

Noble Energy Inc.- Weld County, CO (Grid North)

Well Name: **Heartland C30-79HN**

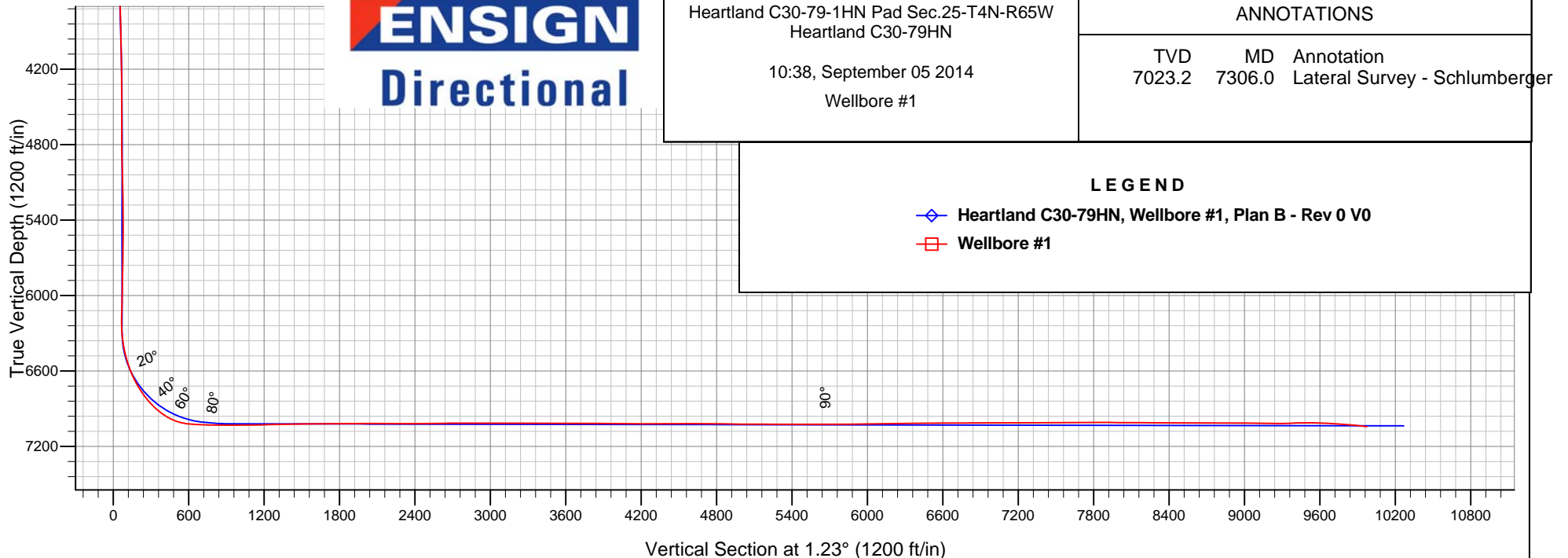
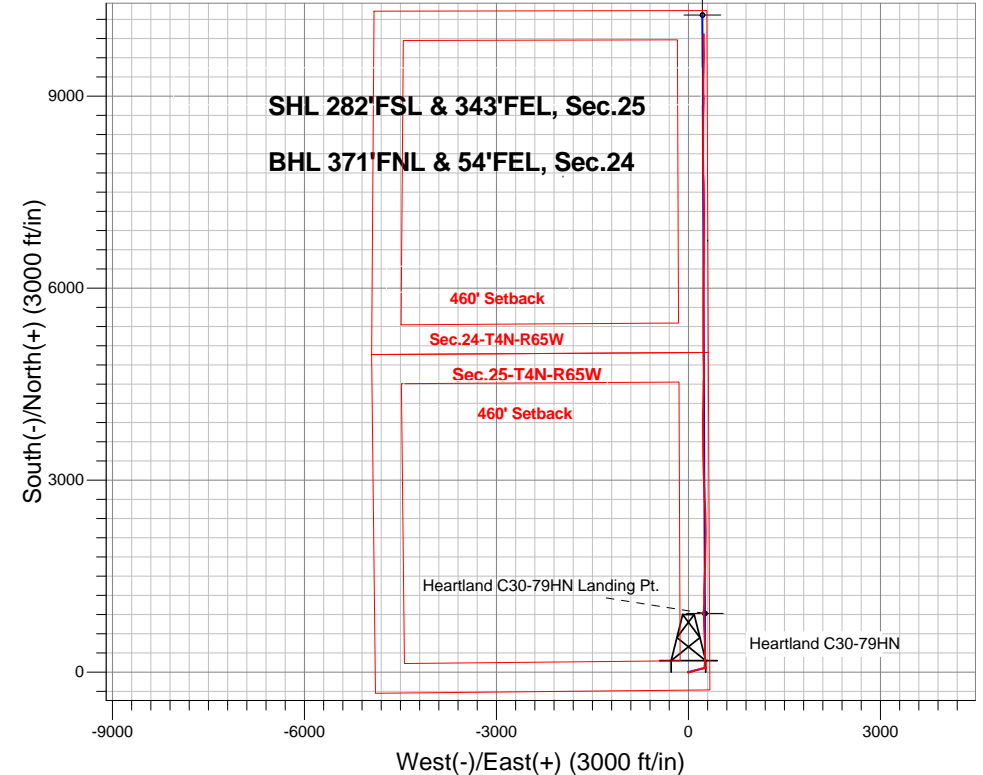
Surface Location: Heartland C30-79-1HN Pad Sec.25-T4N-R65W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

