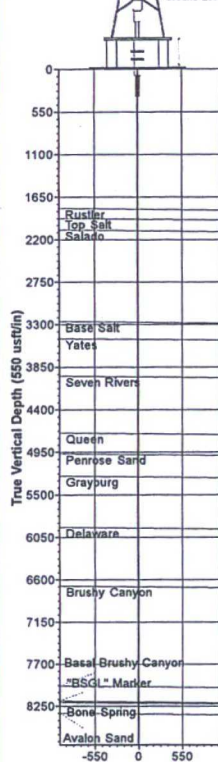


Project: Lea County, NM (NAD27)
 Site: Espejo Federal Com
 Well: 2H
 Wellbore: OH
 Design: Plan 1 11-19-15
 Rig: TBD

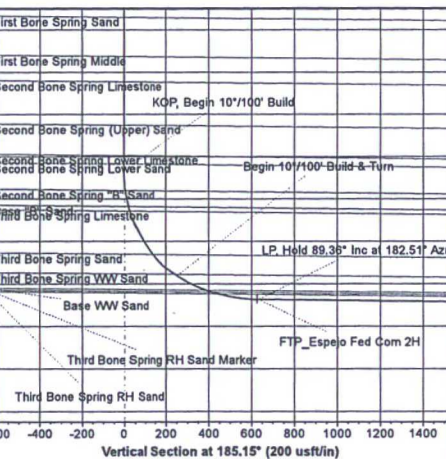
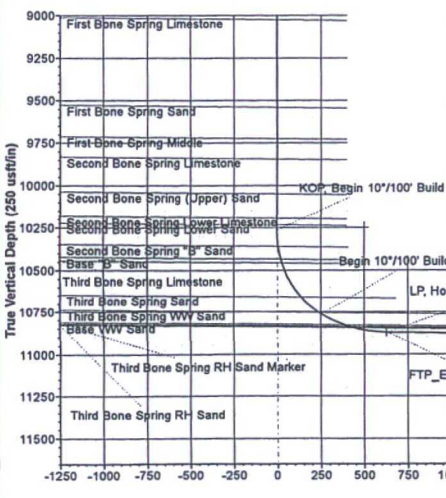


Azimuths to Grid North
 True North: -0.43°
 Magnetic North: 6.41°
 Magnetic Field
 Strength: 48491.2nT
 Dip Angle: 60.68°
 Date: 11/19/2015
 Model: HDGM

RKB @ 3800.00usft (TBD)
 Ground Level: 3775.00



Vertical Section at 185.15° (550 usft/in)



Vertical Section at 185.15° (200 usft/in)

WELL DETAILS

+N-S	+E-W	Ground Level	Easting	Latitude	Longitude
0.00	0.00	3775.00	748167.10	32° 38' 21.06902 N	103° 31' 37.73682 W

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N-S	+E-W	Dleg	TFace	Vsect	Target	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
2	10265.90	0.00	0.00	10265.90	0.00	0.00	0.00	0.00	0.00		KOP, Begin 10°/100' Build
3	10865.90	60.00	213.85	10752.10	-237.92	-159.57	10.00	213.85	251.27		Begin 10°/100' Build & Turn
4	11284.14	89.38	182.51	10874.00	-614.09	-274.77	10.00	-51.25	636.26		LP, Hold 89.36° Inc at 182.51° Azm
5	116036.11	89.38	182.51	10927.00	-5361.20	-482.80	0.00	0.00	5382.90	BHL_Espejo Fed Com 2H	TD at 16036.11

DESIGN TARGET DETAILS

Name	TVD	+N-S	+E-W	Northing	Easting	Latitude	Longitude	Shape
FTP_Espejo Fed Com 2H	10874.00	-607.60	-274.60	596581.20	747892.50	32° 38' 15.07758 N	103° 31' 41.00180 W	Point
LTP_Espejo Fed Com 2H	10925.63	-5231.20	-477.10	591957.60	747690.00	32° 37' 29.34337 N	103° 31' 43.77914 W	Point
BHL_Espejo Fed Com 2H	10927.00	-5361.20	-482.80	591827.60	747684.30	32° 37' 28.05747 N	103° 31' 43.85729 W	Rectangle (Sides: L4751.96 W100.00)

