0.00	0.00
Bone Spring									
9,100.00	9.85	150.08	9,000.20	-1,016.12	584.86	-1,020.08	0.00	0.00	0.00
9,177.95	9.85	150.08	9,077.00	-1,027.68	591.51	-1,031.68	0.00	0.00	0.00
Avalon									
9,200.00	9.85	150.08	9,098.73	-1,030.95	593.39	-1,034.96	0.00	0.00	0.00



Planning Report

Database: EDM 5000.1.13 Single User Db
 Company: XTO Energy
 Project: Lea County, NM (NAD-27)
 Site: Mis Amigos
 Well: #706H
 Wellbore: OH
 Design: PERMIT Rev3

Local Co-ordinate Reference: Well #706H
 TVD Reference: Ref GL @ 3657.00usft
 MD Reference: Ref GL @ 3657.00usft
 North Reference: Grid
 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)
9,300.00	9.85	150.08	9,197.26	-1,045.77	601.92	-1,049.84	0.00	0.00	0.00
9,400.00	9.85	150.08	9,295.78	-1,060.59	610.45	-1,064.72	0.00	0.00	0.00
9,500.00	9.85	150.08	9,394.31	-1,075.42	618.99	-1,079.61	0.00	0.00	0.00
9,600.00	9.85	150.08	9,492.84	-1,090.24	627.52	-1,094.49	0.00	0.00	0.00
9,700.00	9.85	150.08	9,591.36	-1,105.07	636.05	-1,109.37	0.00	0.00	0.00
9,800.00	9.85	150.08	9,689.89	-1,119.89	644.58	-1,124.25	0.00	0.00	0.00
9,900.00	9.85	150.08	9,788.41	-1,134.72	653.12	-1,139.14	0.00	0.00	0.00
10,000.00	9.85	150.08	9,886.94	-1,149.54	661.65	-1,154.02	0.00	0.00	0.00
10,100.00	9.85	150.08	9,985.47	-1,164.36	670.18	-1,168.90	0.00	0.00	0.00
10,197.98	9.85	150.08	10,082.00	-1,178.89	678.54	-1,183.48	0.00	0.00	0.00
1st Bone Spring Ss									
10,200.00	9.85	150.08	10,083.99	-1,179.19	678.71	-1,183.78	0.00	0.00	0.00
10,300.00	9.85	150.08	10,182.52	-1,194.01	687.25	-1,198.66	0.00	0.00	0.00
10,369.68	9.85	150.08	10,251.17	-1,204.34	693.19	-1,209.03	0.00	0.00	0.00
10,400.00	7.38	138.22	10,281.15	-1,208.04	695.78	-1,212.75	10.00	-8.16	-39.10
10,450.00	4.92	95.77	10,330.88	-1,210.65	700.06	-1,215.39	10.00	-4.91	-84.92
10,500.00	6.63	47.08	10,380.66	-1,208.90	704.30	-1,213.67	10.00	3.41	-97.37
10,550.00	10.65	26.68	10,430.09	-1,202.81	708.49	-1,207.60	10.00	8.05	-40.79
10,600.00	15.26	17.90	10,478.81	-1,192.41	712.59	-1,197.23	10.00	9.22	-17.57
10,650.00	20.06	13.17	10,526.44	-1,177.79	716.57	-1,182.64	10.00	9.59	-9.45
10,700.00	24.93	10.22	10,572.62	-1,159.06	720.40	-1,163.94	10.00	9.75	-5.89
