



Company: XTO Energy Inc.
Field: Lea County, NM (NAD27)
Location: Sec 24, T2N 19-S, R3E 34-E
Well: Perla Negra Federal Com #3H
Original Wellbore
Plan: Design #2 (Perla Negra Federal Com #3H/Original Wellbore)
RKB @ 3811.0ft
Ground Level: 3784.0



WELL DETAILS: Perla Negra Federal Com #3H

	Ground Level: 3784.0				
	RKB @ 3811.0ft				
+N-S	+E-W	Northing	Eastings	Latitude	Longitude
0.0	0.0	182015.71	229539.70	32° 38' 20.443 N	103° 30' 40.271 W

SECTION DETAILS

Sec	MD	Inc	Asl	TVD	+N-S	+E-W	Diag	TFace	VFace	Annotation
1	10270.0	1.73	213.42	10288.5	34.9	-8.8	0.00	0.00	34.9	Tie-In to Gyro Survey @ 10270MD
2	10312.1	1.73	213.42	10310.5	33.5	-10.5	0.00	0.00	33.7	KOP 10°/100' @ 10312MD
3	10865.0	53.85	3.08	10787.7	288.3	-2.5	10.01	150.26	288.2	Build and Turn 10°/100' @ 10865MD
4	11236.5	90.98	0.78	10858.0	616.0	8.4	10.01	-3.78	616.1	Land Curve @ 11236MD
5	15577.2	90.98	0.78	10828.7	4755.8	64.7	0.00	0.00	4755.2	
6	15507.2	90.98	0.78	10826.5	4885.7	66.5	0.00	0.00	4885.2	Well TD @ 15507MD

PROJECT DETAILS: Lea County, NM (NAD27)

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



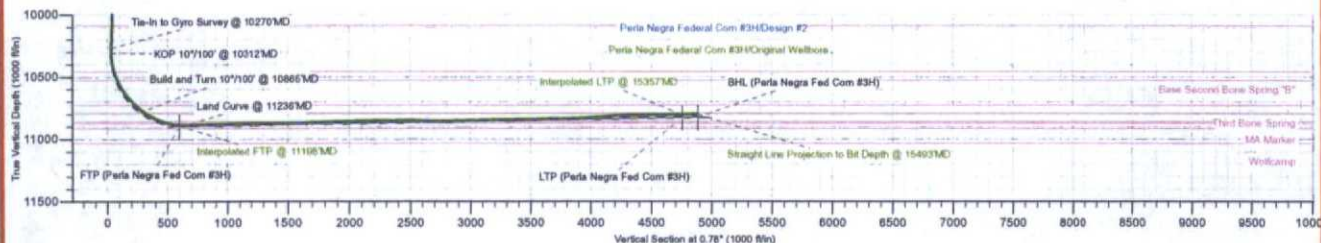
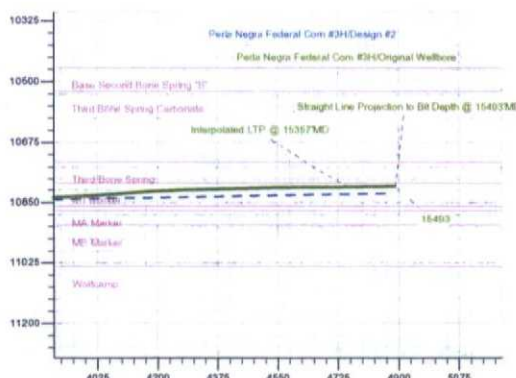
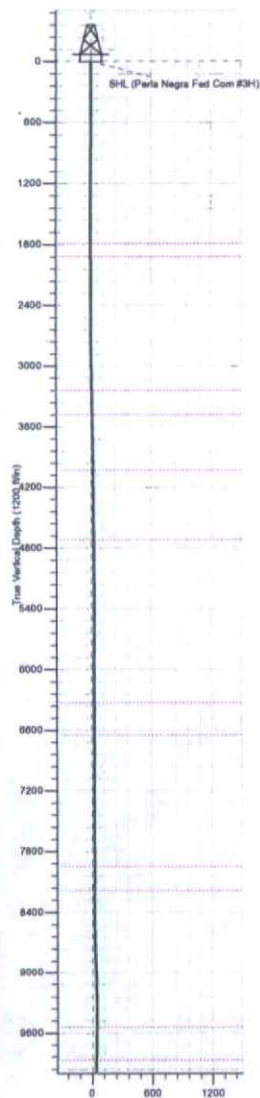
Azimuth to Grid North
True North: -0.44°
Magnetic North: 8.71°
Magnetic Field
Strength: 48360 Gauss
Dip Angle: 90.48°
Date: 2015/05/11
Model: IGRF2015

