

WESTERN DIVISION

PBNM

Dzurisin

Thistle Unit 114H

Wellbore #1

Plan: Plan 1

Standard Planning Report

20 June, 2016

Devon Energy

Planning Report

Database:	EDM r5000 US Production	Local Co-ordinate Reference:	Well Thistle Unit 114H
Company:	WESTERN DIVISION	TVD Reference:	1 @ 3735.20ft
Project:	PBNM	MD Reference:	1 @ 3735.20ft
Site:	Dzurisin	North Reference:	Grid
Well:	Thistle Unit 114H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 1		

Project	PBNM		
Map System:	Flat Earth	System Datum:	Mean Sea Level
Geo Datum:	WGS 1984		
Map Zone:	No Conversions		

Site		Dzurisin			
Site Position:		Northing:	429,922.27 usft	Latitude:	0.000000
From:	Map	Easting:	725,391.41 usft	Longitude:	0.000000
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "	Grid Convergence:	

Well	Thistle Unit 114H					
Well Position	+N/-S	42,579.22 ft	Northing:	472,501.40 usft	Latitude:	0.000000
	+E/-W	53,941.51 ft	Easting:	779,332.81 usft	Longitude:	0.000000
Position Uncertainty		0.00 ft	Wellhead Elevation:	0.00 ft	Ground Level:	3,711.70 ft

Wellbore		Wellbore #1			
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	User Defined	6/20/2016	0.00	0.00	0

Design	Plan 1			
Audit Notes:				
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.00	0.00	0.00	175.97

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	
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,500.00	5.00	90.00	3,499.37	0.00	21.80	1.00	1.00	0.00	90.00	
8,950.00	5.00	90.00	8,928.63	0.00	496.80	0.00	0.00	0.00	0.00	
9,274.89	2.10	90.00	9,252.86	0.00	516.92	0.89	-0.89	0.00	180.00	
10,022.56	89.72	180.00	9,730.00	-475.13	534.33	12.00	11.72	12.04	90.01	
10,131.27	89.72	179.99	9,730.53	-583.84	534.34	0.01	0.00	-0.01	-96.49	
17,044.79	89.72	179.99	9,764.47	-7,497.28	535.64	0.00	0.00	0.00	0.00	
17,153.50	89.72	180.00	9,765.00	-7,605.99	535.65	0.01	0.00	0.01	83.51	Thistle Unit 114H BHL

Devon Energy

Planning Report

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Company:	WESTERN DIVISION	TVD Reference:	1 @ 3735.20ft
Project:	PBNM	MD Reference:	1 @ 3735.20ft
Site:	Dzurisin	North Reference:	Grid
Well:	Thistle Unit 114H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 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)
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	1.00	90.00	3,099.99	0.00	0.87	0.06	1.00	1.00	0.00
3,200.00	2.00	90.00	3,199.96	0.00	3.49	0.25	1.00	1.00	0.00
3,300.00	3.00	90.00	3,299.86	0.00	7.85	0.55	1.00	1.00	0.00
3,400.00	4.00	90.00	3,399.68	0.00	13.96	0.98	1.00	1.00	0.00
3,500.00	5.00	90.00	3,499.37	0.00	21.80	1.53	1.00	1.00	0.00
3,600.00	5.00	90.00	3,598.99	0.00	30.52	2.14	0.00	0.00	0.00
3,700.00	5.00	90.00	3,698.60	0.00	39.23	2.76	0.00	0.00	0.00
3,800.00	5.00	90.00	3,798.22	0.00	47.95	3.37	0.00	0.00	0.00
3,900.00	5.00	90.00	3,897.84	0.00	56.67	3.98	0.00	0.00	0.00
4,000.00	5.00	90.00	3,997.46	0.00	65.38	4.59	0.00	0.00	0.00
4,100.00	5.00	90.00	4,097.08	0.00	74.10	5.21	0.00	0.00	0.00
4,200.00	5.00	90.00	4,196.70	0.00	82.81	5.82	0.00	0.00	0.00
4,300.00	5.00	90.00	4,296.32	0.00	91.53	6.43	0.00	0.00	0.00
4,400.00	5.00	90.00	4,395.94	0.00	100.24	7.04	0.00	0.00	0.00
4,500.00	5.00	90.00	4,495.56	0.00	108.96	7.65	0.00	0.00	0.00
4,600.00	5.00	90.00	4,595.18	0.00	117.67	8.27	0.00	0.00	0.00
4,700.00	5.00	90.00	4,694.80	0.00	126.39	8.88	0.00	0.00	0.00
4,800.00	5.00	90.00	4,794.42	0.00	135.11	9.49	0.00	0.00	0.00
4,900.00	5.00	90.00	4,894.04	0.00	143.82	10.10	0.00	0.00	0.00
5,000.00	5.00	90.00	4,993.66	0.00	152.54	10.72	0.00	0.00	0.00
5,100.00	5.00	90.00	5,093.28	0.00	161.25	11.33	0.00	0.00	0.00
5,200.00	5.00	90.00	5,192.90	0.00	169.97	11.94	0.00	0.00	0.00
5,300.00	5.00	90.00	5,292.52	0.00	178.68	12.55	0.00	0.00	0.00

