

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

Well Name: **Peaks K26-77-1HN**

Surface Location: Peppler K26-79-1HN Pad Sec.35-T4N-R66W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone

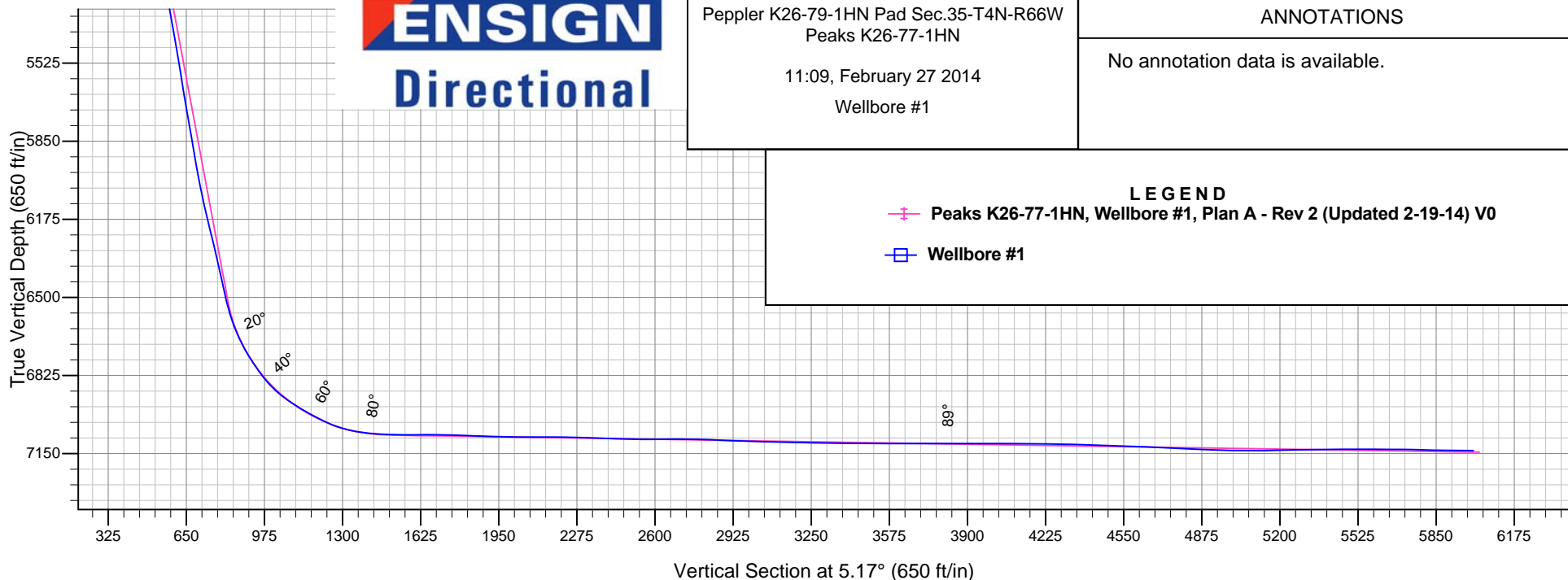
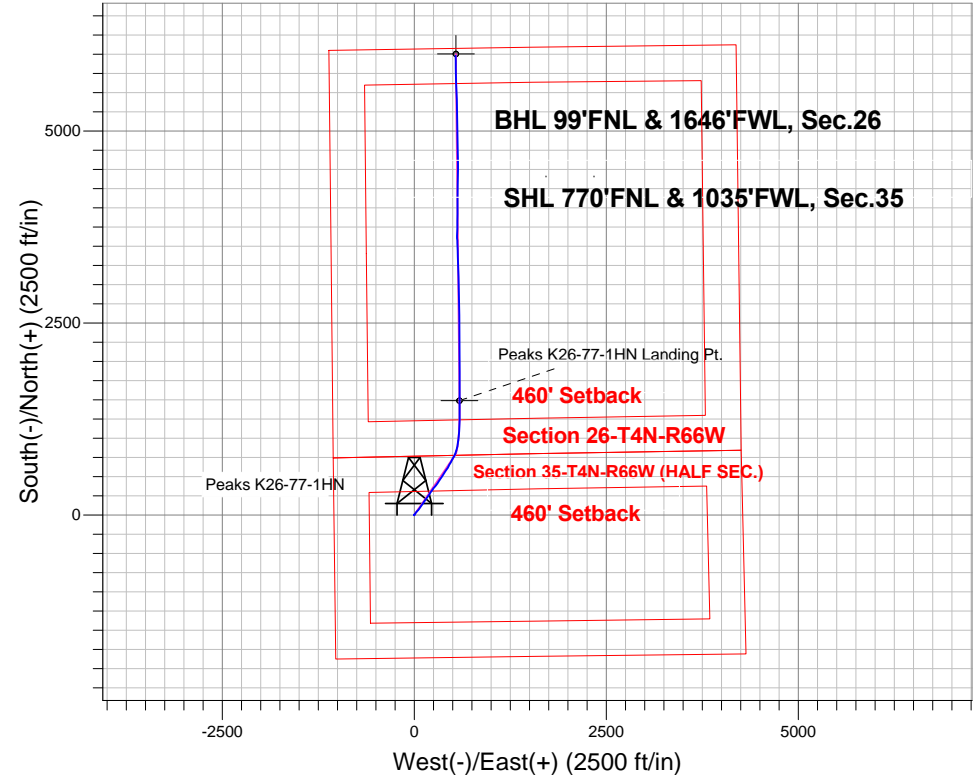
Ground Elevation: 4787.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1343351.13	3209228.28	40.273470	-104.750150	