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
1763.0	1763.0	Runfield
1921.0	1921.0	Top Salt
3248.0	3248.2	Base Salt
3486.0	3486.2	Yates
4034.0	4034.3	Seven Rivers
4726.0	4726.3	Queen
6334.0	6334.4	Delaware
6651.0	6651.4	Brushy Canyon
7654.0	7654.6	Basal Brushy Canyon
8192.0	8192.6	Bone Spring
9445.0	9447.5	First Bone Spring
9873.0	9874.5	Second Bone Spring Carbonate
10089.0	10090.5	Second Bone Spring
10482.0	10484.9	Base Second Bone Spring 'B'
10529.0	10536.2	Third Bone Spring Carbonate
10732.0	10779.2	Third Bone Spring
10765.0	10877.7	M1 Marker
10861.0	11019.5	MA Marker
10874.0	11060.1	MA2 Marker

ANNOTATIONS

TVD	MD	Annotation
10268.5	10270.0	Tie-In to Gyro Survey @ 10270MD
10310.6	10312.1	KOP 10°/100' @ 10312MD
10787.7	10865.0	Build and Turn 10°/100' @ 10865MD
10858.0	11236.4	Land Curve @ 11236MD
10826.5	15507.2	Well TD @ 15507MD



DESIGN TARGET DETAILS

Name	TVD	+N-S	+E-W	Northing	Eastings	Latitude	Longitude	Shape
BHL (Perla Negra Fed Com #3H)	0.0	0.0	0.0	182015.71	229539.70	32° 38' 20.443 N	103° 30' 40.271 W	Point
HL (Perla Negra Fed Com #3H)	10826.2	4885.7	66.5	183504.87	229559.97	32° 38' 8.780 N	103° 30' 39.551 W	Rectangle (Sides: L.O.0 W100.0)
BHL (Perla Negra Fed Com #3H)	10826.5	4885.7	66.5	183504.87	229559.97	32° 38' 8.780 N	103° 30' 39.551 W	Point
LTP (Perla Negra Fed Com #3H)	10828.8	4755.8	64.7	183465.28	229559.42	32° 38' 7.495 N	103° 30' 39.084 W	Point
FTP (Perla Negra Fed Com #3H)	10858.0	599.9	8.2	182198.55	229542.20	32° 38' 26.578 N	103° 30' 40.121 W	Point

XTO Energy Inc.

Lea County, NM (NAD27)
Sec 24, TWN 19-S, RGE 34-E
Perla Negra Federal Com #3H

Original Wellbore

Design: Original Wellbore

Standard Survey Report

15 September, 2015

Company:	XTO Energy Inc.	Local Co-ordinate Reference:	Well Perla Negra Federal Com #3H
Project:	Lea County, NM (NAD27)	TVD Reference:	RKB @ 3811.0ft
Site:	Sec 24, TWN 19-S, RGE 34-E	MD Reference:	RKB @ 3811.0ft
Well:	Perla Negra Federal Com #3H	North Reference:	Grid
Wellbore:	Original Wellbore	Survey Calculation Method:	Minimum Curvature
Design:	Original Wellbore	Database:	EDM 5000.1 Single User Db

Project	Lea County, NM (NAD27)		
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	Sec 24, TWN 19-S, RGE 34-E		
Site Position:		Northing:	181,868.55 m
From:	Map	Easting:	230,002.44 m
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in
		Latitude:	32° 38' 15.549 N
		Longitude:	103° 30' 22.562 W
		Grid Convergence:	0.45 °

Well	Perla Negra Federal Com #3H		
Well Position	+N/-S	0.0 ft	Northing: 182,015.71 m
	+E/-W	0.0 ft	Easting: 229,539.70 m
Position Uncertainty	0.0 ft	Wellhead Elevation:	0.0 ft
		Latitude:	32° 38' 20.443 N
		Longitude:	103° 30' 40.271 W
		Ground Level:	3,784.0 ft

