

WESTERN DIVISION

PBNM

Norwalk_Section 34

Thistle Unit 137H

Wellbore #1

Plan: Design #1

Standard Planning Report

05 October, 2016

HOBBS OCD
DEC 05 2016
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Devon Energy
Planning Report

Database:	EDM r5000 US Production	Local Co-ordinate Reference:	Well Thistle Unit 137H
Company:	WESTERN DIVISION	TVD Reference:	KB @ 3666.70ft
Project:	PBNM	MD Reference:	KB @ 3666.70ft
Site:	Norwalk_Section 34	North Reference:	Grid
Well:	Thistle Unit 137H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Project	PBNM		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone		

Site		Norwalk_Section 34			
Site Position:		Northing:	0.00 usft	Latitude:	30.988446
From:	Map	Easting:	0.00 usft	Longitude:	-106.060830
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	-0.89 °

Well	Thistle Unit 137H					
Well Position	+N/-S	457,182.50 ft	Northing:	457,181.59 usft	Latitude:	32.254488
	+E/-W	781,036.79 ft	Easting:	781,035.23 usft	Longitude:	-103.557946
Position Uncertainty		0.00 ft	Wellhead Elevation:	3,665.71 ft	Ground Level:	3,641.70 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	10/5/2016	6.93	60.08	48,103

Design	Design #1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	4.56

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	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	

Devon Energy

Planning Report

Database: EDM r5000 US Production
 Company: WESTERN DIVISION
 Project: PBNM
 Site: Norwalk_Section 34
 Well: Thistle Unit 137H
 Wellbore: Wellbore #1
 Design: Design #1

Local Co-ordinate Reference: Well Thistle Unit 137H
 TVD Reference: KB @ 3666.70ft
 MD Reference: KB @ 3666.70ft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	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
1,300.00	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
2,700.00	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
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
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	0.75	90.00	3,300.00	0.00	0.65	0.05	0.75	0.75	0.00
3,400.00	1.50	90.00	3,399.98	0.00	2.62	0.21	0.75	0.75	0.00
3,500.00	2.25	90.00	3,499.92	0.00	5.89	0.47	0.75	0.75	0.00
3,600.00	3.00	90.00	3,599.82	0.00	10.47	0.83	0.75	0.75	0.00
3,700.00	3.75	90.00	3,699.64	0.00	16.36	1.30	0.75	0.75	0.00
3,800.00	4.50	90.00	3,799.38	0.00	23.55	1.87	0.75	0.75	0.00
3,900.00	5.25	90.00	3,899.02	0.00	32.05	2.55	0.75	0.75	0.00
4,000.00	6.00	90.00	3,998.54	0.00	41.85	3.33	0.75	0.75	0.00
4,100.00	6.75	90.00	4,097.92	0.00	52.95	4.21	0.75	0.75	0.00
4,133.34	7.00	90.00	4,131.02	0.00	56.94	4.53	0.75	0.75	0.00
4,200.00	7.00	90.00	4,197.18	0.00	65.07	5.17	0.00	0.00	0.00
4,300.00	7.00	90.00	4,296.44	0.00	77.25	6.14	0.00	0.00	0.00
4,400.00	7.00	90.00	4,395.69	0.00	89.44	7.11	0.00	0.00	0.00
4,500.00	7.00	90.00	4,494.95	0.00	101.63	8.08	0.00	0.00	0.00
4,600.00	7.00	90.00	4,594.20	0.00	113.82	9.05	0.00	0.00	0.00
4,700.00	7.00	90.00	4,693.46	0.00	126.00	10.02	0.00	0.00	0.00
4,800.00	7.00	90.00	4,792.71	0.00	138.19	10.99	0.00	0.00	0.00
4,900.00	7.00	90.00	4,891.97	0.00	150.38	11.96	0.00	0.00	0.00
5,000.00	7.00	90.00	4,991.22	0.00	162.56	12.93	0.00	0.00	0.00
5,100.00	7.00	90.00	5,090.47	0.00	174.75	13.90	0.00	0.00	0.00
5,200.00	7.00	90.00	5,189.73	0.00	186.94	14.87	0.00	0.00	0.00