H&P 273 RKB - 24' WELL @ 4811.0ft (H&P 273 RKB - 24')

FINAL SURVEY

Projected Bottom Hole Location
12100'MD 7138'TVD 5981'N & 539'W of SHL
89.4 degree Incl @ 359.0 degree AZM



Peppler K26-79-1HN Pad Sec.35-T4N-R66W
Peaks K26-77-1HN

11:09, February 27 2014
Wellbore #1

ANNOTATIONS

No annotation data is available.



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

Sec.35-T4N-R66W

Peppler K26-79-1HN Pad Sec.35-T4N-R66W

Peaks K26-77-1HN

Wellbore #1

Design: Wellbore #1

Standard Survey Report

03 March, 2014

Company:	Noble Energy Inc.- Weld County, CO (Grid North)	Local Co-ordinate Reference:	Well Peaks K26-77-1HN
Project:	Sec.35-T4N-R66W	TVD Reference:	WELL @ 4811.0ft (H&P 273 RKB - 24')
Site:	Peppler K26-79-1HN Pad Sec.35-T4N-R66W	MD Reference:	WELL @ 4811.0ft (H&P 273 RKB - 24')
Well:	Peaks K26-77-1HN	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)	Build Rate (°/100ft)	Turn Rate (°/100ft)
1,656.0	0.70	1.20	1,656.0	3.1	1.7	3.3	0.29	0.22	18.39
1,748.0	0.60	349.70	1,748.0	4.2	1.6	4.3	0.18	-0.11	-12.50
1,843.0	1.70	35.10	1,843.0	5.8	2.4	6.0	1.42	1.16	47.79
1,938.0	2.90	38.90	1,937.9	8.8	4.7	9.2	1.27	1.26	4.00
2,033.0	3.90	40.70	2,032.7	13.1	8.3	13.8	1.06	1.05	1.89
2,127.0	5.20	38.60	2,126.4	18.9	13.0	20.0	1.39	1.38	-2.23
2,222.0	6.20	31.40	2,220.9	26.6	18.4	28.2	1.29	1.05	-7.58
2,317.0	7.10	37.50	2,315.3	35.7	24.6	37.8	1.20	0.95	6.42
2,412.0	9.10	42.80	2,409.4	45.8	33.3	48.7	2.25	2.11	5.58
2,507.0	10.10	43.50	2,503.0	57.4	44.2	61.1	1.06	1.05	0.74
2,601.0	11.50	38.40	2,595.4	70.7	55.7	75.5	1.80	1.49	-5.43
2,696.0	13.50	35.60	2,688.1	87.2	68.0	92.9	2.20	2.11	-2.95
2,791.0	15.10	35.60	2,780.2	106.2	81.7	113.2	1.68	1.68	0.00
2,886.0	14.40	33.70	2,872.0	126.1	95.4	134.2	0.90	-0.74	-2.00
2,981.0	12.00	33.50	2,964.5	144.2	107.4	153.3	2.53	-2.53	-0.21
3,076.0	13.10	35.40	3,057.2	161.2	119.1	171.3	1.24	1.16	2.00
3,171.0	11.10	33.70	3,150.1	177.6	130.4	188.6	2.14	-2.11	-1.79
3,265.0	10.20	34.40	3,242.5	192.0	140.1	203.8	0.97	-0.96	0.74
3,360.0	9.10	36.50	3,336.2	205.0	149.4	217.6	1.22	-1.16	2.21
3,455.0	9.00	38.40	3,430.0	216.8	158.4	230.2	0.33	-0.11	2.00