Wellbore	Original Wellbore		
Magnetics	Model Name	Sample Date	Declination
			(°)
	IGRF2015	2015/08/11	7.16
			Dip Angle
			(°)
			60.48
			Field Strength
			(nT)
			48,380

Design	Original Wellbore		
Audit Notes:			
Version:	1.0	Phase:	ACTUAL
		Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(ft)	(ft)	(ft)
	0.0	0.0	0.0
			Direction
			(°)
			0.78

Survey Program	Date	2015/09/15		
From	To	Survey (Wellbore)	Tool Name	Description
(ft)	(ft)			
100.0	10,270.0	Survey #1 (Original Wellbore)	GYRO-NS-CT	XYZ Accel with XY Static and Continuous Gyro
10,332.0	15,493.0	MWD Survey #1 (Original Wellbore)	MWD	MWD - Standard

Survey									
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.09	89.68	100.0	0.0	0.1	0.0	0.09	0.09	0.00
200.0	0.15	103.43	200.0	0.0	0.3	0.0	0.07	0.06	13.75
300.0	0.16	104.66	300.0	-0.1	0.5	-0.1	0.01	0.01	1.23
400.0	0.15	104.17	400.0	-0.2	0.8	-0.2	0.01	-0.01	-0.49
500.0	0.19	93.51	500.0	-0.2	1.1	-0.2	0.05	0.04	-10.66
600.0	0.19	91.63	600.0	-0.2	1.4	-0.2	0.01	0.00	-1.88
700.0	0.17	66.51	700.0	-0.2	1.7	-0.1	0.08	-0.02	-25.12
800.0	0.18	60.13	800.0	0.0	2.0	0.0	0.02	0.01	-6.38
900.0	0.17	58.54	900.0	0.1	2.3	0.2	0.01	-0.01	-1.59