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Site:	Norwalk_Section 34	North Reference:	Grid
Well:	Thistle Unit 137H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Design #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,300.00	7.00	90.00	5,288.98	0.00	199.12	15.84	0.00	0.00	0.00
5,400.00	7.00	90.00	5,388.24	0.00	211.31	16.80	0.00	0.00	0.00
5,500.00	7.00	90.00	5,487.49	0.00	223.50	17.77	0.00	0.00	0.00
5,600.00	7.00	90.00	5,586.75	0.00	235.68	18.74	0.00	0.00	0.00
5,700.00	7.00	90.00	5,686.00	0.00	247.87	19.71	0.00	0.00	0.00
5,800.00	7.00	90.00	5,785.26	0.00	260.06	20.68	0.00	0.00	0.00
5,900.00	7.00	90.00	5,884.51	0.00	272.25	21.65	0.00	0.00	0.00
6,000.00	7.00	90.00	5,983.77	0.00	284.43	22.62	0.00	0.00	0.00
6,100.00	7.00	90.00	6,083.02	0.00	296.62	23.59	0.00	0.00	0.00
6,200.00	7.00	90.00	6,182.28	0.00	308.81	24.56	0.00	0.00	0.00
6,300.00	7.00	90.00	6,281.53	0.00	320.99	25.53	0.00	0.00	0.00
6,400.00	7.00	90.00	6,380.78	0.00	333.18	26.50	0.00	0.00	0.00
6,500.00	7.00	90.00	6,480.04	0.00	345.37	27.47	0.00	0.00	0.00
6,600.00	7.00	90.00	6,579.29	0.00	357.55	28.43	0.00	0.00	0.00
6,700.00	7.00	90.00	6,678.55	0.00	369.74	29.40	0.00	0.00	0.00
6,800.00	7.00	90.00	6,777.80	0.00	381.93	30.37	0.00	0.00	0.00
6,900.00	7.00	90.00	6,877.06	0.00	394.11	31.34	0.00	0.00	0.00
7,000.00	7.00	90.00	6,976.31	0.00	406.30	32.31	0.00	0.00	0.00
7,100.00	7.00	90.00	7,075.57	0.00	418.49	33.28	0.00	0.00	0.00
7,200.00	7.00	90.00	7,174.82	0.00	430.68	34.25	0.00	0.00	0.00
7,300.00	7.00	90.00	7,274.08	0.00	442.86	35.22	0.00	0.00	0.00
7,400.00	7.00	90.00	7,373.33	0.00	455.05	36.19	0.00	0.00	0.00
7,500.00	7.00	90.00	7,472.59	0.00	467.24	37.16	0.00	0.00	0.00
7,600.00	7.00	90.00	7,571.84	0.00	479.42	38.13	0.00	0.00	0.00
7,700.00	7.00	90.00	7,671.09	0.00	491.61	39.10	0.00	0.00	0.00
7,800.00	7.00	90.00	7,770.35	0.00	503.80	40.06	0.00	0.00	0.00
7,900.00	7.00	90.00	7,869.60	0.00	515.98	41.03	0.00	0.00	0.00
8,000.00	7.00	90.00	7,968.86	0.00	528.17	42.00	0.00	0.00	0.00
8,100.00	7.00	90.00	8,068.11	0.00	540.36	42.97	0.00	0.00	0.00
8,200.00	7.00	90.00	8,167.37	0.00	552.55	43.94	0.00	0.00	0.00
8,300.00	7.00	90.00	8,266.62	0.00	564.73	44.91	0.00	0.00	0.00
8,400.00	7.00	90.00	8,365.88	0.00	576.92	45.88	0.00	0.00	0.00
8,500.00	7.00	90.00	8,465.13	0.00	589.11	46.85	0.00	0.00	0.00
8,600.00	7.00	90.00	8,564.39	0.00	601.29	47.82	0.00	0.00	0.00
8,633.34	7.00	90.00	8,597.47	0.00	605.36	48.14	0.00	0.00	0.00
8,700.00	6.50	90.00	8,663.68	0.00	613.19	48.76	0.75	-0.75	0.00
8,800.00	5.75	90.00	8,763.10	0.00	623.86	49.61	0.75	-0.75	0.00
8,900.00	5.00	90.00	8,862.66	0.00	633.23	50.36	0.75	-0.75	0.00
9,000.00	4.25	90.00	8,962.34	0.00	641.29	51.00	0.75	-0.75	0.00
9,100.00	3.50	90.00	9,062.11	0.00	648.05	51.54	0.75	-0.75	0.00
9,200.00	2.75	90.00	9,161.96	0.00	653.50	51.97	0.75	-0.75	0.00
9,300.00	2.00	90.00	9,261.87	0.00	657.64	52.30	0.75	-0.75	0.00
9,400.00	1.25	90.00	9,361.83	0.00	660.48	52.53	0.75	-0.75	0.00
9,500.00	0.50	90.00	9,461.82	0.00	662.01	52.65	0.75	-0.75	0.00
9,566.67	0.00	0.00	9,528.49	0.00	662.30	52.67	0.75	-0.75	0.00
9,600.00	0.00	0.00	9,561.82	0.00	662.30	52.67	0.00	0.00	0.00
9,700.00	0.00	0.00	9,661.82	0.00	662.30	52.67	0.00	0.00	0.00
9,800.00	0.00	0.00	9,761.82	0.00	662.30	52.67	0.00	0.00	0.00
9,900.00	0.00	0.00	9,861.82	0.00	662.30	52.67	0.00	0.00	0.00
10,000.00	0.00	0.00	9,961.82	0.00	662.30	52.67	0.00	0.00	0.00
10,100.00	0.00	0.00	10,061.82	0.00	662.30	52.67	0.00	0.00	0.00
10,128.24	0.00	0.00	10,090.06	0.00	662.30	52.67	0.00	0.00	0.00
10,150.00	2.18	359.64	10,111.81	0.41	662.30	53.08	10.00	10.00	0.00
10,200.00	7.18	359.64	10,161.63	4.49	662.27	57.14	10.00	10.00	0.00