3,550.0	9.00	36.10	3,523.8	228.7	167.4	242.8	0.38	0.00	-2.42
3,645.0	9.80	37.50	3,617.5	241.1	176.7	256.0	0.88	0.84	1.47
3,740.0	10.60	32.40	3,711.0	254.9	186.3	270.6	1.27	0.84	-5.37
3,834.0	10.60	33.30	3,803.4	269.4	195.7	285.9	0.18	0.00	0.96
3,929.0	12.60	34.70	3,896.5	285.2	206.4	302.7	2.13	2.11	1.47
4,024.0	13.90	34.00	3,988.9	303.2	218.7	321.7	1.38	1.37	-0.74
4,119.0	14.10	33.80	4,081.1	322.3	231.5	341.8	0.22	0.21	-0.21
4,214.0	14.10	36.80	4,173.3	341.2	244.9	361.8	0.77	0.00	3.16
4,308.0	13.40	41.10	4,264.6	358.5	258.9	380.4	1.32	-0.74	4.57
4,403.0	13.00	39.50	4,357.1	375.1	272.9	398.1	0.57	-0.42	-1.68
4,498.0	12.80	38.10	4,449.7	391.6	286.2	415.8	0.39	-0.21	-1.47
4,593.0	13.70	34.20	4,542.1	409.2	299.0	434.5	1.33	0.95	-4.11
4,688.0	14.10	33.30	4,634.4	428.2	311.7	454.5	0.48	0.42	-0.95
4,782.0	12.20	32.40	4,725.9	446.1	323.3	473.4	2.03	-2.02	-0.96
4,877.0	11.60	36.30	4,818.8	462.3	334.4	490.6	1.06	-0.63	4.11
4,972.0	11.60	33.70	4,911.9	477.9	345.3	507.1	0.55	0.00	-2.74
5,067.0	13.10	34.70	5,004.7	494.7	356.7	524.9	1.59	1.58	1.05
5,162.0	12.30	32.40	5,097.4	512.1	368.3	543.2	1.00	-0.84	-2.42
5,256.0	11.20	32.10	5,189.4	528.3	378.5	560.3	1.17	-1.17	-0.32
5,351.0	12.00	34.40	5,282.5	544.3	389.0	577.1	0.97	0.84	2.42
5,446.0	11.00	32.40	5,375.6	560.1	399.4	593.8	1.13	-1.05	-2.11
5,541.0	10.70	33.10	5,468.9	575.1	409.1	609.7	0.34	-0.32	0.74
5,636.0	10.60	33.50	5,562.2	589.8	418.7	625.1	0.13	-0.11	0.42
5,731.0	10.70	33.70	5,655.6	604.4	428.5	640.6	0.11	0.11	0.21
5,826.0	10.70	28.60	5,748.9	619.5	437.6	656.4	1.00	0.00	-5.37
5,918.0	10.30	24.70	5,839.4	634.5	445.1	672.0	0.89	-0.43	-4.24
6,013.0	11.40	34.90	5,932.7	649.9	454.0	688.2	2.32	1.16	10.74
6,108.0	12.20	28.80	6,025.7	666.4	464.2	705.5	1.56	0.84	-6.42
6,203.0	14.10	31.20	6,118.2	685.1	475.1	725.1	2.08	2.00	2.53
6,297.0	14.20	26.60	6,209.4	705.2	486.2	746.1	1.20	0.11	-4.89
6,392.0	15.20	24.90	6,301.3	726.9	496.6	768.7	1.15	1.05	-1.79
6,487.0	12.80	31.40	6,393.4	747.2	507.3	789.9	3.02	-2.53	6.84
6,582.0	14.00	30.30	6,485.8	766.1	518.6	809.7	1.29	1.26	-1.16
6,677.0	17.80	22.40	6,577.2	789.5	530.0	834.0	4.59	4.00	-8.32

