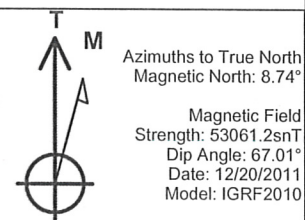
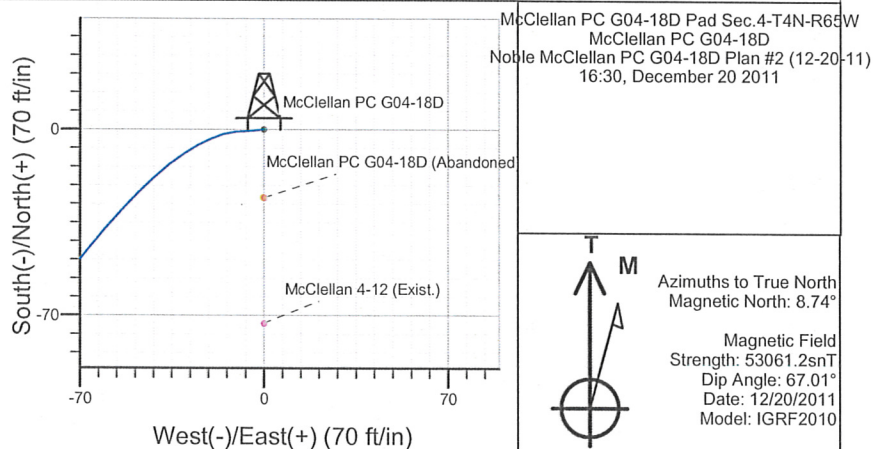
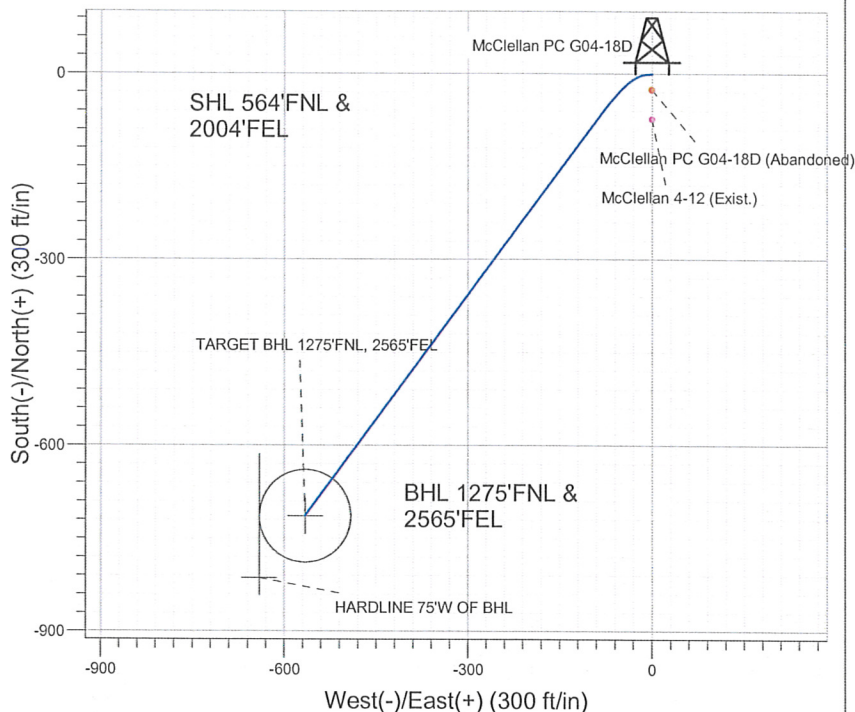
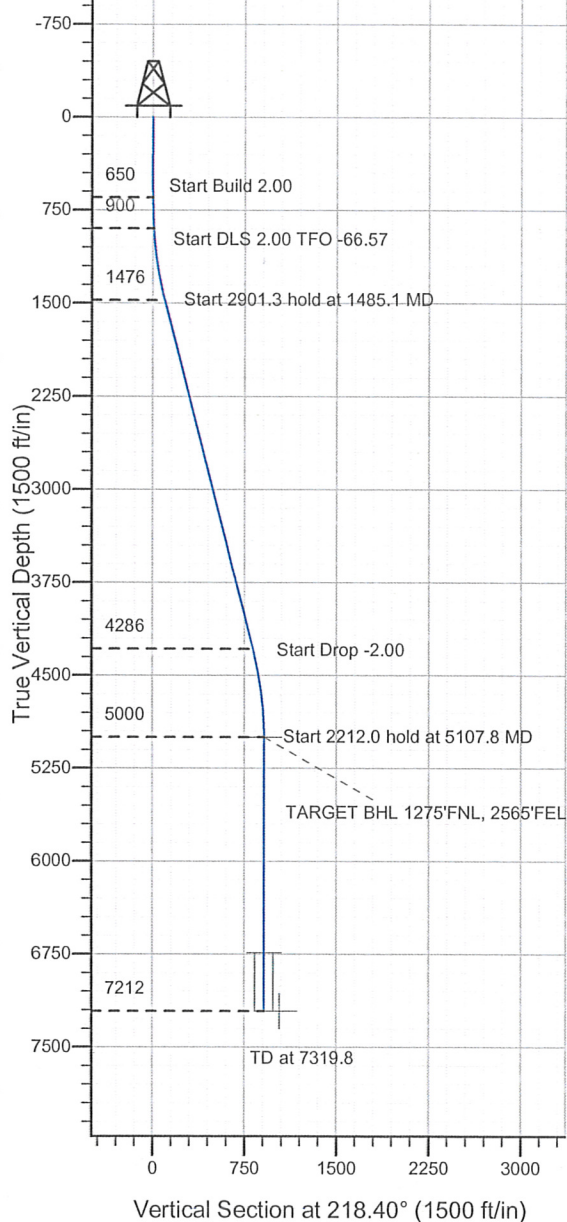