LEGEND

— Plan 1 11-19-15

Map System: US State Plane 1927 (Exact solution)
 Datum: NAD 1927 (NADCON CONUS)
 Ellipsoid: Clarke 1866
 Zone Name: New Mexico East 3001

Local Origin: Well 2H, Grid North

Latitude: 32° 38' 21.06902 N
 Longitude: 103° 31' 37.73682 W

Grid East: 748167.10

Grid North: 597188.80

Scale Factor: 1.000

Geomagnetic Model: HDGM

Sample Date: 19-Nov-15

Magnetic Declination: 6.85°

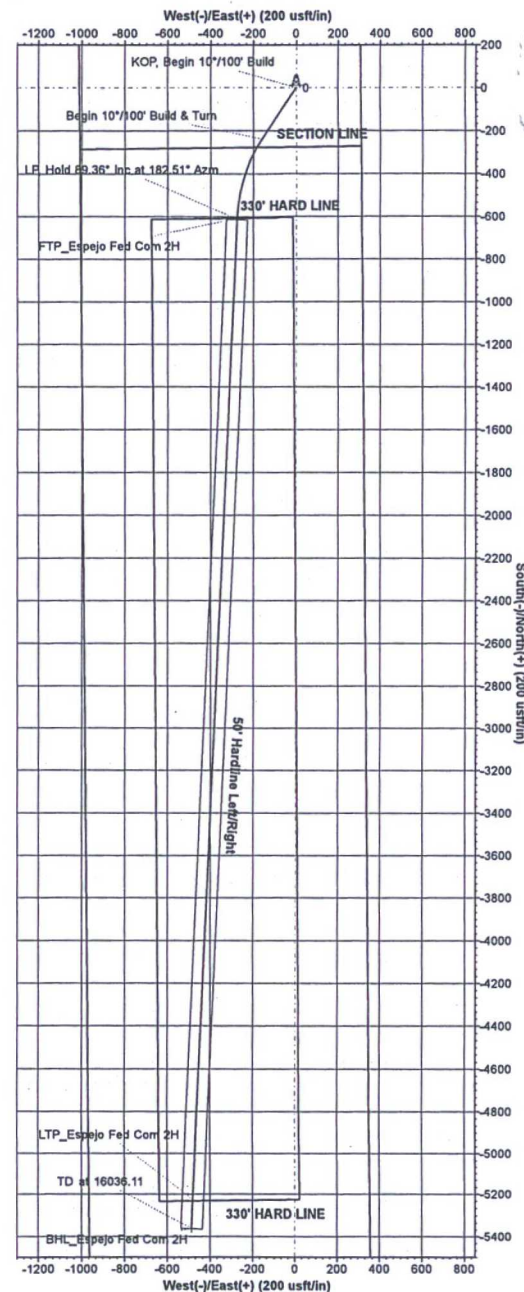
Dip Angle from Horizontal: 60.68°

Magnetic Field Strength: 48491

To convert a Magnetic Direction to a Grid Direction, Add 6.42°
 To convert a Magnetic Direction to a True Direction, Add 6.85° East
 To convert a True Direction to a Grid Direction, Subtract 0.43°