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Wellbore:	Wellbore #1		
Design:	Plan 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)
5,400.00	5.00	90.00	5,392.14	0.00	187.40	13.16	0.00	0.00	0.00
5,500.00	5.00	90.00	5,491.76	0.00	196.11	13.78	0.00	0.00	0.00
5,600.00	5.00	90.00	5,591.37	0.00	204.83	14.39	0.00	0.00	0.00
5,700.00	5.00	90.00	5,690.99	0.00	213.55	15.00	0.00	0.00	0.00
5,800.00	5.00	90.00	5,790.61	0.00	222.26	15.61	0.00	0.00	0.00
5,900.00	5.00	90.00	5,890.23	0.00	230.98	16.23	0.00	0.00	0.00
6,000.00	5.00	90.00	5,989.85	0.00	239.69	16.84	0.00	0.00	0.00
6,100.00	5.00	90.00	6,089.47	0.00	248.41	17.45	0.00	0.00	0.00
6,200.00	5.00	90.00	6,189.09	0.00	257.12	18.06	0.00	0.00	0.00
6,300.00	5.00	90.00	6,288.71	0.00	265.84	18.68	0.00	0.00	0.00
6,400.00	5.00	90.00	6,388.33	0.00	274.55	19.29	0.00	0.00	0.00
6,500.00	5.00	90.00	6,487.95	0.00	283.27	19.90	0.00	0.00	0.00
6,600.00	5.00	90.00	6,587.57	0.00	291.99	20.51	0.00	0.00	0.00
6,700.00	5.00	90.00	6,687.19	0.00	300.70	21.12	0.00	0.00	0.00
6,800.00	5.00	90.00	6,786.81	0.00	309.42	21.74	0.00	0.00	0.00
6,900.00	5.00	90.00	6,886.43	0.00	318.13	22.35	0.00	0.00	0.00
7,000.00	5.00	90.00	6,986.05	0.00	326.85	22.96	0.00	0.00	0.00
7,100.00	5.00	90.00	7,085.67	0.00	335.56	23.57	0.00	0.00	0.00
7,200.00	5.00	90.00	7,185.29	0.00	344.28	24.19	0.00	0.00	0.00
7,300.00	5.00	90.00	7,284.91	0.00	352.99	24.80	0.00	0.00	0.00
7,400.00	5.00	90.00	7,384.53	0.00	361.71	25.41	0.00	0.00	0.00
7,500.00	5.00	90.00	7,484.14	0.00	370.43	26.02	0.00	0.00	0.00
7,600.00	5.00	90.00	7,583.76	0.00	379.14	26.64	0.00	0.00	0.00
7,700.00	5.00	90.00	7,683.38	0.00	387.86	27.25	0.00	0.00	0.00
7,800.00	5.00	90.00	7,783.00	0.00	396.57	27.86	0.00	0.00	0.00
7,900.00	5.00	90.00	7,882.62	0.00	405.29	28.47	0.00	0.00	0.00
8,000.00	5.00	90.00	7,982.24	0.00	414.00	29.08	0.00	0.00	0.00