Ground Elevation: 4844.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1344918.34	3250117.53	40.276730	-104.603560	
Precision 828 RKB - 16' WELL @ 4860.0ft (Precision 828 RKB - 16')						

FINAL SURVEY

Projected Bottom Hole Location
16660'MD 7042'TVD 9970'N & 241'W of SHL
82.76 degree Incl @ .37 degree AZM





Noble Energy Inc.- Weld County, CO (Grid North)

Sec.25-T4N-R65W

Heartland C30-79-1HN Pad Sec.25-T4N-R65W

Heartland C30-79HN

Wellbore #1

Design: Wellbore #1

Final Survey

05 September, 2014

Company:	Noble Energy Inc.- Weld County, CO (Grid North)	Local Co-ordinate Reference:	Well Heartland C30-79HN
Project:	Sec.25-T4N-R65W	TVD Reference:	WELL @ 4860.0ft (Precision 828 RKB - 16')
Site:	Heartland C30-79-1HN Pad Sec.25-T4N-R65W	MD Reference:	WELL @ 4860.0ft (Precision 828 RKB - 16')
Well:	Heartland C30-79HN	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Project	Sec.25-T4N-R65W, Weld County, CO		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		Using Well Reference Point
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site		Heartland C30-79-1HN Pad Sec.25-T4N-R65W			
Site Position:		Northing:	1,344,918.58 ft	Latitude:	40.276730
From:	Lat/Long	Easting:	3,250,139.86 ft	Longitude:	-104.603480
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.58 °

Well	Heartland C30-79HN					
Well Position	+N-S	0.0 ft	Northing:	1,344,918.34 ft	Latitude:	40.276730
	+E-W	0.0 ft	Easting:	3,250,117.53 ft	Longitude:	-104.603560
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,844.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	8/7/2014	8.34	66.87	52,752

Design	Wellbore #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.0	0.0	0.0	1.23	

Survey Program	Date	9/5/2014			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
320.0	713.0	Surface (Wellbore #1)	Flexi-Shot	VES Flexi-Shot Tool	
794.0	7,249.0	Curve/Intermediate (Wellbore #1)	MWD	MWD - Standard	
7,249.0	16,660.0	Lateral (Wellbore #1)	MWD+IFR1+MS_WY	Fixed:v2:Rockies, crustal dec + 3-axis correction	