Company:	Noble Energy Inc.- Weld County, CO (Grid North)	Local Co-ordinate Reference:	Well Peaks K26-77-1HN
Project:	Sec.35-T4N-R66W	TVD Reference:	WELL @ 4811.0ft (H&P 273 RKB - 24')
Site:	Peppler K26-79-1HN Pad Sec.35-T4N-R66W	MD Reference:	WELL @ 4811.0ft (H&P 273 RKB - 24')
Well:	Peaks K26-77-1HN	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)	Build Rate (°/100ft)	Turn Rate (°/100ft)
6,772.0	25.50	19.30	6,665.4	822.2	542.3	867.8	8.19	8.11	-3.26
6,867.0	32.40	14.30	6,748.5	866.3	555.3	912.8	7.69	7.26	-5.26
6,962.0	36.80	9.40	6,826.7	919.0	566.3	966.3	5.48	4.63	-5.16
7,056.0	49.20	6.30	6,895.3	982.4	574.8	1,030.2	13.38	13.19	-3.30
7,151.0	58.50	5.00	6,951.3	1,058.7	582.3	1,106.8	9.85	9.79	-1.37
7,198.0	61.30	4.50	6,974.9	1,099.2	585.7	1,147.5	6.03	5.96	-1.06
7,246.0	60.90	3.30	6,998.1	1,141.1	588.5	1,189.5	2.34	-0.83	-2.50
7,293.0	64.90	1.90	7,019.5	1,182.9	590.4	1,231.3	8.91	8.51	-2.98
7,341.0	70.50	0.80	7,037.7	1,227.3	591.5	1,275.6	11.86	11.67	-2.29
7,388.0	77.00	359.90	7,050.8	1,272.4	591.7	1,320.5	13.95	13.83	-1.91
7,436.0	80.80	0.30	7,060.1	1,319.5	591.8	1,367.4	7.96	7.92	0.83
7,481.0	84.90	359.90	7,065.7	1,364.1	591.9	1,411.9	9.15	9.11	-0.89
7,575.0	88.60	0.30	7,071.0	1,457.9	592.1	1,505.4	3.96	3.94	0.43
7,608.0	89.05	0.06	7,071.7	1,490.9	592.2	1,538.2	1.55	1.37	-0.74
Peaks K26-77-1HN Landing Pt.									
7,670.0	89.90	359.60	7,072.3	1,552.9	592.0	1,600.0	1.55	1.37	-0.74
7,765.0	90.00	0.30	7,072.3	1,647.9	591.9	1,694.6	0.74	0.11	0.74
7,860.0	87.90	359.70	7,074.1	1,742.9	591.9	1,789.2	2.30	-2.21	-0.63
7,954.0	88.20	359.70	7,077.3	1,836.9	591.4	1,882.7	0.32	0.32	0.00
8,049.0	88.40	359.60	7,080.1	1,931.8	590.8	1,977.2	0.24	0.21	-0.11
8,144.0	89.80	0.30	7,081.6	2,026.8	590.7	2,071.8	1.65	1.47	0.74
8,239.0	90.40	0.10	7,081.4	2,121.8	591.1	2,166.4	0.67	0.63	-0.21
8,334.0	88.30	359.60	7,082.5	2,216.8	590.8	2,261.0	2.27	-2.21	-0.53
8,428.0	87.90	359.70	7,085.6	2,310.7	590.2	2,354.5	0.44	-0.43	0.11
8,523.0	88.30	359.40	7,088.8	2,405.7	589.5	2,449.0	0.53	0.42	-0.32
8,618.0	89.30	359.20	7,090.8	2,500.6	588.3	2,543.5	1.07	1.05	-0.21
8,713.0	91.00	359.00	7,090.5	2,595.6	586.8	2,638.0	1.80	1.79	-0.21
8,808.0	89.40	359.00	7,090.2	2,690.6	585.2	2,732.4	1.68	-1.68	0.00
8,902.0	87.80	359.70	7,092.5	2,784.6	584.1	2,825.9	1.86	-1.70	0.74
8,997.0	87.90	358.70	7,096.0	2,879.5	582.8	2,920.3	1.06	0.11	-1.05
9,092.0	88.20	358.20	7,099.3	2,974.4	580.2	3,014.6	0.61	0.32	-0.53
9,187.0	88.50	358.30	7,102.0	3,069.3	577.3	3,108.9	0.33	0.32	0.11
9,282.0	88.90	358.70	7,104.2	3,164.3	574.8	3,203.2	0.60	0.42	0.42
9,376.0	89.10	358.20	7,105.8	3,258.2	572.3	3,296.5	0.57	0.21	-0.53
9,471.0	89.20	357.80	7,107.2	3,353.1	569.0	3,390.8	0.43	0.11	-0.42
9,566.0	89.50	357.30	7,108.3	3,448.1	564.9	3,484.9	0.61	0.32	-0.53
9,661.0	90.00	357.80	7,108.7	3,543.0	560.9	3,579.1	0.74	0.53	0.53
9,756.0	90.00	0.50	7,108.7	3,637.9	559.4	3,673.6	2.84	0.00	2.84
9,851.0	90.10	1.20	7,108.6	3,732.9	560.9	3,768.3	0.74	0.11	0.74
9,945.0	90.20	0.50	7,108.4	3,826.9	562.3	3,862.0	0.75	0.11	-0.74
10,040.0	90.10	0.30	7,108.1	3,921.9	562.9	3,956.7	0.24	-0.11	-0.21
10,135.0	89.20	0.60	7,108.7	4,016.9	563.7	4,051.4	1.00	-0.95	0.32
10,230.0	89.80	0.10	7,109.5	4,111.9	564.2	4,146.0	0.82	0.63	-0.53
10,325.0	89.40	1.30	7,110.2	4,206.9	565.4	4,240.7	1.33	-0.42	1.26
10,420.0	88.20	1.00	7,112.2	4,301.9	567.3	4,335.5	1.30	-1.26	-0.32
10,514.0	88.20	1.20	7,115.1	4,395.8	569.1	4,429.2	0.21	0.00	0.21
10,609.0	88.20	0.30	7,118.1	4,490.7	570.4	4,523.9	0.95	0.00	-0.95
10,704.0	87.60	359.60	7,121.6	4,585.7	570.3	4,618.4	0.97	-0.63	-0.74
10,799.0	87.60	358.90	7,125.6	4,680.6	569.0	4,712.8	0.74	0.00	-0.74
10,894.0	87.50	358.30	7,129.6	4,775.5	566.7	4,807.1	0.64	-0.11	-0.63
10,989.0	87.10	358.00	7,134.1	4,870.3	563.6	4,901.3	0.53	-0.42	-0.32
11,084.0	89.10	359.40	7,137.3	4,965.2	561.5	4,995.6	2.57	2.11	1.47
11,179.0	90.00	0.10	7,138.0	5,060.2	561.1	5,090.2	1.20	0.95	0.74