Well Name: McClellan PC G04-18D X

Surface Location: McClellan PC G04-18D Pad Sec.4-T4N-R65W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone
Ground Elevation: 4669.0

+N/-S +E/-W Northing Easting Latitude Longitude Slot
0.0 0.0 1370324.36 3232489.45 40.346940 -104.665880
Original Well Elev WELL @ 4682.0ft (Original Well Elev)

NOBLE ENERGY INC WELD COUNTY CO



WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 1275'FNL, 2565'FEL	5000.0	-714.0	-565.9	40.344980	-104.667910	Point
TARGET CIRCLE 1275'FNL, 2565'FEL	6742.0	-714.0	-565.9	40.344980	-104.667910	Circle (Radius: 75.0)
HARDLINE 75'W OF BHL	7212.0	-814.0	-640.9	40.344706	-104.668179	Polygon

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	650.0	0.00	0.00	650.0	0.0	0.0	0.00	0.00	0.0	
3	900.0	5.00	265.00	899.7	-1.0	-10.9	2.00	265.00	7.5	
4	1485.1	14.43	216.68	1476.4	-61.8	-80.0	2.00	-66.57	98.2	
5	4386.3	14.43	216.68	4286.2	-641.6	-511.9	0.00	0.00	820.8	
6	5107.8	0.00	0.00	5000.0	-714.0	-565.9	2.00	180.00	911.1	TARGET BHL 1275'FNL, 2565'FEL
7	7319.8	0.00	0.00	7212.0	-714.0	-565.9	0.00	0.00	911.1	



Directional

**NOBLE ENERGY INC WELD
COUNTY CO**

SEC.4-T4N-R65W

McClellan PC G04-18D Pad Sec.4-T4N-R65W

McClellan PC G04-18D ✕

Wellbore #1

Plan: Noble McClellan PC G04-18D Plan #2 (12-20-11)

Standard Planning Report

20 December, 2011



Database: Landmark
Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.4-T4N-R65W
Site: McClellan PC G04-18D Pad
 Sec.4-T4N-R65W
Well: McClellan PC G04-18D
Wellbore: Wellbore #1
Design: Noble McClellan PC G04-18D Plan #2 (12-20-1