Survey								
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	
320.0	0.20	220.76	320.0	-0.4	-0.4	-0.4	0.06	
713.0	0.60	277.76	713.0	-0.7	-2.9	-0.7	0.13	
794.0	0.50	235.10	794.0	-0.8	-3.6	-0.9	0.51	
884.0	0.50	231.00	884.0	-1.3	-4.2	-1.4	0.04	
973.0	0.50	241.50	973.0	-1.7	-4.8	-1.8	0.10	
1,063.0	0.60	240.50	1,063.0	-2.1	-5.6	-2.2	0.11	
1,158.0	0.50	235.70	1,158.0	-2.6	-6.4	-2.7	0.12	
1,251.0	0.40	237.80	1,251.0	-3.0	-7.0	-3.2	0.11	
1,346.0	0.60	238.70	1,346.0	-3.4	-7.7	-3.6	0.21	

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Well:	Heartland C30-79HN	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Survey							
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
1,440.0	0.70	256.70	1,440.0	-3.8	-8.7	-4.0	0.24
1,534.0	0.60	221.90	1,534.0	-4.3	-9.5	-4.5	0.43
1,628.0	1.30	118.90	1,627.9	-5.2	-8.9	-5.4	1.65
1,723.0	1.80	90.40	1,722.9	-5.7	-6.5	-5.9	0.95
1,818.0	2.60	65.30	1,817.8	-4.9	-3.1	-4.9	1.30
1,913.0	3.70	79.10	1,912.7	-3.4	1.9	-3.3	1.40
2,008.0	5.10	82.60	2,007.4	-2.3	9.1	-2.1	1.50
2,100.0	5.90	79.00	2,099.0	-0.8	17.8	-0.4	0.95
2,190.0	7.20	79.50	2,188.4	1.1	27.9	1.7	1.45
2,280.0	6.70	74.30	2,277.7	3.5	38.5	4.4	0.89
2,370.0	6.20	70.60	2,367.2	6.6	48.1	7.6	0.72
2,460.0	6.60	75.30	2,456.6	9.5	57.7	10.7	0.73
2,550.0	6.20	70.60	2,546.1	12.4	67.3	13.9	0.73
2,640.0	6.80	73.00	2,635.5	15.6	77.0	17.2	0.73
2,730.0	6.60	68.60	2,724.9	19.0	86.9	20.9	0.61
2,820.0	7.80	77.40	2,814.1	22.3	97.7	24.3	1.81
2,910.0	7.40	74.60	2,903.4	25.1	109.2	27.5	0.61
3,000.0	7.50	73.50	2,992.6	28.3	120.4	30.9	0.19
3,090.0	6.70	73.50	3,081.9	31.5	131.1	34.3	0.89
3,180.0	6.20	74.60	3,171.3	34.3	140.8	37.3	0.57
3,269.0	6.50	73.40	3,259.8	37.0	150.3	40.2	0.37
3,359.0	5.90	66.60	3,349.3	40.3	159.4	43.7	1.05
3,449.0	6.50	70.20	3,438.7	43.9	168.5	47.4	0.79
3,539.0	6.20	75.60	3,528.2	46.8	178.0	50.6	0.74
3,629.0	6.00	78.20	3,617.7	49.0	187.3	53.0	0.38
3,719.0	6.10	74.90	3,707.2	51.2	196.5	55.4	0.40
3,808.0	5.70	75.70	3,795.7	53.5	205.3	57.9	0.46
3,898.0	6.90	80.80	3,885.2	55.5	215.0	60.0	1.47
3,988.0	6.70	79.40	3,974.5	57.3	225.5	62.1	0.29
4,078.0	6.50	79.00	4,063.9	59.2	235.7	64.3	0.23
4,168.0	4.80	84.30	4,153.5	60.6	244.4	65.8	1.97
4,258.0	4.60	85.00	4,243.2	61.3	251.8	66.6	0.23
4,348.0	3.60	82.60	4,333.0	61.9	258.1	67.4	1.13
4,438.0	2.20	82.10	4,422.8	62.5	262.7	68.1	1.56
4,527.0	1.10	87.40	4,511.8	62.8	265.2	68.5	1.25
4,617.0	1.30	86.90	4,601.8	62.9	267.1	68.6	0.22
4,707.0	0.50	127.40	4,691.8	62.7	268.4	68.5	1.08
4,797.0	0.70	78.90	4,781.8	62.6	269.3	68.3	0.58
4,887.0	1.10	42.10	4,871.8	63.3	270.4	69.1	0.76
4,977.0	2.00	9.50	4,961.7	65.5	271.2	71.3	1.36
5,067.0	1.60	335.40	5,051.7	68.2	271.0	74.0	1.25
5,157.0	1.50	339.20	5,141.7	70.5	270.0	76.2	0.16
5,246.0	0.40	305.00	5,230.6	71.7	269.4	77.5	1.34
5,336.0	0.60	357.90	5,320.6	72.4	269.1	78.1	0.53
5,426.0	0.70	292.30	5,410.6	73.1	268.6	78.8	0.79