Gyrodata
Survey Report



Company:	XTO Energy Inc.	Local Co-ordinate Reference:	Well Perla Negra Federal Com #3H
Project:	Lea County, NM (NAD27)	TVD Reference:	RKB @ 3811.0ft
Site:	Sec 24, TWN 19-S, RGE 34-E	MD Reference:	RKB @ 3811.0ft
Well:	Perla Negra Federal Com #3H	North Reference:	Grid
Wellbore:	Original Wellbore	Survey Calculation Method:	Minimum Curvature
Design:	Original Wellbore	Database:	EDM 5000.1 Single User Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
1,000.0	0.17	60.14	1,000.0	0.3	2.5	0.3	0.00	0.00	1.60
1,100.0	0.17	63.26	1,100.0	0.4	2.8	0.5	0.01	0.00	3.12
1,200.0	0.06	130.76	1,200.0	0.5	3.0	0.5	0.16	-0.11	67.50
1,300.0	0.04	131.22	1,300.0	0.4	3.0	0.4	0.02	-0.02	0.46
1,400.0	0.04	142.44	1,400.0	0.3	3.1	0.4	0.01	0.00	11.22
1,500.0	0.04	142.23	1,500.0	0.3	3.1	0.3	0.00	0.00	-0.21
1,600.0	0.12	178.84	1,600.0	0.2	3.1	0.2	0.09	0.08	36.61
1,700.0	0.17	220.29	1,700.0	-0.1	3.0	0.0	0.11	0.05	41.45
1,800.0	0.16	219.37	1,800.0	-0.3	2.9	-0.2	0.01	-0.01	-0.92
1,900.0	0.15	231.64	1,900.0	-0.5	2.7	-0.4	0.03	-0.01	12.27
2,000.0	0.19	122.09	2,000.0	-0.6	2.7	-0.6	0.28	0.04	-109.55
2,100.0	0.23	112.00	2,100.0	-0.8	3.0	-0.8	0.05	0.04	-10.09
2,200.0	0.22	83.59	2,200.0	-0.9	3.4	-0.8	0.11	-0.01	-28.41
2,300.0	0.20	83.59	2,300.0	-0.8	3.8	-0.8	0.02	-0.02	0.00
2,400.0	0.19	80.36	2,400.0	-0.8	4.1	-0.7	0.01	-0.01	-3.23
2,500.0	0.32	33.30	2,500.0	-0.5	4.4	-0.4	0.24	0.13	-47.06
2,600.0	0.47	21.58	2,600.0	0.1	4.7	0.2	0.17	0.15	-11.72
2,700.0	0.61	27.24	2,700.0	1.0	5.1	1.0	0.15	0.14	5.66
2,800.0	0.92	36.29	2,800.0	2.1	5.8	2.2	0.33	0.31	9.05
2,900.0	1.21	40.89	2,900.0	3.5	7.0	3.6	0.30	0.29	4.60
3,000.0	1.42	49.07	2,999.9	5.1	8.6	5.3	0.28	0.21	8.18
3,100.0	1.53	52.77	3,099.9	6.8	10.6	6.9	0.15	0.11	3.70
3,200.0	1.64	53.76	3,199.9	8.4	12.9	8.6	0.11	0.11	0.99
3,300.0	1.60	51.43	3,299.8	10.1	15.1	10.3	0.08	-0.04	-2.33
3,400.0	1.36	46.11	3,399.8	11.8	17.0	12.1	0.28	-0.24	-5.32
3,500.0	1.20	41.58	3,499.8	13.4	18.6	13.7	0.19	-0.16	-4.53
3,600.0	1.04	34.49	3,599.7	15.0	19.8	15.2	0.21	-0.16	-7.09
3,700.0	0.93	28.15	3,699.7	16.4	20.7	16.7	0.15	-0.11	-6.34
3,800.0	0.87	26.02	3,799.7	17.8	21.4	18.1	0.07	-0.06	-2.13
3,900.0	0.86	24.49	3,899.7	19.2	22.1	19.5	0.03	-0.01	-1.53
4,000.0	0.84	23.76	3,999.7	20.5	22.7	20.8	0.02	-0.02	-0.73
4,100.0	0.68	17.35	4,099.7	21.8	23.1	22.1	0.18	-0.16	-6.41
4,200.0	0.60	12.77	4,199.7	22.9	23.4	23.2	0.09	-0.08	-4.58
4,300.0	0.46	4.50	4,299.7	23.8	23.6	24.1	0.16	-0.14	-8.27
4,400.0	0.39	354.82	4,399.7	24.5	23.6	24.8	0.10	-0.07	-9.68
4,500.0	0.34	335.08	4,499.7	25.1	23.4	25.4	0.13	-0.05	-19.74
4,600.0	0.32	329.82	4,599.7	25.6	23.2	25.9	0.04	-0.02	-5.26
4,700.0	0.43	324.53	4,699.7	26.2	22.8	26.5	0.12	0.11	-5.29
4,800.0	0.41	322.99	4,799.7	26.8	22.4	27.1	0.02	-0.02	-1.54
4,900.0	0.41	300.87	4,899.7	27.2	21.8	27.5	0.16	0.00	-22.12
5,000.0	0.41	289.20	4,999.7	27.5	21.2	27.8	0.08	0.00	-11.67
5,100.0	0.38	282.75	5,099.7	27.7	20.5	28.0	0.05	-0.03	-6.45
5,200.0	0.37	275.49	5,199.7	27.8	19.9	28.1	0.05	-0.01	-7.26