FORMATION TOP DETAILS

TVDPath	MDPath	Formation	DipAngle	DipDir
1805.00	1805.00	Rustler	0.64	185.15
1935.00	1935.00	Top Salt	0.64	185.15
2085.00	2085.00	Salado	0.64	185.15
3270.00	3270.00	Base Salt	0.64	185.15
3490.00	3490.00	Yates	0.64	185.15
3975.00	3975.00	Seven Rivers	0.64	185.15
4710.00	4710.00	Queen	0.64	185.15
4880.00	4880.00	Penrose Sand	0.64	185.15
5265.00	5265.00	Grayburg	0.64	185.15
5930.00	5930.00	Delaware	0.64	185.15
6690.00	6690.00	Brushy Canyon	0.64	185.15
7995.00	7995.00	Basal Brushy Canyon	0.64	185.15
8190.00	8190.00	"BSCL" Marker	0.64	185.15
8210.00	8210.00	Bone Spring	0.64	185.15
8350.00	8350.00	Avalon Sand	0.64	185.15
8850.00	8850.00	Lower Avalon Shale	0.64	185.15
9025.00	9025.00	First Bone Spring Limestone	0.64	185.15
9540.00	9540.00	First Bone Spring Sand	0.64	185.15
9725.00	9725.00	First Bone Spring Middle	0.64	185.15
9845.00	9845.00	Second Bone Spring Limestone	0.64	185.15
10050.00	10050.00	Second Bone Spring (Upper) Sand	0.64	185.15
10195.00	10195.00	Second Bone Spring Lower Limestone	0.64	185.15
10235.00	10235.00	Second Bone Spring Lower Sand	0.64	185.15
10360.08	10360.51	Second Bone Spring "B" Sand	0.64	185.15
10435.25	10437.82	Base "B" Sand	0.64	185.15
10457.32	10461.08	Third Bone Spring Limestone	0.64	185.15
10660.54	10701.24	Third Bone Spring Sand	0.64	185.15
10754.68	10851.39	Third Bone Spring WW Sand	0.64	185.15
10830.35	11029.91	Base WW Sand	0.64	185.15
10839.66	11060.03	Third Bone Spring RH Sand Marker	0.64	185.15
10847.98	11090.48	Third Bone Spring RH Sand	0.64	185.15



XTO ENERGY

HOEBS OCD

APR 10 2017

RECEIVED

XTO Energy Inc

Lea County, NM (NAD27)

Espejo Federal Com

2H

OH

Plan: Plan 1 11-19-15

Standard Planning Report

19 November, 2015



PHOENIX
TECHNOLOGY SERVICES

Phoenix Technology Services LP
Planning Report



XTOENERGY

Database: Compass 5000 GCR
Company: XTO Energy Inc
Project: Lea County, NM (NAD27)
Site: Espejo Federal Com
Well: 2H
Wellbore: OH
Design: Plan 1 11-19-15

Local Co-ordinate Reference: Well 2H
TVD Reference: RKB @ 3800.00usft (TBD)
MD Reference: RKB @ 3800.00usft (TBD)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

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	Espejo Federal Com				
Site Position:		Northing:	597,189.30 usft	Latitude:	32° 38' 21.07020 N
From:	Map	Easting:	748,217.20 usft	Longitude:	103° 31' 37.15092 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.43 °

Well	2H					
Well Position	+N/-S	-0.50 usft	Northing:	597,188.80 usft	Latitude:	32° 38' 21.06902 N
	+E/-W	-50.10 usft	Easting:	748,167.10 usft	Longitude:	103° 31' 37.73682 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	0.00 usft	Ground Level:	3,775.00 usft

Wellbore	OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	HDGM	11/19/2015	6.85	60.68	48,491

Design	Plan 1 11-19-15			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.00	0.00	0.00	185.15

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	
10,265.90	0.00	0.00	10,265.90	0.00	0.00	0.00	0.00	0.00	0.00	
10,865.90	60.00	213.85	10,762.10	-237.92	-159.57	10.00	10.00	0.00	213.85	
11,284.14	89.36	182.51	10,874.00	-614.09	-274.77	10.00	7.02	-7.49	-51.25	
16,036.11	89.36	182.51	10,927.00	-5,361.20	-482.80	0.00	0.00	0.00	0.00	BHL_Espejo Fed Con

Database: Compass 5000 GCR
 Company: XTO Energy Inc
 Project: Lea County, NM (NAD27)
 Site: Espejo Federal Com
 Well: 2H
 Wellbore: OH
 Design: Plan 1 11-19-15