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Well:	Heartland C30-79HN	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Survey							
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
5,516.0	0.70	259.90	5,500.6	73.2	267.5	78.9	0.43
5,606.0	1.20	246.60	5,590.6	72.7	266.1	78.4	0.60
5,695.0	2.00	245.30	5,679.6	71.7	263.8	77.3	0.90
5,785.0	1.90	238.00	5,769.5	70.2	261.1	75.8	0.30
5,875.0	1.90	223.80	5,859.5	68.4	258.8	73.9	0.52
5,965.0	1.50	231.80	5,949.4	66.6	256.9	72.0	0.52
6,055.0	1.20	235.50	6,039.4	65.3	255.2	70.7	0.35
6,145.0	1.50	222.00	6,129.4	63.9	253.6	69.3	0.48
6,190.0	1.60	220.50	6,174.4	63.0	252.8	68.4	0.24
6,235.0	1.50	222.40	6,219.4	62.1	252.0	67.4	0.25
6,280.0	2.10	345.50	6,264.3	62.4	251.4	67.8	7.06
6,325.0	5.00	2.40	6,309.3	65.2	251.3	70.5	6.78
6,370.0	7.20	4.20	6,354.0	70.0	251.6	75.3	4.91
6,414.0	9.80	3.70	6,397.5	76.4	252.0	81.8	5.91
6,459.0	12.40	2.90	6,441.7	85.1	252.5	90.5	5.79
6,504.0	14.90	1.10	6,485.4	95.7	252.9	101.1	5.63
6,549.0	16.90	6.40	6,528.7	108.0	253.7	113.4	5.49
6,594.0	20.00	6.10	6,571.3	122.1	255.2	127.6	6.89
6,639.0	22.80	6.10	6,613.2	138.5	257.0	143.9	6.22
6,684.0	25.50	5.10	6,654.3	156.8	258.8	162.3	6.07
6,729.0	28.20	3.20	6,694.4	177.1	260.2	182.6	6.30
6,774.0	31.30	1.20	6,733.5	199.4	261.1	204.9	7.23
6,819.0	34.40	0.50	6,771.3	223.8	261.4	229.3	6.94
6,864.0	37.60	358.90	6,807.7	250.2	261.3	255.8	7.41
6,909.0	41.10	357.40	6,842.5	278.7	260.3	284.2	8.06
6,954.0	45.50	356.70	6,875.2	309.5	258.7	315.0	9.84
6,999.0	48.60	357.20	6,905.9	342.4	257.0	347.9	6.94
7,043.0	53.40	357.90	6,933.6	376.6	255.5	382.0	10.98
7,088.0	58.10	358.30	6,958.9	413.7	254.3	419.1	10.47
7,133.0	63.80	358.60	6,980.7	453.1	253.3	458.4	12.68
7,178.0	70.00	358.20	6,998.4	494.4	252.1	499.7	13.80
7,223.0	76.40	358.50	7,011.4	537.5	250.9	542.7	14.24
7,249.0	80.10	358.40	7,016.7	562.9	250.2	568.1	14.24
7,306.0	86.73	358.10	7,023.2	619.5	248.4	624.6	11.64
Lateral Survey - Schlumberger							
7,396.0	88.28	358.88	7,027.1	709.3	246.1	714.4	1.93
7,487.0	88.38	358.62	7,029.8	800.3	244.1	805.3	0.31
7,577.0	90.17	0.65	7,030.9	890.3	243.5	895.3	3.01
7,602.7	90.29	0.50	7,030.8	916.0	243.8	921.0	0.75
Heartland C30-79HN Landing Pt.							
7,667.0	90.58	0.11	7,030.3	980.3	244.1	985.3	0.75
7,757.0	90.72	0.17	7,029.3	1,070.2	244.3	1,075.2	0.17
7,847.0	90.93	0.31	7,028.0	1,160.2	244.7	1,165.2	0.28
7,937.0	91.14	0.95	7,026.4	1,250.2	245.7	1,255.2	0.75