Local Co-ordinate Reference: Well McClellan PC G04-18D
TVD Reference: WELL @ 4682.0ft (Original Well Elev)
MD Reference: WELL @ 4682.0ft (Original Well Elev)
North Reference: True

Survey Calculation Method: Minimum Curvature

Project	SEC.4-T4N-R65W, Weld County, Colorado		
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	McClellan PC G04-18D Pad Sec.4-T4N-R65W				
Site Position:		Northing:	1,370,298.87 ft	Latitude:	40.346870
From:	Lat/Long	Easting:	3,232,489.69 ft	Longitude:	-104.665880
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.54 °

Well	McClellan PC G04-18D					
Well Position	+N/-S	25.5 ft	Northing:	1,370,324.36 ft	Latitude:	40.346940
	+E/-W	0.0 ft	Easting:	3,232,489.45 ft	Longitude:	-104.665880
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,669.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/20/2011	8.74	67.01	53,061

Design Noble McClellan PC G04-18D Plan #2 (12-20-11)

Audit Notes:

Version: **Phase:** PROTOTYPE **Tie On Depth:** 0.0

Vertical Section:	Depth From (TVD)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	218.40

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
650.0	0.00	0.00	650.0	0.0	0.0	0.00	0.00	0.00	0.00	
900.0	5.00	265.00	899.7	-1.0	-10.9	2.00	2.00	0.00	265.00	
1,485.1	14.43	216.68	1,476.4	-61.8	-80.0	2.00	1.61	-8.26	-66.57	
4,386.3	14.43	216.68	4,286.2	-641.6	-511.9	0.00	0.00	0.00	0.00	
5,107.8	0.00	0.00	5,000.0	-714.0	-565.9	2.00	-2.00	0.00	180.00	TARGET BHL 1275
7,319.8	0.00	0.00	7,212.0	-714.0	-565.9	0.00	0.00	0.00	0.00	

Database: Landmark
 Company: NOBLE ENERGY INC WELD COUNTY CO
 Project: SEC.4-T4N-R65W
 Site: McClellan PC G04-18D Pad
 Sec.4-T4N-R65W
 Well: McClellan PC G04-18D
 Wellbore: Wellbore #1
 Design: Noble McClellan PC G04-18D Plan #2 (12-20-1

Local Co-ordinate Reference: Well McClellan PC G04-18D
 TVD Reference: WELL @ 4682.0ft (Original Well Elev)
 MD Reference: WELL @ 4682.0ft (Original Well Elev)
 North Reference: True