8,100.00	5.00	90.00	8,081.86	0.00	422.72	29.70	0.00	0.00	0.00
8,200.00	5.00	90.00	8,181.48	0.00	431.43	30.31	0.00	0.00	0.00
8,300.00	5.00	90.00	8,281.10	0.00	440.15	30.92	0.00	0.00	0.00
8,400.00	5.00	90.00	8,380.72	0.00	448.87	31.53	0.00	0.00	0.00
8,500.00	5.00	90.00	8,480.34	0.00	457.58	32.15	0.00	0.00	0.00
8,600.00	5.00	90.00	8,579.96	0.00	466.30	32.76	0.00	0.00	0.00
8,700.00	5.00	90.00	8,679.58	0.00	475.01	33.37	0.00	0.00	0.00
8,800.00	5.00	90.00	8,779.20	0.00	483.73	33.98	0.00	0.00	0.00
8,900.00	5.00	90.00	8,878.82	0.00	492.44	34.59	0.00	0.00	0.00
8,950.00	5.00	90.00	8,928.63	0.00	496.80	34.90	0.00	0.00	0.00
9,000.00	4.55	90.00	8,978.45	0.00	500.97	35.19	0.89	-0.89	0.00
9,100.00	3.66	90.00	9,078.20	0.00	508.13	35.70	0.89	-0.89	0.00
9,200.00	2.77	90.00	9,178.04	0.00	513.74	36.09	0.89	-0.89	0.00
9,274.89	2.10	90.00	9,252.86	0.00	516.92	36.31	0.89	-0.89	0.00
9,300.00	3.67	145.16	9,277.94	-0.66	517.84	37.04	12.00	6.26	219.69
9,325.00	6.37	160.83	9,302.84	-2.63	518.75	39.06	12.00	10.78	62.66
9,350.00	9.25	167.00	9,327.61	-5.90	519.66	42.39	12.00	11.54	24.70
9,375.00	12.19	170.24	9,352.17	-10.46	520.56	47.00	12.00	11.76	12.95
9,400.00	15.16	172.23	9,376.46	-16.30	521.45	52.89	12.00	11.85	7.96
9,425.00	18.13	173.58	9,400.41	-23.40	522.32	60.04	12.00	11.90	5.40
9,450.00	21.11	174.56	9,423.95	-31.75	523.18	68.43	12.00	11.93	3.92
9,475.00	24.10	175.31	9,447.03	-41.32	524.03	78.04	12.00	11.95	2.99
9,500.00	27.09	175.90	9,469.58	-52.09	524.85	88.83	12.00	11.96	2.36
9,525.00	30.08	176.38	9,491.53	-64.02	525.66	100.79	12.00	11.96	1.93
9,550.00	33.07	176.78	9,512.82	-77.09	526.44	113.88	12.00	11.97	1.61
9,575.00	36.07	177.12	9,533.41	-91.25	527.19	128.06	12.00	11.97	1.37
9,600.00	39.06	177.42	9,553.22	-106.47	527.91	143.30	12.00	11.98	1.18