Company:	Noble Energy Inc.- Weld County, CO (Grid North)	Local Co-ordinate Reference:	Well Heartland C30-79HN
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Site:	Heartland C30-79-1HN Pad Sec.25-T4N-R65W	MD Reference:	WELL @ 4860.0ft (Precision 828 RKB - 16')
Well:	Heartland C30-79HN	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Survey							
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
8,027.0	90.93	1.27	7,024.8	1,340.2	247.4	1,345.2	0.43
8,117.0	91.10	1.99	7,023.2	1,430.1	250.0	1,435.2	0.82
8,206.0	90.96	2.23	7,021.6	1,519.1	253.3	1,524.1	0.31
8,296.0	90.89	2.34	7,020.1	1,609.0	256.9	1,614.1	0.14
8,386.0	90.55	1.50	7,019.0	1,698.9	259.9	1,704.1	1.01
8,476.0	90.62	1.86	7,018.1	1,788.9	262.5	1,794.1	0.41
8,564.0	90.65	2.18	7,017.1	1,876.8	265.6	1,882.1	0.37
8,654.0	90.03	2.05	7,016.6	1,966.8	268.9	1,972.1	0.70
8,744.0	89.45	1.11	7,017.0	2,056.7	271.4	2,062.1	1.23
8,834.0	89.14	359.43	7,018.1	2,146.7	271.8	2,152.0	1.90
8,924.0	89.66	358.74	7,019.0	2,236.7	270.4	2,242.0	0.96
9,014.0	90.28	358.32	7,019.1	2,326.7	268.1	2,331.9	0.83
9,104.0	90.72	357.35	7,018.3	2,416.6	264.7	2,421.7	1.18
9,193.0	90.62	357.36	7,017.2	2,505.5	260.6	2,510.5	0.11
9,283.0	90.52	357.64	7,016.3	2,595.4	256.7	2,600.3	0.33
9,373.0	90.45	357.93	7,015.6	2,685.3	253.2	2,690.1	0.33
9,463.0	90.28	357.86	7,015.0	2,775.3	249.9	2,780.0	0.20
9,553.0	90.24	358.39	7,014.6	2,865.2	246.9	2,869.8	0.59
9,643.0	89.86	358.05	7,014.5	2,955.2	244.1	2,959.7	0.57
9,732.0	89.52	357.87	7,015.0	3,044.1	241.0	3,048.6	0.43
9,822.0	89.69	357.31	7,015.6	3,134.0	237.2	3,138.4	0.65
9,912.0	90.27	358.48	7,015.7	3,224.0	233.9	3,228.2	1.45
10,002.0	90.10	359.08	7,015.4	3,313.9	232.0	3,318.2	0.69
10,092.0	90.24	359.43	7,015.1	3,403.9	230.8	3,408.1	0.42
10,181.0	89.66	358.95	7,015.2	3,492.9	229.5	3,497.0	0.85
10,271.0	89.59	358.99	7,015.8	3,582.9	227.9	3,587.0	0.09
10,361.0	89.86	359.56	7,016.2	3,672.9	226.8	3,676.9	0.70
10,451.0	89.83	0.33	7,016.4	3,762.9	226.7	3,766.9	0.86
10,540.0	89.76	359.91	7,016.8	3,851.9	226.9	3,855.9	0.48
10,630.0	89.55	0.01	7,017.3	3,941.9	226.8	3,945.9	0.26
10,739.0	89.42	0.20	7,018.3	4,050.9	227.0	4,054.8	0.21
10,831.0	89.93	0.97	7,018.8	4,142.9	228.0	4,146.8	1.00
10,924.0	89.42	1.25	7,019.3	4,235.9	229.8	4,239.8	0.63
11,017.0	90.52	2.02	7,019.4	4,328.8	232.4	4,332.8	1.44
11,110.0	90.34	1.72	7,018.7	4,421.8	235.5	4,425.8	0.38
11,203.0	89.93	1.13	7,018.5	4,514.7	237.8	4,518.8	0.77
11,297.0	90.00	0.46	7,018.5	4,608.7	239.1	4,612.8	0.72
11,391.0	89.55	359.40	7,018.9	4,702.7	239.0	4,706.8	1.23
11,485.0	88.87	359.17	7,020.2	4,796.7	237.8	4,800.7	0.76
11,578.0	89.59	359.36	7,021.4	4,889.7	236.6	4,893.6	0.80
11,672.0	90.07	0.36	7,021.7	4,983.7	236.4	4,987.6	1.18
11,765.0	89.66	359.66	7,021.9	5,076.7	236.4	5,080.6	0.87
11,858.0	89.72	359.68	7,022.4	5,169.7	235.8	5,173.6	0.07
11,952.0	89.62	359.35	7,023.0	5,263.7	235.0	5,267.5	0.37