10,750.00	29.84	8.19	10,617.01	-1,136.36	724.04	-1,141.27	10.00	9.83	-4.06
10,800.00	34.78	6.69	10,659.26	-1,109.87	727.48	-1,114.80	10.00	9.87	-3.00
10,850.00	39.73	5.53	10,699.04	-1,079.79	730.68	-1,084.74	10.00	9.90	-2.34
10,860.42	40.76	5.31	10,707.00	-1,073.08	731.32	-1,078.04	10.00	9.91	-2.04
2nd Bone Spring Ss									
10,900.00	44.69	4.58	10,736.07	-1,046.34	733.63	-1,051.31	10.00	9.92	-1.86
10,950.00	49.65	3.78	10,770.05	-1,009.78	736.29	-1,014.77	10.00	9.93	-1.59
11,000.00	54.62	3.10	10,800.73	-970.39	738.65	-975.39	10.00	9.94	-1.37
11,050.00	59.60	2.49	10,827.87	-928.47	740.69	-933.49	10.00	9.95	-1.21
11,100.00	64.57	1.95	10,851.28	-884.33	742.40	-889.36	10.00	9.95	-1.09
11,150.00	69.55	1.44	10,870.76	-838.32	743.75	-843.36	10.00	9.96	-1.01
11,200.00	74.53	0.97	10,886.17	-790.78	744.75	-795.83	10.00	9.96	-0.94
11,250.00	79.51	0.52	10,897.39	-742.08	745.38	-747.13	10.00	9.96	-0.90
11,300.00	84.49	0.09	10,904.35	-692.58	745.64	-697.64	10.00	9.96	-0.87
11,350.00	89.48	359.66	10,906.98	-642.67	745.53	-647.73	10.00	9.96	-0.86
11,355.27	90.00	359.61	10,907.00	-637.40	745.50	-642.46	10.00	9.96	-0.85
LP									
11,400.00	90.00	359.61	10,907.00	-592.67	745.20	-597.73	0.00	0.00	0.00
11,500.00	90.00	359.61	10,907.00	-492.67	744.52	-497.73	0.00	0.00	0.00
11,600.00	90.00	359.61	10,907.00	-392.67	743.85	-397.73	0.00	0.00	0.00
11,700.00	90.00	359.61	10,907.00	-292.67	743.18	-297.73	0.00	0.00	0.00
11,800.00	90.00	359.61	10,907.00	-192.68	742.50	-197.73	0.00	0.00	0.00
11,900.00	90.00	359.61	10,907.00	-92.68	741.83	-97.73	0.00	0.00	0.00
12,000.00	90.00	359.61	10,907.00	7.32	741.15	2.27	0.00	0.00	0.00
12,100.00	90.00	359.61	10,907.00	107.32	740.48	102.27	0.00	0.00	0.00
12,200.00	90.00	359.61	10,907.00	207.32	739.81	202.27	0.00	0.00	0.00
12,300.00	90.00	359.61	10,907.00	307.31	739.13	302.27	0.00	0.00	0.00
12,400.00	90.00	359.61	10,907.00	407.31	738.46	402.27	0.00	0.00	0.00
12,500.00	90.00	359.61	10,907.00	507.31	737.78	502.27	0.00	0.00	0.00
12,600.00	90.00	359.61	10,907.00	607.31	737.11	602.27	0.00	0.00	0.00
12,700.00	90.00	359.61	10,907.00	707.30	736.43	702.27	0.00	0.00	0.00
12,800.00	90.00	359.61	10,907.00	807.30	735.76	802.27	0.00	0.00	0.00