Gyrodata
Survey Report



Company:	XTO Energy Inc.	Local Co-ordinate Reference:	Well Perla Negra Federal Com #3H
Project:	Lea County, NM (NAD27)	TVD Reference:	RKB @ 3811.0ft
Site:	Sec 24, TWN 19-S, RGE 34-E	MD Reference:	RKB @ 3811.0ft
Well:	Perla Negra Federal Com #3H	North Reference:	Grid
Wellbore:	Original Wellbore	Survey Calculation Method:	Minimum Curvature
Design:	Original Wellbore	Database:	EDM 5000.1 Single User Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,300.0	0.34	279.18	5,299.7	27.9	19.3	28.2	0.04	-0.03	3.69
5,400.0	0.30	285.04	5,399.7	28.0	18.7	28.3	0.05	-0.04	5.86
5,500.0	0.25	290.79	5,499.7	28.2	18.3	28.4	0.06	-0.05	5.75
5,600.0	0.22	297.05	5,599.7	28.3	17.9	28.6	0.04	-0.03	6.26
5,700.0	0.24	281.39	5,699.7	28.5	17.5	28.7	0.07	0.02	-15.66
5,800.0	0.39	237.87	5,799.7	28.3	17.0	28.5	0.27	0.15	-43.52
5,900.0	0.44	230.85	5,899.7	27.9	16.4	28.1	0.07	0.05	-7.02
6,000.0	0.46	228.03	5,999.7	27.4	15.9	27.6	0.03	0.02	-2.82
6,100.0	0.51	239.96	6,099.6	26.9	15.2	27.1	0.11	0.05	11.93
6,200.0	0.63	266.36	6,199.6	26.6	14.2	26.8	0.29	0.12	26.40
6,300.0	0.82	272.93	6,299.6	26.6	13.0	26.8	0.21	0.19	6.57
6,400.0	1.00	262.29	6,399.6	26.6	11.4	26.7	0.25	0.18	-10.64
6,500.0	1.07	260.25	6,499.6	26.3	9.6	26.4	0.08	0.07	-2.04
6,600.0	1.08	261.78	6,599.6	26.0	7.8	26.1	0.03	0.01	1.53
6,700.0	0.99	273.85	6,699.6	25.9	6.0	26.0	0.24	-0.09	12.07
6,800.0	0.95	271.57	6,799.6	26.0	4.3	26.0	0.06	-0.04	-2.28
6,900.0	0.88	268.67	6,899.5	26.0	2.7	26.0	0.08	-0.07	-2.90
7,000.0	0.79	266.98	6,999.5	25.9	1.2	26.0	0.09	-0.09	-1.69
7,100.0	0.68	265.94	7,099.5	25.9	-0.1	25.9	0.11	-0.11	-1.04
7,200.0	0.69	266.42	7,199.5	25.8	-1.3	25.8	0.01	0.01	0.48
7,300.0	0.71	267.56	7,299.5	25.7	-2.5	25.7	0.02	0.02	1.14
7,400.0	0.83	266.29	7,399.5	25.6	-3.8	25.6	0.12	0.12	-1.27
7,500.0	0.91	267.91	7,499.5	25.6	-5.3	25.5	0.08	0.08	1.62
7,600.0	0.74	271.59	7,599.5	25.6	-6.8	25.5	0.18	-0.17	3.68
7,700.0	0.58	280.48	7,699.5	25.7	-7.9	25.6	0.19	-0.16	8.89
7,800.0	0.44	303.69	7,799.5	26.0	-8.7	25.9	0.25	-0.14	23.21
7,900.0	0.44	303.09	7,899.5	26.4	-9.4	26.3	0.00	0.00	-0.60
8,000.0	0.39	287.50	7,999.5	26.7	-10.0	26.6	0.12	-0.05	-15.59
8,100.0	0.28	224.34	8,099.5	26.6	-10.5	26.5	0.36	-0.11	-63.16
8,200.0	0.33	232.75	8,199.5	26.3	-10.9	26.1	0.07	0.05	8.41
8,300.0	0.49	246.93	8,299.5	25.9	-11.5	25.8	0.19	0.16	14.18
8,400.0	0.52	248.16	8,399.5	25.6	-12.4	25.4	0.03	0.03	1.23
8,500.0	0.48	253.86	8,499.5	25.3	-13.2	25.1	0.06	-0.04	5.70
8,600.0	0.69	325.66	8,599.5	25.7	-13.9	25.5	0.71	0.21	71.80
8,700.0	1.32	348.16	8,699.4	27.3	-14.5	27.1	0.73	0.63	22.50
8,800.0	3.32	23.57	8,799.4	31.1	-13.6	30.9	2.37	2.00	35.41
8,900.0	4.00	39.99	8,899.2	36.4	-10.2	36.3	1.24	0.68	16.42
9,000.0	3.13	49.17	8,999.0	40.9	-5.9	40.8	1.04	-0.87	9.18
9,100.0	2.34	54.36	9,098.8	43.9	-2.1	43.8	0.83	-0.79	5.19
9,200.0	1.94	59.22	9,198.8	45.9	1.0	45.9	0.44	-0.40	4.86
9,300.0	1.28	63.67	9,298.7	47.3	3.4	47.3	0.67	-0.66	4.45
9,400.0	0.29	61.11	9,398.7	47.9	4.6	48.0	0.99	-0.99	-2.56
9,500.0	0.74	228.77	9,498.7	47.6	4.4	47.7	1.03	0.45	167.66