Devon Energy

Planning Report

Database: EDM r5000 US Production
Company: WESTERN DIVISION
Project: PBNM
Site: Dzurisin
Well: Thistle Unit 114H
Wellbore: Wellbore #1
Design: Plan 1

Local Co-ordinate Reference: Well Thistle Unit 114H
TVD Reference: 1 @ 3735.20ft
MD Reference: 1 @ 3735.20ft
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)
9,625.00	42.06	177.68	9,572.21	-122.71	528.60	159.54	12.00	11.98	1.04
9,650.00	45.05	177.91	9,590.33	-139.92	529.27	176.76	12.00	11.98	0.93
9,675.00	48.05	178.12	9,607.52	-158.06	529.89	194.89	12.00	11.98	0.84
9,700.00	51.04	178.31	9,623.74	-177.07	530.48	213.90	12.00	11.99	0.76
9,725.00	54.04	178.49	9,638.94	-196.91	531.04	233.73	12.00	11.99	0.70
9,750.00	57.04	178.65	9,653.09	-217.51	531.55	254.32	12.00	11.99	0.65
9,775.00	60.03	178.80	9,666.13	-238.83	532.03	275.61	12.00	11.99	0.60
9,800.00	63.03	178.94	9,678.05	-260.80	532.46	297.56	12.00	11.99	0.57
9,825.00	66.03	179.08	9,688.80	-283.36	532.85	320.10	12.00	11.99	0.54
9,850.00	69.03	179.20	9,698.35	-306.46	533.20	343.16	12.00	11.99	0.52
9,875.00	72.03	179.33	9,706.69	-330.02	533.50	366.69	12.00	11.99	0.49
9,900.00	75.02	179.45	9,713.78	-353.99	533.75	390.62	12.00	11.99	0.48
9,925.00	78.02	179.56	9,719.60	-378.30	533.96	414.88	12.00	11.99	0.47
9,950.00	81.02	179.68	9,724.15	-402.88	534.13	439.41	12.00	11.99	0.45
9,975.00	84.02	179.79	9,727.40	-427.67	534.24	464.14	12.00	11.99	0.45
10,000.00	87.01	179.90	9,729.36	-452.59	534.31	489.00	12.00	11.99	0.44
10,022.56	89.72	180.00	9,730.00	-475.13	534.33	511.50	12.00	11.99	0.44
10,100.00	89.72	179.99	9,730.38	-552.57	534.33	588.75	0.01	0.00	-0.01
10,131.27	89.72	179.99	9,730.53	-583.84	534.34	619.94	0.01	0.00	-0.01
10,200.00	89.72	179.99	9,730.87	-652.57	534.35	688.50	0.00	0.00	0.00
10,300.00	89.72	179.99	9,731.36	-752.57	534.37	788.25	0.00	0.00	0.00
10,400.00	89.72	179.99	9,731.85	-852.57	534.39	888.00	0.00	0.00	0.00
10,500.00	89.72	179.99	9,732.34	-952.57	534.41	987.76	0.00	0.00	0.00
10,600.00	89.72	179.99	9,732.83	-1,052.57	534.43	1,087.51	0.00	0.00	0.00
10,700.00	89.72	179.99	9,733.33	-1,152.57	534.44	1,187.26	0.00	0.00	0.00