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12,045.0	89.69	359.71	7,023.5	5,356.7	234.3	5,360.5	0.39
12,139.0	90.17	359.70	7,023.7	5,450.7	233.8	5,454.4	0.51
12,260.0	90.14	0.11	7,023.3	5,571.7	233.6	5,575.4	0.34
12,350.0	90.31	0.31	7,023.0	5,661.7	233.9	5,665.4	0.29
12,440.0	89.83	359.51	7,022.9	5,751.7	233.8	5,755.4	1.04
12,529.0	90.48	359.65	7,022.6	5,840.7	233.1	5,844.3	0.75
12,619.0	90.76	0.62	7,021.6	5,930.7	233.3	5,934.3	1.12
12,709.0	90.83	1.03	7,020.4	6,020.7	234.6	6,024.3	0.46
12,799.0	90.96	1.22	7,019.0	6,110.6	236.4	6,114.3	0.26
12,889.0	90.52	0.68	7,017.8	6,200.6	237.9	6,204.3	0.77
12,978.0	90.65	0.49	7,016.9	6,289.6	238.8	6,293.3	0.26
13,068.0	90.58	0.59	7,016.0	6,379.6	239.7	6,383.3	0.14
13,158.0	90.48	359.84	7,015.1	6,469.6	240.0	6,473.2	0.84
13,248.0	90.34	0.15	7,014.5	6,559.6	240.0	6,563.2	0.38
13,338.0	90.24	0.15	7,014.0	6,649.6	240.2	6,653.2	0.11
13,428.0	90.31	0.64	7,013.6	6,739.6	240.8	6,743.2	0.55
13,518.0	90.58	1.29	7,012.9	6,829.6	242.4	6,833.2	0.78
13,608.0	90.03	1.46	7,012.4	6,919.5	244.5	6,923.2	0.64
13,697.0	89.90	1.05	7,012.5	7,008.5	246.5	7,012.2	0.48
13,787.0	90.31	359.94	7,012.3	7,098.5	247.2	7,102.2	1.31
13,877.0	90.45	358.61	7,011.7	7,188.5	246.1	7,192.1	1.49
13,967.0	90.41	359.07	7,011.0	7,278.5	244.3	7,282.0	0.51
14,057.0	90.00	358.63	7,010.7	7,368.5	242.5	7,372.0	0.67
14,147.0	90.03	359.04	7,010.7	7,458.4	240.6	7,461.9	0.46
14,236.0	90.38	359.72	7,010.4	7,547.4	239.7	7,550.8	0.86
14,326.0	90.24	358.51	7,009.9	7,637.4	238.3	7,640.8	1.35
14,416.0	90.28	358.21	7,009.5	7,727.4	235.7	7,730.6	0.34
14,506.0	90.14	359.53	7,009.1	7,817.4	233.9	7,820.6	1.47
14,596.0	89.52	359.08	7,009.4	7,907.3	232.9	7,910.5	0.85
14,686.0	89.76	359.09	7,010.0	7,997.3	231.4	8,000.5	0.27
14,775.0	89.83	358.73	7,010.3	8,086.3	229.7	8,089.4	0.41
14,865.0	89.79	358.66	7,010.6	8,176.3	227.7	8,179.3	0.09
14,954.0	89.76	1.03	7,010.9	8,265.3	227.4	8,268.3	2.66
15,044.0	89.79	1.34	7,011.3	8,355.3	229.3	8,358.3	0.35
15,134.0	89.79	0.42	7,011.6	8,445.3	230.7	8,448.3	1.02
15,224.0	89.59	0.40	7,012.1	8,535.2	231.3	8,538.2	0.22
15,314.0	89.79	1.27	7,012.6	8,625.2	232.6	8,628.2	0.99
15,404.0	89.52	1.17	7,013.1	8,715.2	234.5	8,718.2	0.32
15,494.0	89.86	1.19	7,013.6	8,805.2	236.4	8,808.2	0.38
15,584.0	89.72	0.87	7,014.0	8,895.2	238.0	8,898.2	0.39
15,674.0	89.59	359.57	7,014.5	8,985.2	238.4	8,988.2	1.45
15,763.0	89.62	358.46	7,015.1	9,074.2	236.8	9,077.1	1.25
15,853.0	89.79	359.77	7,015.6	9,164.1	235.4	9,167.1	1.47
15,943.0	88.97	0.85	7,016.6	9,254.1	235.9	9,257.1	1.51