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 (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
40.0	0.00	0.00	40.0	0.0	0.0	0.0	0.00	0.00	0.00
80.0	0.00	0.00	80.0	0.0	0.0	0.0	0.00	0.00	0.00
120.0	0.00	0.00	120.0	0.0	0.0	0.0	0.00	0.00	0.00
160.0	0.00	0.00	160.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
240.0	0.00	0.00	240.0	0.0	0.0	0.0	0.00	0.00	0.00
280.0	0.00	0.00	280.0	0.0	0.0	0.0	0.00	0.00	0.00
320.0	0.00	0.00	320.0	0.0	0.0	0.0	0.00	0.00	0.00
360.0	0.00	0.00	360.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
440.0	0.00	0.00	440.0	0.0	0.0	0.0	0.00	0.00	0.00
480.0	0.00	0.00	480.0	0.0	0.0	0.0	0.00	0.00	0.00
520.0	0.00	0.00	520.0	0.0	0.0	0.0	0.00	0.00	0.00
560.0	0.00	0.00	560.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
640.0	0.00	0.00	640.0	0.0	0.0	0.0	0.00	0.00	0.00
650.0	0.00	0.00	650.0	0.0	0.0	0.0	0.00	0.00	0.00
680.0	0.60	265.00	680.0	0.0	-0.2	0.1	2.00	2.00	0.00
720.0	1.40	265.00	720.0	-0.1	-0.9	0.6	2.00	2.00	0.00
760.0	2.20	265.00	760.0	-0.2	-2.1	1.5	2.00	2.00	0.00
800.0	3.00	265.00	799.9	-0.3	-3.9	2.7	2.00	2.00	0.00
840.0	3.80	265.00	839.9	-0.5	-6.3	4.3	2.00	2.00	0.00
880.0	4.60	265.00	879.8	-0.8	-9.2	6.3	2.00	2.00	0.00
900.0	5.00	265.00	899.7	-1.0	-10.9	7.5	2.00	2.00	0.00
920.0	5.17	260.93	919.6	-1.2	-12.6	8.8	2.00	0.86	-20.37
960.0	5.59	253.62	959.4	-2.0	-16.3	11.7	2.00	1.04	-18.27
1,000.0	6.08	247.40	999.2	-3.4	-20.1	15.1	2.00	1.23	-15.55
1,040.0	6.63	242.16	1,039.0	-5.3	-24.1	19.1	2.00	1.38	-13.10
1,080.0	7.23	237.75	1,078.7	-7.7	-28.3	23.6	2.00	1.50	-11.02
1,120.0	7.86	234.03	1,118.3	-10.6	-32.6	28.6	2.00	1.59	-9.30
1,160.0	8.52	230.87	1,157.9	-14.1	-37.1	34.1	2.00	1.65	-7.89
1,200.0	9.21	228.18	1,197.5	-18.1	-41.8	40.2	2.00	1.71	-6.75
1,240.0	9.91	225.85	1,236.9	-22.6	-46.7	46.7	2.00	1.75	-5.81
1,280.0	10.62	223.84	1,276.3	-27.7	-51.7	53.8	2.00	1.79	-5.04
1,320.0	11.35	222.07	1,315.5	-33.3	-56.9	61.4	2.00	1.82	-4.41
1,360.0	12.08	220.52	1,354.7	-39.4	-62.2	69.5	2.00	1.84	-3.88
1,400.0	12.83	219.14	1,393.7	-46.0	-67.7	78.1	2.00	1.86	-3.44
1,440.0	13.58	217.92	1,432.7	-53.2	-73.4	87.3	2.00	1.87	-3.07
1,480.0	14.33	216.81	1,471.5	-60.8	-79.3	96.9	2.00	1.89	-2.75
1,485.1	14.43	216.68	1,476.4	-61.8	-80.0	98.2	2.00	1.89	-2.59
1,520.0	14.43	216.68	1,510.2	-68.8	-85.2	106.9	0.00	0.00	0.00
1,560.0	14.43	216.68	1,549.0	-76.8	-91.2	116.8	0.00	0.00	0.00
1,600.0	14.43	216.68	1,587.7	-84.8	-97.1	126.8	0.00	0.00	0.00
1,640.0	14.43	216.68	1,626.5	-92.8	-103.1	136.8	0.00	0.00	0.00
1,680.0	14.43	216.68	1,665.2	-100.8	-109.1	146.7	0.00	0.00	0.00
1,720.0	14.43	216.68	1,703.9	-108.8	-115.0	156.7	0.00	0.00	0.00
1,760.0	14.43	216.68	1,742.7	-116.8	-121.0	166.6	0.00	0.00	0.00
1,800.0	14.43	216.68	1,781.4	-124.8	-126.9	176.6	0.00	0.00	0.00
1,840.0	14.43	216.68	1,820.2	-132.8	-132.9	186.6	0.00	0.00	0.00
1,880.0	14.43	216.68	1,858.9	-140.8	-138.8	196.5	0.00	0.00	0.00
1,920.0	14.43	216.68	1,897.6	-148.7	-144.8	206.5	0.00	0.00	0.00
1,960.0	14.43	216.68	1,936.4	-156.7	-150.7	216.5	0.00	0.00	0.00

Database: Landmark
Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.4-T4N-R65W
Site: McClellan PC G04-18D Pad
 Sec.4-T4N-R65W
Well: McClellan PC G04-18D
Wellbore: Wellbore #1
Design: Noble McClellan PC G04-18D Plan #2 (12-20-1