Gyrodata
Survey Report



Company:	XTO Energy Inc.	Local Co-ordinate Reference:	Well Perla Negra Federal Com #3H
Project:	Lea County, NM (NAD27)	TVD Reference:	RKB @ 3811.0ft
Site:	Sec 24, TWN 19-S, RGE 34-E	MD Reference:	RKB @ 3811.0ft
Well:	Perla Negra Federal Com #3H	North Reference:	Grid
Wellbore:	Original Wellbore	Survey Calculation Method:	Minimum Curvature
Design:	Original Wellbore	Database:	EDM 5000.1 Single User Db

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
9,600.0	1.53	229.20	9,598.7	46.3	2.9	46.3	0.79	0.79	0.43
9,700.0	1.70	231.06	9,698.7	44.5	0.7	44.5	0.18	0.17	1.86
9,800.0	1.77	228.80	9,798.6	42.5	-1.6	42.5	0.10	0.07	-2.26
9,900.0	1.33	235.83	9,898.6	40.9	-3.7	40.8	0.48	-0.44	7.03
10,000.0	1.28	236.28	9,998.6	39.6	-5.6	39.5	0.05	-0.05	0.45
10,100.0	1.15	234.12	10,098.5	38.4	-7.3	38.3	0.14	-0.13	-2.16
10,200.0	1.53	206.84	10,198.5	36.6	-8.8	36.5	0.73	0.38	-27.28
10,270.0	1.73	213.42	10,268.5	34.9	-9.8	34.8	0.39	0.29	9.40
10,332.0	1.42	338.02	10,330.5	34.8	-10.6	34.7	4.50	-0.50	200.97
10,364.0	5.76	353.81	10,362.4	36.8	-10.9	36.6	13.78	13.56	49.34
10,395.0	10.26	357.78	10,393.1	41.1	-11.2	41.0	14.62	14.52	12.81
10,427.0	14.48	0.72	10,424.3	48.0	-11.2	47.8	13.33	13.19	9.19
10,458.0	17.92	4.04	10,454.1	56.6	-10.8	56.4	11.49	11.10	10.71
10,489.0	20.66	6.25	10,483.4	66.8	-9.9	66.6	9.15	8.84	7.13
10,521.0	23.35	6.64	10,513.0	78.7	-8.6	78.6	8.42	8.41	1.22
10,552.0	26.00	6.34	10,541.2	91.6	-7.1	91.5	8.56	8.55	-0.97
10,584.0	28.32	5.74	10,569.7	106.1	-5.6	106.0	7.30	7.25	-1.87
10,615.0	29.68	2.52	10,596.8	121.1	-4.5	121.0	6.68	4.39	-10.39
10,647.0	33.33	1.28	10,624.1	137.8	-3.9	137.7	11.58	11.41	-3.87
10,678.0	37.90	1.07	10,649.3	155.8	-3.6	155.8	14.75	14.74	-0.68
10,709.0	41.89	1.26	10,673.0	175.7	-3.2	175.6	12.88	12.87	0.61
10,741.0	45.29	2.67	10,696.2	197.7	-2.4	197.7	11.05	10.62	4.41
10,773.0	47.51	3.83	10,718.3	220.9	-1.1	220.8	7.42	6.94	3.62
10,804.0	49.30	3.99	10,738.9	244.0	0.5	244.0	5.79	5.77	0.52
10,836.0	51.40	3.95	10,759.3	268.6	2.2	268.6	6.56	6.56	-0.12
10,867.0	53.82	2.74	10,778.1	293.2	3.6	293.2	8.40	7.81	-3.90
10,899.0	56.85	2.05	10,796.3	319.5	4.7	319.5	9.63	9.47	-2.16
10,930.0	59.41	2.15	10,812.7	345.8	5.7	345.8	8.26	8.26	0.32
10,962.0	62.15	0.61	10,828.3	373.7	6.4	373.7	9.54	8.56	-4.81
10,993.0	65.28	359.12	10,842.0	401.5	6.3	401.5	10.98	10.10	-4.81
11,025.0	69.11	358.85	10,854.4	431.0	5.8	431.0	11.99	11.97	-0.84
11,056.0	72.04	359.56	10,864.7	460.2	5.4	460.2	9.70	9.45	2.29
11,088.0	75.20	0.35	10,873.7	490.9	5.3	490.9	10.15	9.87	2.47
11,119.0	78.58	0.90	10,880.8	521.1	5.7	521.1	11.04	10.90	1.77
11,150.0	80.57	1.36	10,886.4	551.6	6.3	551.6	6.58	6.42	1.48
11,182.0	82.83	1.32	10,891.0	583.2	7.0	583.3	7.06	7.06	-0.12
11,198.9	84.74	0.87	10,892.8	600.0	7.3	600.0	11.64	11.34	-2.67
Interpolated FTP @ 11198'MD									
11,213.0	86.35	0.49	10,893.9	614.1	7.5	614.1	11.69	11.38	-2.69
11,277.0	90.69	359.71	10,895.6	678.0	7.6	678.1	6.89	6.78	-1.22
11,371.0	92.76	359.70	10,892.7	772.0	7.1	772.0	2.20	2.20	-0.01
11,465.0	92.42	0.43	10,888.5	865.9	7.2	865.9	0.86	-0.36	0.78
11,560.0	93.04	0.66	10,884.0	960.8	8.1	960.8	0.70	0.65	0.24
11,654.0	90.63	0.52	10,881.0	1,054.7	9.1	1,054.7	2.57	-2.56	-0.15