Local Co-ordinate Reference: Well 2H
 TVD Reference: RKB @ 3800.00usft (TBD)
 MD Reference: RKB @ 3800.00usft (TBD)
 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
1,805.00	0.00	0.00	1,805.00	0.00	0.00	0.00	0.00	0.00	0.00
Rustler									
1,935.00	0.00	0.00	1,935.00	0.00	0.00	0.00	0.00	0.00	0.00
Top Salt									
2,085.00	0.00	0.00	2,085.00	0.00	0.00	0.00	0.00	0.00	0.00
Salado									
3,270.00	0.00	0.00	3,270.00	0.00	0.00	0.00	0.00	0.00	0.00
Base Salt									
3,490.00	0.00	0.00	3,490.00	0.00	0.00	0.00	0.00	0.00	0.00
Yates									
3,975.00	0.00	0.00	3,975.00	0.00	0.00	0.00	0.00	0.00	0.00
Seven Rivers									
4,710.00	0.00	0.00	4,710.00	0.00	0.00	0.00	0.00	0.00	0.00
Queen									
4,980.00	0.00	0.00	4,980.00	0.00	0.00	0.00	0.00	0.00	0.00
Penrose Sand									
5,265.00	0.00	0.00	5,265.00	0.00	0.00	0.00	0.00	0.00	0.00
Grayburg									
5,930.00	0.00	0.00	5,930.00	0.00	0.00	0.00	0.00	0.00	0.00
Delaware									
6,690.00	0.00	0.00	6,690.00	0.00	0.00	0.00	0.00	0.00	0.00
Brushy Canyon									
7,995.00	0.00	0.00	7,995.00	0.00	0.00	0.00	0.00	0.00	0.00
Basal Brushy Canyon									
8,190.00	0.00	0.00	8,190.00	0.00	0.00	0.00	0.00	0.00	0.00
"BSGL" Marker									
8,210.00	0.00	0.00	8,210.00	0.00	0.00	0.00	0.00	0.00	0.00
Bone Spring									
8,350.00	0.00	0.00	8,350.00	0.00	0.00	0.00	0.00	0.00	0.00
Avalon Sand									
8,850.00	0.00	0.00	8,850.00	0.00	0.00	0.00	0.00	0.00	0.00
Lower Avalon Shale									
9,025.00	0.00	0.00	9,025.00	0.00	0.00	0.00	0.00	0.00	0.00
First Bone Spring Limestone									
9,540.00	0.00	0.00	9,540.00	0.00	0.00	0.00	0.00	0.00	0.00
First Bone Spring Sand									
9,725.00	0.00	0.00	9,725.00	0.00	0.00	0.00	0.00	0.00	0.00
First Bone Spring Middle									
9,845.00	0.00	0.00	9,845.00	0.00	0.00	0.00	0.00	0.00	0.00
Second Bone Spring Limestone									
10,050.00	0.00	0.00	10,050.00	0.00	0.00	0.00	0.00	0.00	0.00
Second Bone Spring (Upper) Sand									
10,195.00	0.00	0.00	10,195.00	0.00	0.00	0.00	0.00	0.00	0.00
Second Bone Spring Lower Limestone									
10,235.00	0.00	0.00	10,235.00	0.00	0.00	0.00	0.00	0.00	0.00
Second Bone Spring Lower Sand									
10,265.90	0.00	0.00	10,265.90	0.00	0.00	0.00	0.00	0.00	0.00
KOP, Begin 10°/100' Build									
10,300.00	3.41	213.85	10,299.98	-0.84	-0.57	0.89	10.00	10.00	0.00
10,360.51	9.46	213.85	10,360.08	-6.47	-4.34	6.84	10.00	10.00	0.00

Database: Compass 5000 GCR
Company: XTO Energy Inc
Project: Lea County, NM (NAD27)
Site: Espejo Federal Com
Well: 2H
Wellbore: OH
Design: Plan 1 11-19-15