Devon Energy
Planning Report

Database: EDM r5000 US Production
Company: WESTERN DIVISION
Project: PBNM
Site: Norwalk_Section 34
Well: Thistle Unit 137H
Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference: Well Thistle Unit 137H
TVD Reference: KB @ 3666.70ft
MD Reference: KB @ 3666.70ft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,250.00	12.18	359.64	10,210.90	12.89	662.22	65.51	10.00	10.00	0.00
10,300.00	17.18	359.64	10,259.26	25.55	662.14	78.13	10.00	10.00	0.00
10,350.00	22.18	359.64	10,306.32	42.38	662.04	94.90	10.00	10.00	0.00
10,400.00	27.18	359.64	10,351.74	63.25	661.91	115.69	10.00	10.00	0.00
10,450.00	32.18	359.64	10,395.17	87.99	661.75	140.34	10.00	10.00	0.00
10,500.00	37.18	359.64	10,436.28	116.43	661.58	168.68	10.00	10.00	0.00
10,550.00	42.18	359.64	10,474.75	148.34	661.38	200.47	10.00	10.00	0.00
10,600.00	47.18	359.64	10,510.29	183.49	661.16	235.48	10.00	10.00	0.00
10,650.00	52.18	359.64	10,542.64	221.59	660.93	273.45	10.00	10.00	0.00
10,700.00	57.18	359.64	10,571.54	262.37	660.67	314.08	10.00	10.00	0.00
10,750.00	62.18	359.64	10,596.77	305.52	660.41	357.07	10.00	10.00	0.00
10,800.00	67.18	359.64	10,618.15	350.70	660.13	402.09	10.00	10.00	0.00
10,850.00	72.18	359.64	10,635.52	397.57	659.84	448.78	10.00	10.00	0.00
10,900.00	77.18	359.64	10,648.72	445.78	659.54	496.81	10.00	10.00	0.00
10,950.00	82.18	359.64	10,657.68	494.95	659.23	545.81	10.00	10.00	0.00
11,000.00	87.18	359.64	10,662.32	544.72	658.92	595.39	10.00	10.00	0.00
11,050.00	92.18	359.64	10,662.60	594.70	658.61	645.19	10.00	10.00	0.00
11,075.86	94.76	359.64	10,661.04	620.51	658.45	670.91	10.00	10.00	0.00
11,100.00	94.76	359.64	10,659.04	644.57	658.30	694.88	0.00	0.00	0.00
11,200.00	94.76	359.64	10,650.73	744.22	657.69	794.17	0.00	0.00	0.00
11,300.00	94.76	359.64	10,642.43	843.87	657.07	893.45	0.00	0.00	0.00
11,400.00	94.76	359.64	10,634.13	943.53	656.45	992.74	0.00	0.00	0.00
11,500.00	94.76	359.64	10,625.83	1,043.18	655.83	1,092.03	0.00	0.00	0.00
11,600.00	94.76	359.64	10,617.53	1,142.83	655.22	1,191.32	0.00	0.00	0.00
11,700.00	94.76	359.64	10,609.23	1,242.48	654.60	1,290.61	0.00	0.00	0.00
11,800.00	94.76	359.64	10,600.92	1,342.14	653.98	1,389.89	0.00	0.00	0.00
11,900.00	94.76	359.64	10,592.62	1,441.79	653.36	1,489.18	0.00	0.00	0.00
