



Professional Directional
Planning Report

30-015- 45009



Database: WellPlanner1
Company: Marathon Oil

Local Co-ordinate Reference
TVD Reference:

Well WA #15H
Well @ 3061.50usft (GL: 3035' + KB: 26.5'
(H&P423))

Project: Eddy County, NM

MD Reference:

Well @ 3061.50usft (GL: 3035' + KB: 26.5'
(H&P423))

Site: Maximus Fee 23-28-6

North Reference:

Grid

Well: WA #15H

Survey Calculation Method:

Minimum Curvature

Wellbore: OH

Design: Prelim Plan A

Project	Eddy County, NM		
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	Maximus Fee 23-28-6		
Site Position:		Northing:	487,037.57 usft
From:	Map	Easting:	566,163.47 usft
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "
		Latitude:	32.338800
		Longitude:	-104.119108
		Grid Convergence:	0.11 °

Well	WA #15H		
Well Position	+N/-S	30.00 usft	Northing:
	+E/-W	0.01 usft	Easting:
Position Uncertainty	0.00 usft	Wellhead Elevation:	
		Latitude:	32.338883
		Longitude:	-104.119108
		Ground Level:	3,035.00 usft

Wellbore	OH		
Magnetics	Model Name	Sample Date	Declination
			(°)
	HDGM	5/16/2018	7.28
			Dip Angle
			(°)
			60.10
			Field Strength
			(nT)
			48,020.60

Design	Prelim Plan A		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth:
			0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W
	(usft)	(usft)	(usft)
	0.00	0.00	0.00
			Direction
			(°)
			269.65

Plan Survey Tool Program		Date 5/16/2018	
Depth From (usft)	Depth To (usft)	Survey (Wellbore)	Tool Name
1 0.00	1,500.00	Prelim Plan A (OH)	MWD+IFR1
			OWSG MWD + IFR1
2 1,500.00	5,000.00	Prelim Plan A (OH)	MWD+IFR1
			OWSG MWD + IFR1
3 5,000.00	10,000.00	Prelim Plan A (OH)	MWD+IFR1
			OWSG MWD + IFR1
4 10,000.00	14,204.98	Prelim Plan A (OH)	MWD+IFR1
			OWSG MWD + IFR1

NM OIL CONSERVATION
ARTESIA DISTRICT

JUN 01 2018

RECEIVED

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Company:	Marathon Oil	TVD Reference:	Well @ 3061.50usft (GL: 3035' + KB: 26.5' (H&P423))
Project:	Eddy County, NM	MD Reference:	Well @ 3061.50usft (GL: 3035' + KB: 26.5' (H&P423))
Site:	Maximus Fee 23-28-6	North Reference:	Grid
Well:	WA #15H	Survey Calculation Method:	Minimum Curvature
Wellbore:	OH		
Design:	Prelim Plan A		

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	
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00	
2,300.00	10.00	106.57	2,297.47	-12.41	41.71	2.00	2.00	0.00	106.57	
4,544.55	10.00	106.57	4,507.92	-123.59	415.29	0.00	0.00	0.00	0.00	
5,044.55	0.00	0.00	5,005.38	-136.00	457.00	2.00	-2.00	0.00	180.00	
9,049.67	0.00	0.00	9,010.50	-136.00	457.00	0.00	0.00	0.00	0.00	[Maximus#15H]KOP
9,956.66	90.70	269.65	9,583.42	-139.51	-122.94	10.00	10.00	-9.96	269.65	
14,204.98	90.70	269.65	9,531.59	-165.23	-4,370.86	0.00	0.00	0.00	0.00	[Maximus#15H]LTP/B

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Well @ 3061.50usft (GL: 3035' + KB: 26.5'
(H&P423))

Site: Maximus Fee 23-28-6

North Reference:

Grid

Well: WA #15H

Survey Calculation Method:

Minimum Curvature

Wellbore: OH

Design: Prelim Plan A

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
[Maximus#15H]FTP									
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
1,300.00	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	2.00	106.57	1,899.98	-0.50	1.67	-1.67	2.00	2.00	0.00
2,000.00	4.00	106.57	1,999.84	-1.99	6.69	-6.68	2.00	2.00	0.00
2,100.00	6.00	106.57	2,099.45	-4.48	15.04	-15.01	2.00	2.00	0.00
2,200.00	8.00	106.57	2,198.70	-7.95	26.72	-26.67	2.00	2.00	0.00
2,300.00	10.00	106.57	2,297.47	-12.41	41.71	-41.64	2.00	2.00	0.00
2,400.00	10.00	106.57	2,395.95	-17.37	58.36	-58.25	0.00	0.00	0.00
2,500.00	10.00	106.57	2,494.43	-22.32	75.00	-74.86	0.00	0.00	0.00
2,600.00	10.00	106.57	2,592.91	-27.27	91.64	-91.48	0.00	0.00	0.00
2,700.00	10.00	106.57	2,691.39	-32.23	108.29	-108.09	0.00	0.00	0.00
2,800.00	10.00	106.57	2,789.87	-37.18	124.93	-124.70	0.00	0.00	0.00
2,900.00	10.00	106.57	2,888.35	-42.13	141.58	-141.32	0.00	0.00	0.00
3,000.00	10.00	106.57	2,986.83	-47.08	158.22	-157.93	0.00	0.00	0.00
3,100.00	10.00	106.57	3,085.31	-52.04	174.86	-174.54	0.00	0.00	0.00
3,200.00	10.00	106.57	3,183.79	-56.99	191.51	-191.15	0.00	0.00	0.00
3,300.00	10.00	106.57	3,282.27	-61.94	208.15	-207.77	0.00	0.00	0.00
3,400.00	10.00	106.57	3,380.75	-66.90	224.79	-224.38	0.00	0.00	0.00
3,500.00	10.00	106.57	3,479.23	-71.85	241.44	-240.99	0.00	0.00	0.00
3,600.00	10.00	106.57	3,577.72	-76.80	258.08	-257.61	0.00	0.00	0.00
3,700.00	10.00	106.57	3,676.20	-81.76	274.72	-274.22	0.00	0.00	0.00
3,800.00	10.00	106.57	3,774.68	-86.71	291.37	-290.83	0.00	0.00	0.00
3,900.00	10.00	106.57	3,873.16	-91.66	308.01	-307.44	0.00	0.00	0.00
4,000.00	10.00	106.57	3,971.64	-96.61	324.65	-324.06	0.00	0.00	0.00
4,100.00	10.00	106.57	4,070.12	-101.57	341.30	-340.67	0.00	0.00	0.00
4,200.00	10.00	106.57	4,168.60	-106.52	357.94	-357.28	0.00	0.00	0.00
4,300.00	10.00	106.57	4,267.08	-111.47	374.58	-373.90	0.00	0.00	0.00
4,400.00	10.00	106.57	4,365.56	-116.43	391.23	-390.51	0.00	0.00	0.00
4,500.00	10.00	106.57	4,464.04	-121.38	407.87	-407.12	0.00	0.00	0.00
4,544.55	10.00	106.57	4,507.92	-123.59	415.29	-414.52	0.00	0.00	0.00
4,600.00	8.89	106.57	4,562.61	-126.18	424.01	-423.23	2.00	-2.00	0.00
4,700.00	6.89	106.57	4,661.66	-130.10	437.17	-436.36	2.00	-2.00	0.00
4,800.00	4.89	106.57	4,761.13	-133.02	447.00	-446.18	2.00	-2.00	0.00