Local Co-ordinate Reference: Well 2H
TVD Reference: RKB @ 3800.00usft (TBD)
MD Reference: RKB @ 3800.00usft (TBD)
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)
Second Bone Spring "B" Sand									
10,400.00	13.41	213.85	10,398.78	-12.97	-8.70	13.70	10.00	10.00	0.00
10,437.82	17.19	213.85	10,435.25	-21.26	-14.26	22.45	10.00	10.00	0.00
Base "B" Sand									
10,461.08	19.52	213.85	10,457.32	-27.34	-18.34	28.88	10.00	10.00	0.00
Third Bone Spring Limestone									
10,500.00	23.41	213.85	10,493.54	-39.17	-26.27	41.37	10.00	10.00	0.00
10,600.00	33.41	213.85	10,581.39	-78.63	-52.74	83.05	10.00	10.00	0.00
10,700.00	43.41	213.85	10,659.65	-130.16	-87.30	137.47	10.00	10.00	0.00
10,701.24	43.53	213.85	10,660.54	-130.87	-87.78	138.22	10.00	10.00	0.00
Third Bone Spring Sand									
10,800.00	53.41	213.85	10,725.94	-192.20	-128.91	202.99	10.00	10.00	0.00
10,851.39	58.55	213.85	10,754.69	-227.56	-152.63	240.34	10.00	10.00	0.00
Third Bone Spring WW Sand									
10,865.90	60.00	213.85	10,762.10	-237.92	-159.57	251.27	10.00	10.00	0.00
Begin 10°/100' Build & Turn									
10,900.00	62.17	210.84	10,778.59	-263.14	-175.53	277.82	10.00	6.36	-8.82
11,000.00	68.86	202.67	10,820.07	-344.34	-216.28	362.35	10.00	6.69	-8.18
11,029.91	70.94	200.38	10,830.35	-370.46	-226.58	389.29	10.00	6.95	-7.66
Base WW Sand									
11,060.03	73.06	198.13	10,839.66	-397.51	-236.02	417.07	10.00	7.04	-7.47
Third Bone Spring RH Sand Marker									
11,090.48	75.22	195.90	10,847.98	-425.51	-244.59	445.73	10.00	7.12	-7.30
Third Bone Spring RH Sand									
11,100.00	75.91	195.22	10,850.35	-434.39	-247.06	454.80	10.00	7.17	-7.20
11,200.00	83.17	188.22	10,868.52	-530.57	-266.94	552.37	10.00	7.26	-7.00
11,284.14	89.36	182.51	10,874.00	-614.09	-274.77	636.26	10.00	7.36	-6.79
LP, Hold 89.36° Inc at 182.51° Azm									
11,300.00	89.36	182.51	10,874.18	-629.93	-275.46	652.10	0.00	0.00	0.00
11,400.00	89.36	182.51	10,875.30	-729.83	-279.84	751.99	0.00	0.00	0.00
11,500.00	89.36	182.51	10,876.41	-829.73	-284.22	851.87	0.00	0.00	0.00
11,600.00	89.36	182.51	10,877.53	-929.62	-288.60	951.76	0.00	0.00	0.00
11,700.00	89.36	182.51	10,878.64	-1,029.52	-292.98	1,051.65	0.00	0.00	0.00
11,800.00	89.36	182.51	10,879.76	-1,129.42	-297.35	1,151.54	0.00	0.00	0.00
11,900.00	89.36	182.51	10,880.87	-1,229.32	-301.73	1,251.43	0.00	0.00	0.00
12,000.00	89.36	182.51	10,881.99	-1,329.22	-306.11	1,351.31	0.00	0.00	0.00
12,100.00	89.36	182.51	10,883.10	-1,429.11	-310.49	1,451.20	0.00	0.00	0.00
12,200.00	89.36	182.51	10,884.22	-1,529.01	-314.86	1,551.09	0.00	0.00	0.00
12,300.00	89.36	182.51	10,885.33	-1,628.91	-319.24	1,650.98	0.00	0.00	0.00
12,400.00	89.36	182.51	10,886.45	-1,728.81	-323.62	1,750.87	0.00	0.00	0.00
12,500.00	89.36	182.51	10,887.56	-1,828.71	-328.00	1,850.75	0.00	0.00	0.00
12,600.00	89.36	182.51	10,888.68	-1,928.60	-332.38	1,950.64	0.00	0.00	0.00
12,700.00	89.36	182.51	10,889.79	-2,028.50	-336.75	2,050.53	0.00	0.00	0.00
12,800.00	89.36	182.51	10,890.91	-2,128.40	-341.13	2,150.42	0.00	0.00	0.00
12,900.00	89.36	182.51	10,892.02	-2,228.30	-345.51	2,250.30	0.00	0.00	0.00
13,000.00	89.36	182.51	10,893.14	-2,328.19	-349.89	2,350.19	0.00	0.00	0.00
13,100.00	89.36	182.51	10,894.25	-2,428.09	-354.26	2,450.08	0.00	0.00	0.00
13,200.00	89.36	182.51	10,895.37	-2,527.99	-358.64	2,549.97	0.00	0.00	0.00
13,300.00	89.36	182.51	10,896.49	-2,627.89	-363.02	2,649.86	0.00	0.00	0.00
13,400.00	89.36	182.51	10,897.60	-2,727.79	-367.40	2,749.74	0.00	0.00	0.00
13,500.00	89.36	182.51	10,898.72	-2,827.68	-371.77	2,849.63	0.00	0.00	0.00
13,600.00	89.36	182.51	10,899.83	-2,927.58	-376.15	2,949.52	0.00	0.00	0.00
13,700.00	89.36	182.51	10,900.95	-3,027.48	-380.53	3,049.41	0.00	0.00	0.00