Planning Report

Database:	EDM 5000.1.13 Single User Db	Local Co-ordinate Reference:	Well #706H
Company:	XTO Energy	TVD Reference:	Ref GL @ 3657.00usft
Project:	Lea County, NM (NAD-27)	MD Reference:	Ref GL @ 3657.00usft
Site:	Mis Amigos	North Reference:	Grid
Well:	#706H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PERMIT Rev3		

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)
12,900.00	90.00	359.61	10,907.00	907.30	735.09	902.27	0.00	0.00	0.00
13,000.00	90.00	359.61	10,907.00	1,007.30	734.41	1,002.27	0.00	0.00	0.00
13,100.00	90.00	359.61	10,907.00	1,107.29	733.74	1,102.27	0.00	0.00	0.00
13,200.00	90.00	359.61	10,907.00	1,207.29	733.06	1,202.27	0.00	0.00	0.00
13,300.00	90.00	359.61	10,907.00	1,307.29	732.39	1,302.27	0.00	0.00	0.00
13,400.00	90.00	359.61	10,907.00	1,407.29	731.72	1,402.27	0.00	0.00	0.00
13,500.00	90.00	359.61	10,907.00	1,507.29	731.04	1,502.27	0.00	0.00	0.00
13,600.00	90.00	359.61	10,907.00	1,607.28	730.37	1,602.27	0.00	0.00	0.00
13,700.00	90.00	359.61	10,907.00	1,707.28	729.69	1,702.27	0.00	0.00	0.00
13,800.00	90.00	359.61	10,907.00	1,807.28	729.02	1,802.27	0.00	0.00	0.00
13,900.00	90.00	359.61	10,907.00	1,907.28	728.34	1,902.27	0.00	0.00	0.00
14,000.00	90.00	359.61	10,907.00	2,007.27	727.67	2,002.27	0.00	0.00	0.00
14,100.00	90.00	359.61	10,907.00	2,107.27	727.00	2,102.27	0.00	0.00	0.00
14,200.00	90.00	359.61	10,907.00	2,207.27	726.32	2,202.27	0.00	0.00	0.00
14,300.00	90.00	359.61	10,907.00	2,307.27	725.65	2,302.27	0.00	0.00	0.00
14,400.00	90.00	359.61	10,907.00	2,407.27	724.97	2,402.27	0.00	0.00	0.00
14,500.00	90.00	359.61	10,907.00	2,507.26	724.30	2,502.27	0.00	0.00	0.00
14,600.00	90.00	359.61	10,907.00	2,607.26	723.63	2,602.27	0.00	0.00	0.00
14,700.00	90.00	359.61	10,907.00	2,707.26	722.95	2,702.27	0.00	0.00	0.00
14,800.00	90.00	359.61	10,907.00	2,807.26	722.28	2,802.27	0.00	0.00	0.00
14,900.00	90.00	359.61	10,907.00	2,907.25	721.60	2,902.27	0.00	0.00	0.00
15,000.00	90.00	359.61	10,907.00	3,007.25	720.93	3,002.27	0.00	0.00	0.00
15,100.00	90.00	359.61	10,907.00	3,107.25	720.25	3,102.27	0.00	0.00	0.00
15,200.00	90.00	359.61	10,907.00	3,207.25	719.58	3,202.27	0.00	0.00	0.00
15,300.00	90.00	359.61	10,907.00	3,307.24	718.91	3,302.27	0.00	0.00	0.00
15,400.00	90.00	359.61	10,907.00	3,407.24	718.23	3,402.27	0.00	0.00	0.00
15,500.00	90.00	359.61	10,907.00	3,507.24	717.56	3,502.27	0.00	0.00	0.00
15,600.00	90.00	359.61	10,907.00	3,607.24	716.88	3,602.27	0.00	0.00	0.00
15,700.00	90.00	359.61	10,907.00	3,707.24	716.21	3,702.27	0.00	0.00	0.00
15,800.00	90.00	359.61	10,907.00	3,807.23	715.54	3,802.27	0.00	0.00	0.00
15,900.00	90.00	359.61	10,907.00	3,907.23	714.86	3,902.27	0.00	0.00	0.00
16,000.00	90.00	359.61	10,907.00	4,007.23	714.19	4,002.27	0.00	0.00	0.00
16,100.00	90.00	359.61	10,907.00	4,107.23	713.51	4,102.27	0.00	0.00	0.00
16,200.00	90.00	359.61	10,907.00	4,207.22	712.84	4,202.27	0.00	0.00	0.00
16,300.00	90.00	359.61	10,907.00	4,307.22	712.16	4,302.27	0.00	0.00	0.00
16,400.00	90.00	359.61	10,907.00	4,407.22	711.49	4,402.27	0.00	0.00	0.00
16,437.58	90.00	359.61	10,907.00	4,444.80	711.24	4,439.86	0.00	0.00	0.00
16,487.58	90.00	359.61	10,907.00	4,494.80	710.90	4,489.86	0.00	0.00	0.00



Planning Report

Database:	EDM 5000.1.13 Single User Db	Local Co-ordinate Reference:	Well #706H
Company:	XTO Energy	TVD Reference:	Ref GL @ 3657.00usft
Project:	Lea County, NM (NAD-27)	MD Reference:	Ref GL @ 3657.00usft
Site:	Mis Amigos	North Reference:	Grid
Well:	#706H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	PERMIT Rev3		

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
MA #706H: SHLv3 (74 - plan hits target center - Point	0.00	0.00	0.00	0.00	0.00	457,561.90	723,894.50	32.2558784	-103.6090704
MA #706H: LTPv3 - plan misses target center by 0.04usft at 16437.58usft MD (10907.00 TVD, 4444.80 N, 711.24 E) - Point	0.00	0.00	10,907.00	4,444.80	711.20	462,006.70	724,605.70	32.2680829	-103.6066726
MA #706H: FTP/ LPv3 - plan hits target center - Point	0.00	0.00	10,907.00	-637.40	745.50	456,924.50	724,640.00	32.2541125	-103.6066730
MA #706H: PBHLv3 (1 - plan hits target center - Point	0.00	0.01	10,907.00	4,494.80	710.90	462,056.70	724,605.40	32.2682203	-103.6066725

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,207.00	1,207.00	Rustler			
1,707.00	1,707.00	Top Salt			
4,590.34	4,557.00	Base Salt			
5,097.82	5,057.00	Delaware			
9,056.15	8,957.00	Bone Spring			
9,177.95	9,077.00	Avalon			
10,197.98	10,082.00	1st Bone Spring Ss			
10,860.42	10,707.00	2nd Bone Spring Ss			
11,355.27	10,907.00	LP			