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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)
4,900.00	2.89	106.57	4,860.89	-134.96	453.51	-452.67	2.00	-2.00	0.00
5,000.00	0.89	106.57	4,960.83	-135.90	456.67	-455.83	2.00	-2.00	0.00
5,044.55	0.00	0.00	5,005.38	-136.00	457.00	-456.16	2.00	-2.00	0.00
5,100.00	0.00	0.00	5,060.83	-136.00	457.00	-456.16	0.00	0.00	0.00
5,200.00	0.00	0.00	5,160.83	-136.00	457.00	-456.16	0.00	0.00	0.00
5,300.00	0.00	0.00	5,260.83	-136.00	457.00	-456.16	0.00	0.00	0.00
5,400.00	0.00	0.00	5,360.83	-136.00	457.00	-456.16	0.00	0.00	0.00
5,500.00	0.00	0.00	5,460.83	-136.00	457.00	-456.16	0.00	0.00	0.00
5,600.00	0.00	0.00	5,560.83	-136.00	457.00	-456.16	0.00	0.00	0.00
5,700.00	0.00	0.00	5,660.83	-136.00	457.00	-456.16	0.00	0.00	0.00
5,800.00	0.00	0.00	5,760.83	-136.00	457.00	-456.16	0.00	0.00	0.00
5,900.00	0.00	0.00	5,860.83	-136.00	457.00	-456.16	0.00	0.00	0.00
6,000.00	0.00	0.00	5,960.83	-136.00	457.00	-456.16	0.00	0.00	0.00
6,100.00	0.00	0.00	6,060.83	-136.00	457.00	-456.16	0.00	0.00	0.00
6,200.00	0.00	0.00	6,160.83	-136.00	457.00	-456.16	0.00	0.00	0.00
6,300.00	0.00	0.00	6,260.83	-136.00	457.00	-456.16	0.00	0.00	0.00
6,400.00	0.00	0.00	6,360.83	-136.00	457.00	-456.16	0.00	0.00	0.00
6,500.00	0.00	0.00	6,460.83	-136.00	457.00	-456.16	0.00	0.00	0.00
6,600.00	0.00	0.00	6,560.83	-136.00	457.00	-456.16	0.00	0.00	0.00
6,700.00	0.00	0.00	6,660.83	-136.00	457.00	-456.16	0.00	0.00	0.00
6,800.00	0.00	0.00	6,760.83	-136.00	457.00	-456.16	0.00	0.00	0.00
6,900.00	0.00	0.00	6,860.83	-136.00	457.00	-456.16	0.00	0.00	0.00
7,000.00	0.00	0.00	6,960.83	-136.00	457.00	-456.16	0.00	0.00	0.00
7,100.00	0.00	0.00	7,060.83	-136.00	457.00	-456.16	0.00	0.00	0.00
7,200.00	0.00	0.00	7,160.83	-136.00	457.00	-456.16	0.00	0.00	0.00
7,300.00	0.00	0.00	7,260.83	-136.00	457.00	-456.16	0.00	0.00	0.00
7,400.00	0.00	0.00	7,360.83	-136.00	457.00	-456.16	0.00	0.00	0.00
7,500.00	0.00	0.00	7,460.83	-136.00	457.00	-456.16	0.00	0.00	0.00
7,600.00	0.00	0.00	7,560.83	-136.00	457.00	-456.16	0.00	0.00	0.00
7,700.00	0.00	0.00	7,660.83	-136.00	457.00	-456.16	0.00	0.00	0.00
7,800.00	0.00	0.00	7,760.83	-136.00	457.00	-456.16	0.00	0.00	0.00
7,900.00	0.00	0.00	7,860.83	-136.00	457.00	-456.16	0.00	0.00	0.00
8,000.00	0.00	0.00	7,960.83	-136.00	457.00	-456.16	0.00	0.00	0.00
8,100.00	0.00	0.00	8,060.83	-136.00	457.00	-456.16	0.00	0.00	0.00
8,200.00	0.00	0.00	8,160.83	-136.00	457.00	-456.16	0.00	0.00	0.00
8,300.00	0.00	0.00	8,260.83	-136.00	457.00	-456.16	0.00	0.00	0.00
8,400.00	0.00	0.00	8,360.83	-136.00	457.00	-456.16	0.00	0.00	0.00
8,500.00	0.00	0.00	8,460.83	-136.00	457.00	-456.16	0.00	0.00	0.00
8,600.00	0.00	0.00	8,560.83	-136.00	457.00	-456.16	0.00	0.00	0.00
8,700.00	0.00	0.00	8,660.83	-136.00	457.00	-456.16	0.00	0.00	0.00
8,800.00	0.00	0.00	8,760.83	-136.00	457.00	-456.16	0.00	0.00	0.00
8,900.00	0.00	0.00	8,860.83	-136.00	457.00	-456.16	0.00	0.00	0.00
9,000.00	0.00	0.00	8,960.83	-136.00	457.00	-456.16	0.00	0.00	0.00
9,049.67	0.00	0.00	9,010.50	-136.00	457.00	-456.16	0.00	0.00	0.00
[Maximus#15H]KOP									
9,100.00	5.03	269.65	9,060.77	-136.01	454.79	-453.95	10.00	10.00	0.00
9,150.00	10.03	269.65	9,110.32	-136.05	448.24	-447.40	10.00	10.00	0.00
9,200.00	15.03	269.65	9,159.11	-136.12	437.39	-436.55	10.00	10.00	0.00
9,250.00	20.03	269.65	9,206.77	-136.21	422.33	-421.49	10.00	10.00	0.00
9,300.00	25.03	269.65	9,252.94	-136.33	403.18	-402.34	10.00	10.00	0.00
9,350.00	30.03	269.65	9,297.27	-136.47	380.07	-379.23	10.00	10.00	0.00