Database: Compass 5000 GCR
 Company: XTO Energy Inc
 Project: Lea County, NM (NAD27)
 Site: Espejo Federal Com
 Well: 2H
 Wellbore: OH
 Design: Plan 1 11-19-15

Local Co-ordinate Reference: Well 2H
 TVD Reference: RKB @ 3800.00usft (TBD)
 MD Reference: RKB @ 3800.00usft (TBD)
 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)
13,800.00	89.36	182.51	10,902.06	-3,127.38	-384.91	3,149.30	0.00	0.00	0.00
13,900.00	89.36	182.51	10,903.18	-3,227.28	-389.29	3,249.18	0.00	0.00	0.00
14,000.00	89.36	182.51	10,904.29	-3,327.17	-393.66	3,349.07	0.00	0.00	0.00
14,100.00	89.36	182.51	10,905.41	-3,427.07	-398.04	3,448.96	0.00	0.00	0.00
14,200.00	89.36	182.51	10,906.52	-3,526.97	-402.42	3,548.85	0.00	0.00	0.00
14,300.00	89.36	182.51	10,907.64	-3,626.87	-406.80	3,648.74	0.00	0.00	0.00
14,400.00	89.36	182.51	10,908.75	-3,726.77	-411.17	3,748.62	0.00	0.00	0.00
14,500.00	89.36	182.51	10,909.87	-3,826.66	-415.55	3,848.51	0.00	0.00	0.00
14,600.00	89.36	182.51	10,910.98	-3,926.56	-419.93	3,948.40	0.00	0.00	0.00
14,700.00	89.36	182.51	10,912.10	-4,026.46	-424.31	4,048.29	0.00	0.00	0.00
14,800.00	89.36	182.51	10,913.21	-4,126.36	-428.69	4,148.18	0.00	0.00	0.00
14,900.00	89.36	182.51	10,914.33	-4,226.25	-433.06	4,248.06	0.00	0.00	0.00
15,000.00	89.36	182.51	10,915.44	-4,326.15	-437.44	4,347.95	0.00	0.00	0.00
15,100.00	89.36	182.51	10,916.56	-4,426.05	-441.82	4,447.84	0.00	0.00	0.00
15,200.00	89.36	182.51	10,917.68	-4,525.95	-446.20	4,547.73	0.00	0.00	0.00
15,300.00	89.36	182.51	10,918.79	-4,625.85	-450.57	4,647.62	0.00	0.00	0.00
15,400.00	89.36	182.51	10,919.91	-4,725.74	-454.95	4,747.50	0.00	0.00	0.00
15,500.00	89.36	182.51	10,921.02	-4,825.64	-459.33	4,847.39	0.00	0.00	0.00
15,600.00	89.36	182.51	10,922.14	-4,925.54	-463.71	4,947.28	0.00	0.00	0.00
15,700.00	89.36	182.51	10,923.25	-5,025.44	-468.09	5,047.17	0.00	0.00	0.00
15,800.00	89.36	182.51	10,924.37	-5,125.34	-472.46	5,147.05	0.00	0.00	0.00
15,900.00	89.36	182.51	10,925.48	-5,225.23	-476.84	5,246.94	0.00	0.00	0.00
16,000.00	89.36	182.51	10,926.60	-5,325.13	-481.22	5,346.83	0.00	0.00	0.00
16,036.11	89.36	182.51	10,927.00	-5,361.20	-482.80	5,382.90	0.00	0.00	0.00