10,800.00	89.72	179.99	9,733.82	-1,252.56	534.46	1,287.02	0.00	0.00	0.00
10,900.00	89.72	179.99	9,734.31	-1,352.56	534.48	1,386.77	0.00	0.00	0.00
11,000.00	89.72	179.99	9,734.80	-1,452.56	534.50	1,486.52	0.00	0.00	0.00
11,100.00	89.72	179.99	9,735.29	-1,552.56	534.52	1,586.28	0.00	0.00	0.00
11,200.00	89.72	179.99	9,735.78	-1,652.56	534.54	1,686.03	0.00	0.00	0.00
11,300.00	89.72	179.99	9,736.27	-1,752.56	534.56	1,785.78	0.00	0.00	0.00
11,400.00	89.72	179.99	9,736.76	-1,852.56	534.58	1,885.54	0.00	0.00	0.00
11,500.00	89.72	179.99	9,737.25	-1,952.56	534.60	1,985.29	0.00	0.00	0.00
11,600.00	89.72	179.99	9,737.74	-2,052.56	534.61	2,085.04	0.00	0.00	0.00
11,700.00	89.72	179.99	9,738.23	-2,152.55	534.63	2,184.79	0.00	0.00	0.00
11,800.00	89.72	179.99	9,738.72	-2,252.55	534.65	2,284.55	0.00	0.00	0.00
11,900.00	89.72	179.99	9,739.22	-2,352.55	534.67	2,384.30	0.00	0.00	0.00
12,000.00	89.72	179.99	9,739.71	-2,452.55	534.69	2,484.05	0.00	0.00	0.00
12,100.00	89.72	179.99	9,740.20	-2,552.55	534.71	2,583.81	0.00	0.00	0.00
12,200.00	89.72	179.99	9,740.69	-2,652.55	534.73	2,683.56	0.00	0.00	0.00
12,300.00	89.72	179.99	9,741.18	-2,752.55	534.75	2,783.31	0.00	0.00	0.00
12,400.00	89.72	179.99	9,741.67	-2,852.55	534.77	2,883.07	0.00	0.00	0.00
12,500.00	89.72	179.99	9,742.16	-2,952.54	534.78	2,982.82	0.00	0.00	0.00
12,600.00	89.72	179.99	9,742.65	-3,052.54	534.80	3,082.57	0.00	0.00	0.00
12,700.00	89.72	179.99	9,743.14	-3,152.54	534.82	3,182.32	0.00	0.00	0.00
12,800.00	89.72	179.99	9,743.63	-3,252.54	534.84	3,282.08	0.00	0.00	0.00
12,900.00	89.72	179.99	9,744.12	-3,352.54	534.86	3,381.83	0.00	0.00	0.00
13,000.00	89.72	179.99	9,744.61	-3,452.54	534.88	3,481.58	0.00	0.00	0.00
13,100.00	89.72	179.99	9,745.11	-3,552.54	534.90	3,581.34	0.00	0.00	0.00
13,200.00	89.72	179.99	9,745.60	-3,652.54	534.92	3,681.09	0.00	0.00	0.00
13,300.00	89.72	179.99	9,746.09	-3,752.53	534.93	3,780.84	0.00	0.00	0.00
13,400.00	89.72	179.99	9,746.58	-3,852.53	534.95	3,880.60	0.00	0.00	0.00
13,500.00	89.72	179.99	9,747.07	-3,952.53	534.97	3,980.35	0.00	0.00	0.00
13,600.00	89.72	179.99	9,747.56	-4,052.53	534.99	4,080.10	0.00	0.00	0.00