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Minimum Curvature

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Design: Prelim Plan A

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)
9,400.00	35.03	269.65	9,339.41	-136.63	353.19	-352.35	10.00	10.00	0.00
9,450.00	40.03	269.65	9,379.04	-136.81	322.74	-321.90	10.00	10.00	0.00
9,500.00	45.03	269.65	9,415.88	-137.02	288.95	-288.11	10.00	10.00	0.00
9,550.00	50.03	269.65	9,449.62	-137.24	252.08	-251.24	10.00	10.00	0.00
9,600.00	55.03	269.65	9,480.03	-137.48	212.41	-211.57	10.00	10.00	0.00
9,650.00	60.03	269.65	9,506.86	-137.74	170.24	-169.40	10.00	10.00	0.00
9,700.00	65.03	269.65	9,529.92	-138.00	125.89	-125.05	10.00	10.00	0.00
9,750.00	70.03	269.65	9,549.02	-138.28	79.70	-78.85	10.00	10.00	0.00
9,800.00	75.03	269.65	9,564.02	-138.57	32.02	-31.18	10.00	10.00	0.00
9,850.00	80.03	269.65	9,574.81	-138.87	-16.78	17.63	10.00	10.00	0.00
9,900.00	85.03	269.65	9,581.31	-139.17	-66.34	67.19	10.00	10.00	0.00
9,950.00	90.03	269.65	9,583.46	-139.47	-116.28	117.13	10.00	10.00	0.00
9,956.66	90.70	269.65	9,583.42	-139.51	-122.94	123.79	10.00	10.00	0.00
10,000.00	90.70	269.65	9,582.89	-139.77	-166.27	167.12	0.00	0.00	0.00
10,100.00	90.70	269.65	9,581.67	-140.38	-266.26	267.12	0.00	0.00	0.00
10,200.00	90.70	269.65	9,580.45	-140.98	-366.26	367.11	0.00	0.00	0.00
10,300.00	90.70	269.65	9,579.23	-141.59	-466.25	467.10	0.00	0.00	0.00
10,400.00	90.70	269.65	9,578.01	-142.20	-566.24	567.09	0.00	0.00	0.00
10,500.00	90.70	269.65	9,576.79	-142.80	-666.23	667.09	0.00	0.00	0.00
10,600.00	90.70	269.65	9,575.57	-143.41	-766.22	767.08	0.00	0.00	0.00
10,700.00	90.70	269.65	9,574.35	-144.01	-866.21	867.07	0.00	0.00	0.00
10,800.00	90.70	269.65	9,573.13	-144.62	-966.20	967.07	0.00	0.00	0.00
10,900.00	90.70	269.65	9,571.91	-145.22	-1,066.19	1,067.06	0.00	0.00	0.00
11,000.00	90.70	269.65	9,570.69	-145.83	-1,166.18	1,167.05	0.00	0.00	0.00
11,100.00	90.70	269.65	9,569.47	-146.43	-1,266.17	1,267.04	0.00	0.00	0.00
11,200.00	90.70	269.65	9,568.25	-147.04	-1,366.16	1,367.04	0.00	0.00	0.00