Company:	Noble Energy Inc.- Weld County, CO (Grid North)	Local Co-ordinate Reference:	Well Peaks K26-77-1HN
Project:	Sec.35-T4N-R66W	TVD Reference:	WELL @ 4811.0ft (H&P 273 RKB - 24')
Site:	Peppler K26-79-1HN Pad Sec.35-T4N-R66W	MD Reference:	WELL @ 4811.0ft (H&P 273 RKB - 24')
Well:	Peaks K26-77-1HN	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)	Build Rate (°/100ft)	Turn Rate (°/100ft)
11,273.0	91.50	359.20	7,136.8	5,154.2	560.5	5,183.7	1.86	1.60	-0.96
11,368.0	90.80	358.90	7,134.9	5,249.2	558.9	5,278.2	0.80	-0.74	-0.32
11,463.0	91.40	357.60	7,133.1	5,344.1	556.0	5,372.5	1.51	0.63	-1.37
11,558.0	89.80	358.00	7,132.1	5,439.0	552.4	5,466.7	1.74	-1.68	0.42
11,653.0	89.90	358.70	7,132.3	5,534.0	549.6	5,561.0	0.74	0.11	0.74
11,748.0	90.00	358.00	7,132.4	5,629.0	546.9	5,655.3	0.74	0.11	-0.74
11,842.0	88.50	358.70	7,133.6	5,722.9	544.2	5,748.7	1.76	-1.60	0.74
11,937.0	89.00	358.90	7,135.7	5,817.9	542.2	5,843.0	0.57	0.53	0.21
12,030.0	89.40	359.00	7,137.0	5,910.8	540.5	5,935.5	0.44	0.43	0.11
12,100.0	89.40	359.00	7,137.7	5,980.8	539.3	6,005.1	0.00	0.00	0.00
Peaks K26-77-1HN BHL 75'FNL & 1650'FWL									

Checked By: _____	Approved By: _____	Date: _____
-------------------	--------------------	-------------