12,000.00	94.76	359.64	10,584.32	1,541.44	652.75	1,588.47	0.00	0.00	0.00
12,100.00	94.76	359.64	10,576.02	1,641.10	652.13	1,687.76	0.00	0.00	0.00
12,200.00	94.76	359.64	10,567.72	1,740.75	651.51	1,787.05	0.00	0.00	0.00
12,300.00	94.76	359.64	10,559.42	1,840.40	650.90	1,886.34	0.00	0.00	0.00
12,400.00	94.76	359.64	10,551.12	1,940.05	650.28	1,985.62	0.00	0.00	0.00
12,500.00	94.76	359.64	10,542.81	2,039.71	649.66	2,084.91	0.00	0.00	0.00
12,600.00	94.76	359.64	10,534.51	2,139.36	649.04	2,184.20	0.00	0.00	0.00
12,700.00	94.76	359.64	10,526.21	2,239.01	648.43	2,283.49	0.00	0.00	0.00
12,800.00	94.76	359.64	10,517.91	2,338.67	647.81	2,382.78	0.00	0.00	0.00
12,900.00	94.76	359.64	10,509.61	2,438.32	647.19	2,482.06	0.00	0.00	0.00
13,000.00	94.76	359.64	10,501.31	2,537.97	646.57	2,581.35	0.00	0.00	0.00
13,100.00	94.76	359.64	10,493.00	2,637.62	645.96	2,680.64	0.00	0.00	0.00
13,200.00	94.76	359.64	10,484.70	2,737.28	645.34	2,779.93	0.00	0.00	0.00
13,300.00	94.76	359.64	10,476.40	2,836.93	644.72	2,879.22	0.00	0.00	0.00
13,400.00	94.76	359.64	10,468.10	2,936.58	644.10	2,978.51	0.00	0.00	0.00
13,500.00	94.76	359.64	10,459.80	3,036.24	643.49	3,077.79	0.00	0.00	0.00
13,600.00	94.76	359.64	10,451.50	3,135.89	642.87	3,177.08	0.00	0.00	0.00
13,700.00	94.76	359.64	10,443.19	3,235.54	642.25	3,276.37	0.00	0.00	0.00
13,800.00	94.76	359.64	10,434.89	3,335.19	641.63	3,375.66	0.00	0.00	0.00
13,900.00	94.76	359.64	10,426.59	3,434.85	641.02	3,474.95	0.00	0.00	0.00
14,000.00	94.76	359.64	10,418.29	3,534.50	640.40	3,574.23	0.00	0.00	0.00
14,100.00	94.76	359.64	10,409.99	3,634.15	639.78	3,673.52	0.00	0.00	0.00
14,200.00	94.76	359.64	10,401.69	3,733.81	639.16	3,772.81	0.00	0.00	0.00
14,300.00	94.76	359.64	10,393.39	3,833.46	638.55	3,872.10	0.00	0.00	0.00
14,400.00	94.76	359.64	10,385.08	3,933.11	637.93	3,971.39	0.00	0.00	0.00
14,500.00	94.76	359.64	10,376.78	4,032.77	637.31	4,070.68	0.00	0.00	0.00
14,600.00	94.76	359.64	10,368.48	4,132.42	636.69	4,169.96	0.00	0.00	0.00

Devon Energy
Planning Report

Database: EDM r5000 US Production
Company: WESTERN DIVISION
Project: PBNM
Site: Norwalk_Section 34
Well: Thistle Unit 137H
Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference:
TVD Reference:
MD Reference:
North Reference:
Survey Calculation Method:

Well Thistle Unit 137H
KB @ 3666.70ft
KB @ 3666.70ft
Grid
Minimum Curvature

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
14,700.00	94.76	359.64	10,360.18	4,232.07	636.08	4,269.25	0.00	0.00	0.00
14,800.00	94.76	359.64	10,351.88	4,331.72	635.46	4,368.54	0.00	0.00	0.00
14,900.00	94.76	359.64	10,343.58	4,431.38	634.84	4,467.83	0.00	0.00	0.00
15,000.00	94.76	359.64	10,335.27	4,531.03	634.22	4,567.12	0.00	0.00	0.00
15,100.00	94.76	359.64	10,326.97	4,630.68	633.61	4,666.40	0.00	0.00	0.00
15,200.00	94.76	359.64	10,318.67	4,730.34	632.99	4,765.69	0.00	0.00	0.00
15,300.00	94.76	359.64	10,310.37	4,829.99	632.37	4,864.98	0.00	0.00	0.00
15,400.00	94.76	359.64	10,302.07	4,929.64	631.75	4,964.27	0.00	0.00	0.00
15,500.00	94.76	359.64	10,293.77	5,029.29	631.14	5,063.56	0.00	0.00	0.00
15,600.00	94.76	359.64	10,285.47	5,128.95	630.52	5,162.85	0.00	0.00	0.00
15,700.00	94.76	359.64	10,277.16	5,228.60	629.90	5,262.13	0.00	0.00	0.00
15,800.00	94.76	359.64	10,268.86	5,328.25	629.28	5,361.42	0.00	0.00	0.00
15,900.00	94.76	359.64	10,260.56	5,427.91	628.67	5,460.71	0.00	0.00	0.00
16,000.00	94.76	359.64	10,252.26	5,527.56	628.05	5,560.00	0.00	0.00	0.00
16,100.00	94.76	359.64	10,243.96	5,627.21	627.43	5,659.29	0.00	0.00	0.00
16,200.00	94.76	359.64	10,235.66	5,726.86	626.81	5,758.57	0.00	0.00	0.00
16,300.00	94.76	359.64	10,227.35	5,826.52	626.20	5,857.86	0.00	0.00	0.00
16,400.00	94.76	359.64	10,219.05	5,926.17	625.58	5,957.15	0.00	0.00	0.00
16,500.00	94.76	359.64	10,210.75	6,025.82	624.96	6,056.44	0.00	0.00	0.00
16,600.00	94.76	359.64	10,202.45	6,125.48	624.34	6,155.73	0.00	0.00	0.00
16,700.00	94.76	359.64	10,194.15	6,225.13	623.73	6,255.02	0.00	0.00	0.00
16,800.00	94.76	359.64	10,185.85	6,324.78	623.11	6,354.30	0.00	0.00	0.00
16,900.00	94.76	359.64	10,177.54	6,424.44	622.49	6,453.59	0.00	0.00	0.00
17,000.00	94.76	359.64	10,169.24	6,524.09	621.87	6,552.88	0.00	0.00	0.00
17,100.00	94.76	359.64	10,160.94	6,623.74	621.26	6,652.17	0.00	0.00	0.00
17,200.00	94.76	359.64	10,152.64	6,723.39	620.64	6,751.46	0.00	0.00	0.00
17,300.00	94.76	359.64	10,144.34	6,823.05	620.02	6,850.74	0.00	0.00	0.00
17,400.00	94.76	359.64	10,136.04	6,922.70	619.40	6,950.03	0.00	0.00	0.00
17,500.00	94.76	359.64	10,127.74	7,022.35	618.79	7,049.32	0.00	0.00	0.00
17,600.00	94.76	359.64	10,119.43	7,122.01	618.17	7,148.61	0.00	0.00	0.00
17,700.00	94.76	359.64	10,111.13	7,221.66	617.55	7,247.90	0.00	0.00	0.00
17,800.00	94.76	359.64	10,102.83	7,321.31	616.93	7,347.19	0.00	0.00	0.00
17,900.00	94.76	359.64	10,094.53	7,420.96	616.32	7,446.47	0.00	0.00	0.00
18,000.00	94.76	359.64	10,086.23	7,520.62	615.70	7,545.76	0.00	0.00	0.00
18,100.00	94.76	359.64	10,077.93	7,620.27	615.08	7,645.05	0.00	0.00	0.00
18,183.43	94.76	359.64	10,071.00	7,703.41	614.57	7,727.88	0.00	0.00	0.00

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Thisite Unit 137H_BHL - plan hits target center - Point	0.00	0.00	10,071.00	7,703.41	614.57	464,884.98	781,649.79	32.275650	-103.555778