Company:	Noble Energy Inc.- Weld County, CO (Grid North)	Local Co-ordinate Reference:	Well Heartland C30-79HN
Project:	Sec.25-T4N-R65W	TVD Reference:	WELL @ 4860.0ft (Precision 828 RKB - 16')
Site:	Heartland C30-79-1HN Pad Sec.25-T4N-R65W	MD Reference:	WELL @ 4860.0ft (Precision 828 RKB - 16')
Well:	Heartland C30-79HN	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Survey							
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)
16,033.0	91.82	0.12	7,015.9	9,344.1	236.7	9,347.0	3.27
16,123.0	92.30	1.87	7,012.7	9,434.0	238.3	9,437.0	2.02
16,213.0	88.83	1.38	7,011.8	9,524.0	240.8	9,527.0	3.89
16,302.0	88.73	1.25	7,013.7	9,612.9	242.8	9,615.9	0.18
16,392.0	85.56	358.01	7,018.2	9,702.8	242.3	9,705.8	5.03
16,482.0	85.49	358.69	7,025.2	9,792.5	239.7	9,795.4	0.76
16,572.0	85.60	1.38	7,032.2	9,882.2	239.7	9,885.1	2.98
16,572.1	85.60	1.35	7,032.2	9,882.3	239.7	9,885.2	29.91
16,617.0	82.76	0.37	7,036.8	9,927.0	240.4	9,929.8	6.69
16,660.0	82.76	0.37	7,042.2	9,969.6	240.7	9,972.5	0.00
Heartland C30-79HN BHL 75'FNL & 75'FEL							

Design Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
7,306.0	7,023.2	619.5	248.4	Lateral Survey - Schlumberger

Checked By: _____	Approved By: _____	Date: _____
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