Devon Energy

Planning Report

Database:	EDM r5000 US Production	Local Co-ordinate Reference:	Well Thistle Unit 114H
Company:	WESTERN DIVISION	TVD Reference:	1 @ 3735.20ft
Project:	PBNM	MD Reference:	1 @ 3735.20ft
Site:	Dzurisin	North Reference:	Grid
Well:	Thistle Unit 114H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan 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)	
13,700.00	89.72	179.99	9,748.05	-4,152.53	535.01	4,179.86	0.00	0.00	0.00	
13,800.00	89.72	179.99	9,748.54	-4,252.53	535.03	4,279.61	0.00	0.00	0.00	
13,900.00	89.72	179.99	9,749.03	-4,352.53	535.05	4,379.36	0.00	0.00	0.00	
14,000.00	89.72	179.99	9,749.52	-4,452.53	535.07	4,479.11	0.00	0.00	0.00	
14,100.00	89.72	179.99	9,750.01	-4,552.53	535.09	4,578.87	0.00	0.00	0.00	
14,200.00	89.72	179.99	9,750.50	-4,652.52	535.10	4,678.62	0.00	0.00	0.00	
14,300.00	89.72	179.99	9,751.00	-4,752.52	535.12	4,778.37	0.00	0.00	0.00	
14,400.00	89.72	179.99	9,751.49	-4,852.52	535.14	4,878.13	0.00	0.00	0.00	
14,500.00	89.72	179.99	9,751.98	-4,952.52	535.16	4,977.88	0.00	0.00	0.00	
14,600.00	89.72	179.99	9,752.47	-5,052.52	535.18	5,077.63	0.00	0.00	0.00	
14,700.00	89.72	179.99	9,752.96	-5,152.52	535.20	5,177.39	0.00	0.00	0.00	
14,800.00	89.72	179.99	9,753.45	-5,252.52	535.22	5,277.14	0.00	0.00	0.00	
14,900.00	89.72	179.99	9,753.94	-5,352.52	535.24	5,376.89	0.00	0.00	0.00	
15,000.00	89.72	179.99	9,754.43	-5,452.51	535.26	5,476.65	0.00	0.00	0.00	
15,100.00	89.72	179.99	9,754.92	-5,552.51	535.27	5,576.40	0.00	0.00	0.00	
15,200.00	89.72	179.99	9,755.41	-5,652.51	535.29	5,676.15	0.00	0.00	0.00	
15,300.00	89.72	179.99	9,755.90	-5,752.51	535.31	5,775.90	0.00	0.00	0.00	
15,400.00	89.72	179.99	9,756.39	-5,852.51	535.33	5,875.66	0.00	0.00	0.00	
15,500.00	89.72	179.99	9,756.89	-5,952.51	535.35	5,975.41	0.00	0.00	0.00	
15,600.00	89.72	179.99	9,757.38	-6,052.51	535.37	6,075.16	0.00	0.00	0.00	
15,700.00	89.72	179.99	9,757.87	-6,152.51	535.39	6,174.92	0.00	0.00	0.00	
15,800.00	89.72	179.99	9,758.36	-6,252.50	535.41	6,274.67	0.00	0.00	0.00	
15,900.00	89.72	179.99	9,758.85	-6,352.50	535.43	6,374.42	0.00	0.00	0.00	
16,000.00	89.72	179.99	9,759.34	-6,452.50	535.44	6,474.18	0.00	0.00	0.00	
16,100.00	89.72	179.99	9,759.83	-6,552.50	535.46	6,573.93	0.00	0.00	0.00	
16,200.00	89.72	179.99	9,760.32	-6,652.50	535.48	6,673.68	0.00	0.00	0.00	
16,300.00	89.72	179.99	9,760.81	-6,752.50	535.50	6,773.44	0.00	0.00	0.00	
16,400.00	89.72	179.99	9,761.30	-6,852.50	535.52	6,873.19	0.00	0.00	0.00	
16,500.00	89.72	179.99	9,761.79	-6,952.50	535.54	6,972.94	0.00	0.00	0.00	
16,600.00	89.72	179.99	9,762.28	-7,052.50	535.56	7,072.69	0.00	0.00	0.00	
16,700.00	89.72	179.99	9,762.78	-7,152.49	535.58	7,172.45	0.00	0.00	0.00	
16,800.00	89.72	179.99	9,763.27	-7,252.49	535.59	7,272.20	0.00	0.00	0.00	
16,900.00	89.72	179.99	9,763.76	-7,352.49	535.61	7,371.95	0.00	0.00	0.00	
17,000.00	89.72	179.99	9,764.25	-7,452.49	535.63	7,471.71	0.00	0.00	0.00	
17,044.79	89.72	179.99	9,764.47	-7,497.28	535.64	7,516.38	0.00	0.00	0.00	
17,100.00	89.72	179.99	9,764.74	-7,552.49	535.65	7,571.46	0.01	0.00	0.01	

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
- hit/miss target									
- Shape									
Thistle Unit 114H BHL	0.00	0.00	9,765.00	-7,605.99	535.65	464,895.43	779,868.46	0.000000	0.000000
- plan misses target center by 53.50ft at 17100.00ft MD (9764.74 TVD, -7552.49 N, 535.65 E)									
- Point									