Gyrodata
Survey Report



Company:	XTO Energy Inc.	Local Co-ordinate Reference:	Well Perla Negra Federal Com #3H
Project:	Lea County, NM (NAD27)	TVD Reference:	RKB @ 3811.0ft
Site:	Sec 24, TWN 19-S, RGE 34-E	MD Reference:	RKB @ 3811.0ft
Well:	Perla Negra Federal Com #3H	North Reference:	Grid
Wellbore:	Original Wellbore	Survey Calculation Method:	Minimum Curvature
Design:	Original Wellbore	Database:	EDM 5000.1 Single User Db

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
11,748.0	92.06	0.37	10,878.8	1,148.7	9.8	1,148.7	1.53	1.52	-0.16
11,843.0	89.85	0.70	10,877.2	1,243.7	10.7	1,243.7	2.35	-2.33	0.35
11,937.0	91.13	1.13	10,876.4	1,337.6	12.2	1,337.7	1.44	1.36	0.46
12,032.0	89.31	1.63	10,876.0	1,432.6	14.5	1,432.7	1.99	-1.92	0.53
12,126.0	90.38	1.89	10,876.3	1,526.6	17.4	1,526.7	1.17	1.14	0.28
12,220.0	91.24	1.18	10,874.9	1,620.5	19.9	1,620.6	1.19	0.91	-0.76
12,314.0	92.67	0.96	10,871.7	1,714.4	21.7	1,714.6	1.54	1.52	-0.23
12,409.0	90.94	0.06	10,868.7	1,809.4	22.5	1,809.5	2.05	-1.82	-0.95
12,503.0	92.25	359.93	10,866.1	1,903.4	22.5	1,903.5	1.40	1.39	-0.14
12,598.0	91.41	0.36	10,863.1	1,998.3	22.7	1,998.4	0.99	-0.88	0.45
12,692.0	89.96	0.49	10,862.0	2,092.3	23.4	2,092.4	1.55	-1.54	0.14
12,786.0	90.71	0.84	10,861.4	2,186.3	24.5	2,186.4	0.88	0.80	0.37
12,881.0	92.03	0.76	10,859.1	2,281.2	25.9	2,281.4	1.39	1.39	-0.08
12,975.0	90.07	1.27	10,857.4	2,375.2	27.5	2,375.4	2.15	-2.09	0.54
13,070.0	91.38	1.19	10,856.2	2,470.2	29.6	2,470.4	1.38	1.38	-0.08
13,164.0	88.20	1.80	10,856.6	2,564.1	32.0	2,564.3	3.44	-3.38	0.65
13,258.0	88.53	1.73	10,859.2	2,658.0	34.9	2,658.3	0.36	0.35	-0.07
13,353.0	89.93	1.33	10,860.5	2,753.0	37.4	2,753.3	1.53	1.47	-0.42
13,447.0	91.36	0.92	10,859.5	2,847.0	39.3	2,847.2	1.58	1.52	-0.44
13,542.0	92.17	0.75	10,856.5	2,941.9	40.7	2,942.2	0.87	0.85	-0.18
13,636.0	90.49	1.22	10,854.3	3,035.9	42.3	3,036.2	1.86	-1.79	0.50
13,730.0	91.50	1.40	10,852.7	3,129.8	44.4	3,130.2	1.09	1.07	0.19
13,825.0	90.69	1.39	10,850.9	3,224.8	46.7	3,225.1	0.85	-0.85	-0.01