TD at 16036.11

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
FTP_Espejo Fed Com 2 - plan misses target center by 0.17usft at 11277.67usft MD (10873.90 TVD, -607.63 N, -274.46 E) - Point	0.00	0.00	10,874.00	-607.60	-274.60	596,581.20	747,892.50	32° 38' 15.07758 N	103° 31' 41.00180 W
LTP_Espejo Fed Com 2I - plan misses target center by 0.08usft at 15905.97usft MD (10925.55 TVD, -5231.20 N, -477.10 E) - Point	0.00	0.00	10,925.63	-5,231.20	-477.10	591,957.60	747,690.00	32° 37' 29.34337 N	103° 31' 43.77914 W
BHL_Espejo Fed Com 2 - plan hits target center - Rectangle (sides W100.00 H4,751.96 D0.00)	0.64	182.51	10,927.00	-5,361.20	-482.80	591,827.60	747,684.30	32° 37' 28.05748 N	103° 31' 43.85729 W

Database: Compass 5000 GCR
Company: XTO Energy Inc
Project: Lea County, NM (NAD27)
Site: Espejo Federal Com
Well: 2H
Wellbore: OH
Design: Plan 1 11-19-15

Local Co-ordinate Reference: Well 2H
TVD Reference: RKB @ 3800.00usft (TBD)
MD Reference: RKB @ 3800.00usft (TBD)
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,805.00	1,804.00	Rustler		0.64	185.15
1,935.00	1,934.00	Top Salt		0.64	185.15
2,085.00	2,084.00	Salado		0.64	185.15
3,270.00	3,269.00	Base Salt		0.64	185.15
3,490.00	3,489.00	Yates		0.64	185.15
3,975.00	3,974.00	Seven Rivers		0.64	185.15
4,710.00	4,709.00	Queen		0.64	185.15
4,980.00	4,979.00	Penrose Sand		0.64	185.15
5,265.00	5,264.00	Grayburg		0.64	185.15
5,930.00	5,929.00	Delaware		0.64	185.15
6,690.00	6,689.00	Brushy Canyon		0.64	185.15
7,995.00	7,994.00	Basal Brushy Canyon		0.64	185.15
8,190.00	8,189.00	"BSGL" Marker		0.64	185.15
8,210.00	8,209.00	Bone Spring		0.64	185.15
8,350.00	8,349.00	Avalon Sand		0.64	185.15
8,850.00	8,849.00	Lower Avalon Shale		0.64	185.15
9,025.00	9,024.00	First Bone Spring Limestone		0.64	185.15
9,540.00	9,539.00	First Bone Spring Sand		0.64	185.15
9,725.00	9,724.00	First Bone Spring Middle		0.64	185.15
9,845.00	9,844.00	Second Bone Spring Limestone		0.64	185.15
10,050.00	10,049.00	Second Bone Spring (Upper) Sand		0.64	185.15
10,195.00	10,194.00	Second Bone Spring Lower Limestone		0.64	185.15
10,235.00	10,234.00	Second Bone Spring Lower Sand		0.64	185.15
10,360.51	10,359.08	Second Bone Spring "B" Sand		0.64	185.15
10,437.82	10,434.25	Base "B" Sand		0.64	185.15
10,461.08	10,456.32	Third Bone Spring Limestone		0.64	185.15
10,701.24	10,659.54	Third Bone Spring Sand		0.64	185.15
10,851.39	10,753.69	Third Bone Spring WW Sand		0.64	185.15
11,029.91	10,829.35	Base WW Sand		0.64	185.15
11,060.03	10,838.66	Third Bone Spring RH Sand Marker		0.64	185.15
11,090.48	10,846.98	Third Bone Spring RH Sand		0.64	185.15

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/-S (usft)	+E/-W (usft)	
10,265.90	10,265.90	0.00	0.00	KOP, Begin 10°/100' Build
10,865.90	10,762.10	-237.92	-159.57	Begin 10°/100' Build & Turn
11,284.14	10,874.00	-614.09	-274.77	LP, Hold 89.36° Inc at 182.51° Azm
16,036.11	10,927.00	-5,361.20	-482.80	TD at 16036.11