11,300.00	90.70	269.65	9,567.03	-147.64	-1,466.15	1,467.03	0.00	0.00	0.00
11,400.00	90.70	269.65	9,565.81	-148.25	-1,566.14	1,567.02	0.00	0.00	0.00
11,500.00	90.70	269.65	9,564.59	-148.85	-1,666.13	1,667.01	0.00	0.00	0.00
11,600.00	90.70	269.65	9,563.37	-149.46	-1,766.13	1,767.01	0.00	0.00	0.00
11,700.00	90.70	269.65	9,562.15	-150.07	-1,866.12	1,867.00	0.00	0.00	0.00
11,800.00	90.70	269.65	9,560.93	-150.67	-1,966.11	1,966.99	0.00	0.00	0.00
11,900.00	90.70	269.65	9,559.71	-151.28	-2,066.10	2,066.98	0.00	0.00	0.00
12,000.00	90.70	269.65	9,558.49	-151.88	-2,166.09	2,166.98	0.00	0.00	0.00
12,100.00	90.70	269.65	9,557.27	-152.49	-2,266.08	2,266.97	0.00	0.00	0.00
12,200.00	90.70	269.65	9,556.05	-153.09	-2,366.07	2,366.96	0.00	0.00	0.00
12,300.00	90.70	269.65	9,554.83	-153.70	-2,466.06	2,466.95	0.00	0.00	0.00
12,400.00	90.70	269.65	9,553.61	-154.30	-2,566.05	2,566.95	0.00	0.00	0.00
12,500.00	90.70	269.65	9,552.39	-154.91	-2,666.04	2,666.94	0.00	0.00	0.00
12,600.00	90.70	269.65	9,551.17	-155.51	-2,766.03	2,766.93	0.00	0.00	0.00
12,700.00	90.70	269.65	9,549.95	-156.12	-2,866.02	2,866.92	0.00	0.00	0.00
12,800.00	90.70	269.65	9,548.73	-156.72	-2,966.01	2,966.92	0.00	0.00	0.00
12,900.00	90.70	269.65	9,547.51	-157.33	-3,066.01	3,066.91	0.00	0.00	0.00
13,000.00	90.70	269.65	9,546.29	-157.94	-3,166.00	3,166.90	0.00	0.00	0.00
13,100.00	90.70	269.65	9,545.07	-158.54	-3,265.99	3,266.89	0.00	0.00	0.00
13,200.00	90.70	269.65	9,543.85	-159.15	-3,365.98	3,366.89	0.00	0.00	0.00
13,300.00	90.70	269.65	9,542.63	-159.75	-3,465.97	3,466.88	0.00	0.00	0.00
13,400.00	90.70	269.65	9,541.41	-160.36	-3,565.96	3,566.87	0.00	0.00	0.00
13,500.00	90.70	269.65	9,540.19	-160.96	-3,665.95	3,666.86	0.00	0.00	0.00
13,600.00	90.70	269.65	9,538.97	-161.57	-3,765.94	3,766.86	0.00	0.00	0.00
13,700.00	90.70	269.65	9,537.75	-162.17	-3,865.93	3,866.85	0.00	0.00	0.00

Database: WellPlanner1
Company: Marathon Oil

Local Co-ordinate Reference
TVD Reference:

Well WA #15H
Well @ 3061.50usft (GL: 3035' + KB: 26.5'
(H&P423))

Project: Eddy County, NM

MD Reference:

Well @ 3061.50usft (GL: 3035' + KB: 26.5'
(H&P423))

Site: Maximus Fee 23-28-6

North Reference:

Grid

Well: WA #15H

Survey Calculation Method:

Minimum Curvature

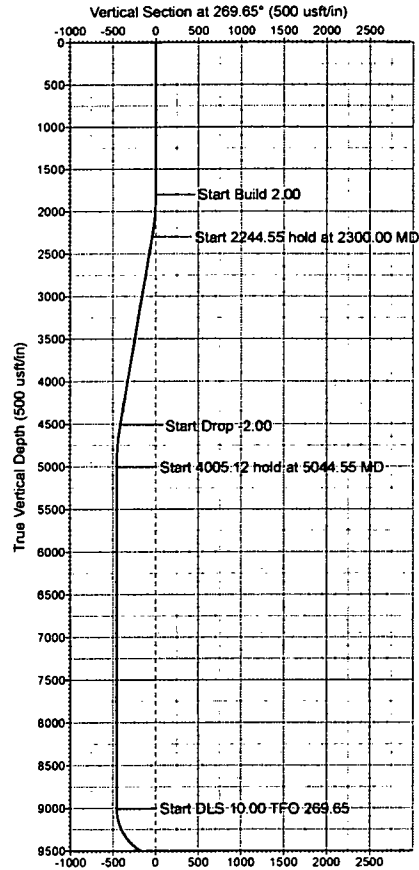
Wellbore: OH

Design: Prelim Plan A

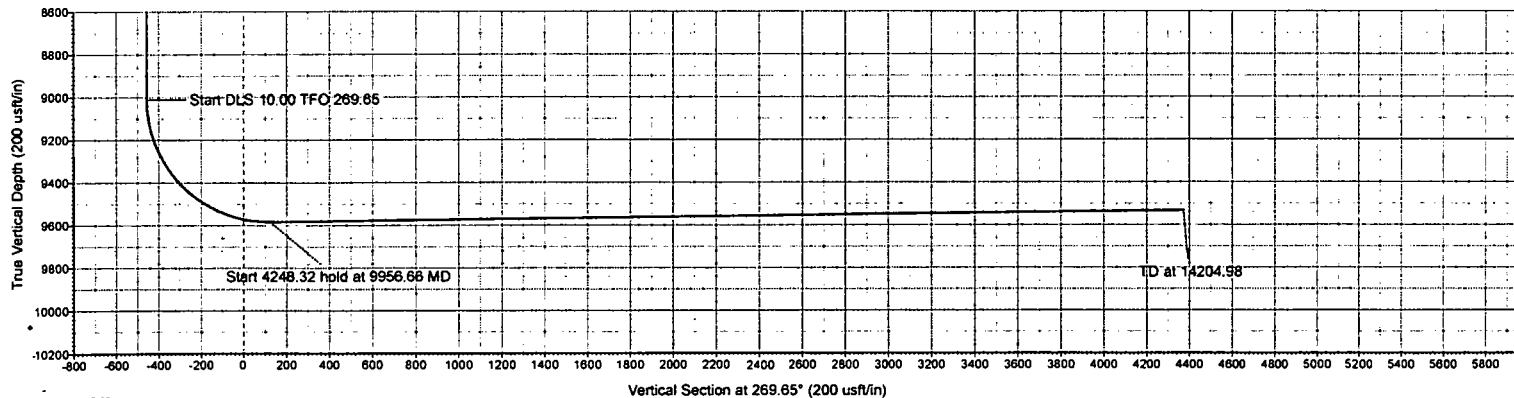
Planned Survey

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	90.70	269.65	9,536.53	-162.78	-3,965.92	3,966.84	0.00	0.00	0.00
13,900.00	90.70	269.65	9,535.31	-163.38	-4,065.91	4,066.83	0.00	0.00	0.00
14,000.00	90.70	269.65	9,534.09	-163.99	-4,165.90	4,166.83	0.00	0.00	0.00
14,100.00	90.70	269.65	9,532.87	-164.59	-4,265.89	4,266.82	0.00	0.00	0.00
14,204.98	90.70	269.65	9,531.59	-165.23	-4,370.86	4,371.79	0.00	0.00	0.00
[Maximus#15H]LTP/BHL									