13,919.0	92.25	1.08	10,848.5	3,318.7	48.8	3,319.1	1.69	1.66	-0.33
14,014.0	89.90	0.57	10,846.7	3,413.7	50.1	3,414.1	2.53	-2.47	-0.54
14,108.0	90.71	0.53	10,846.2	3,507.7	51.0	3,508.1	0.86	0.86	-0.04
14,203.0	92.11	0.23	10,843.9	3,602.7	51.7	3,603.0	1.51	1.47	-0.32
14,297.0	90.66	0.52	10,841.6	3,696.6	52.3	3,697.0	1.57	-1.54	0.31
14,391.0	90.63	0.11	10,840.5	3,790.6	52.8	3,791.0	0.44	-0.03	-0.44
14,486.0	91.83	0.30	10,838.5	3,885.6	53.1	3,886.0	1.28	1.26	0.20
14,580.0	92.70	359.49	10,834.8	3,979.5	53.0	3,979.9	1.26	0.93	-0.86
14,674.0	94.86	359.03	10,828.6	4,073.3	51.8	4,073.6	2.35	2.30	-0.49
14,768.0	93.82	359.20	10,821.5	4,167.0	50.3	4,167.3	1.12	-1.11	0.18
14,862.0	92.53	359.03	10,816.3	4,260.9	48.9	4,261.1	1.38	-1.37	-0.18
14,957.0	90.99	358.82	10,813.3	4,355.8	47.1	4,356.0	1.64	-1.62	-0.22
15,051.0	90.99	358.85	10,811.7	4,449.8	45.2	4,450.0	0.03	0.00	0.03
15,146.0	91.70	359.08	10,809.5	4,544.7	43.5	4,544.9	0.79	0.75	0.24
15,240.0	89.96	359.17	10,808.1	4,638.7	42.0	4,638.8	1.85	-1.85	0.10
15,311.0	90.69	358.58	10,807.7	4,709.7	40.6	4,709.8	1.32	1.03	-0.83
15,357.4	90.69	358.58	10,807.2	4,756.1	39.5	4,756.2	0.00	0.00	0.00
Interpolated LTP @ 15357'MD									
15,493.0	90.69	358.58	10,805.5	4,891.6	36.1	4,891.6	0.00	0.00	0.00
Straight Line Projection to Bit Depth @ 15493'MD									

Company:	XTO Energy Inc.	Local Co-ordinate Reference:	Well Perla Negra Federal Com #3H
Project:	Lea County, NM (NAD27)	TVD Reference:	RKB @ 3811.0ft
Site:	Sec 24, TWN 19-S, RGE 34-E	MD Reference:	RKB @ 3811.0ft
Well:	Perla Negra Federal Com #3H	North Reference:	Grid
Wellbore:	Original Wellbore	Survey Calculation Method:	Minimum Curvature
Design:	Original Wellbore	Database:	EDM 5000.1 Single User Db

Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
11,198.9	10,892.8	600.0	7.3	Interpolated FTP @ 11198'MD
15,357.4	10,807.2	4,756.1	39.5	Interpolated LTP @ 15357'MD
15,493.0	10,805.5	4,891.6	36.1	Straight Line Projection to Bit Depth @ 15493'MD

Checked By: _____ Approved By: _____ Date: _____