US State Plane 1927 (Exact solution)
NAD 1927 (NADCON CONUS)
Clarke 1866
New Mexico East 3001
Mean Sea Level



Target Line: 9585' TVD @ 0° VS: 90.7° INC



36" x 48"

RKB Elevation: Well @ 3061.50 usf (GL: 3035' + KB: 26.5' (H&P423))

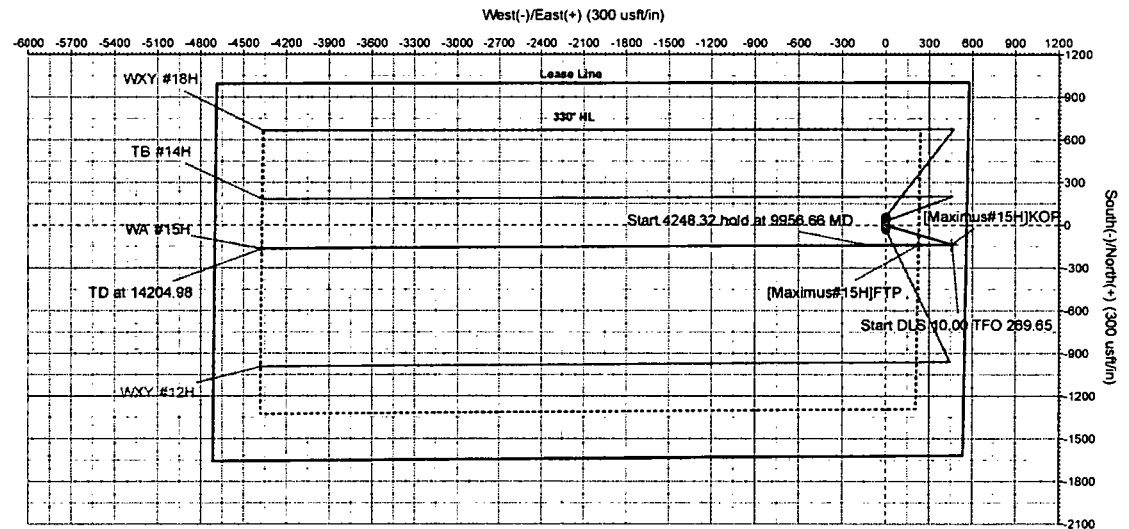
+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Spot
0.00	0.00	487067.57	566163.48	32.338883	-104.119108	

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	Vsect
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	1800.00	0.00	0.00	1800.00	0.00	0.00	0.00	0.00
3	2300.00	10.00	106.57	2297.47	-12.41	41.71	2.00	-41.64
4	4544.55	10.00	106.57	4507.92	-123.59	415.29	0.00	-414.52
5	5044.55	0.00	0.00	5005.38	-136.00	457.00	2.00	-456.16
6	9049.67	0.00	0.00	9010.50	-136.00	457.00	0.00	-456.16
7	9956.66	90.70	269.65	9583.42	-139.51	-122.94	10.00	123.79
8	14204.98	90.70	269.65	9531.59	-165.23	-4370.86	0.00	4371.79

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting
[Maximus#15H]FTP	0.00	-137.52	227.40	486930.05	566390.88
[Maximus#15H]KOP	9010.50	-136.00	457.00	486931.57	566620.48
[Maximus#15H]LTP/BHL	9531.59	-165.23	-4370.86	486902.34	561792.62



Azimuths to Grid North
True North: -0.12°
Magnetic North: 7.17°

Magnetic Field
Strength: 48020 Gauss
Dip Angle: 60.10°
Date: 5/16/2016
Model: HDGM

Azimuth Corrections

Total Magnetic Corr. (M to G): 7.17°

Declination (M to T): 7.28° East