Local Co-ordinate Reference: Well McClellan PC G04-18D
TVD Reference: WELL @ 4682.0ft (Original Well Elev)
MD Reference: WELL @ 4682.0ft (Original Well Elev)
North Reference: True

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 (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
2,000.0	14.43	216.68	1,975.1	-164.7	-156.7	226.4	0.00	0.00	0.00
2,040.0	14.43	216.68	2,013.8	-172.7	-162.6	236.4	0.00	0.00	0.00
2,080.0	14.43	216.68	2,052.6	-180.7	-168.6	246.3	0.00	0.00	0.00
2,120.0	14.43	216.68	2,091.3	-188.7	-174.5	256.3	0.00	0.00	0.00
2,160.0	14.43	216.68	2,130.1	-196.7	-180.5	266.3	0.00	0.00	0.00
2,200.0	14.43	216.68	2,168.8	-204.7	-186.5	276.2	0.00	0.00	0.00
2,240.0	14.43	216.68	2,207.5	-212.7	-192.4	286.2	0.00	0.00	0.00
2,280.0	14.43	216.68	2,246.3	-220.7	-198.4	296.2	0.00	0.00	0.00
2,320.0	14.43	216.68	2,285.0	-228.7	-204.3	306.1	0.00	0.00	0.00
2,360.0	14.43	216.68	2,323.8	-236.7	-210.3	316.1	0.00	0.00	0.00
2,400.0	14.43	216.68	2,362.5	-244.7	-216.2	326.0	0.00	0.00	0.00
2,440.0	14.43	216.68	2,401.2	-252.7	-222.2	336.0	0.00	0.00	0.00
2,480.0	14.43	216.68	2,440.0	-260.6	-228.1	346.0	0.00	0.00	0.00
2,520.0	14.43	216.68	2,478.7	-268.6	-234.1	355.9	0.00	0.00	0.00
2,560.0	14.43	216.68	2,517.4	-276.6	-240.0	365.9	0.00	0.00	0.00
2,600.0	14.43	216.68	2,556.2	-284.6	-246.0	375.9	0.00	0.00	0.00
2,640.0	14.43	216.68	2,594.9	-292.6	-251.9	385.8	0.00	0.00	0.00
2,680.0	14.43	216.68	2,633.7	-300.6	-257.9	395.8	0.00	0.00	0.00
2,720.0	14.43	216.68	2,672.4	-308.6	-263.9	405.7	0.00	0.00	0.00
2,760.0	14.43	216.68	2,711.1	-316.6	-269.8	415.7	0.00	0.00	0.00
2,800.0	14.43	216.68	2,749.9	-324.6	-275.8	425.7	0.00	0.00	0.00
2,840.0	14.43	216.68	2,788.6	-332.6	-281.7	435.6	0.00	0.00	0.00
2,880.0	14.43	216.68	2,827.4	-340.6	-287.7	445.6	0.00	0.00	0.00
2,920.0	14.43	216.68	2,866.1	-348.6	-293.6	455.6	0.00	0.00	0.00
2,960.0	14.43	216.68	2,904.8	-356.6	-299.6	465.5	0.00	0.00	0.00
3,000.0	14.43	216.68	2,943.6	-364.6	-305.5	475.5	0.00	0.00	0.00
3,040.0	14.43	216.68	2,982.3	-372.5	-311.5	485.4	0.00	0.00	0.00
3,080.0	14.43	216.68	3,021.0	-380.5	-317.4	495.4	0.00	0.00	0.00
3,120.0	14.43	216.68	3,059.8	-388.5	-323.4	505.4	0.00	0.00	0.00
3,160.0	14.43	216.68	3,098.5	-396.5	-329.3	515.3	0.00	0.00	0.00
3,200.0	14.43	216.68	3,137.3	-404.5	-335.3	525.3	0.00	0.00	0.00
3,240.0	14.43	216.68	3,176.0	-412.5	-341.3	535.2	0.00	0.00	0.00
3,280.0	14.43	216.68	3,214.7	-420.5	-347.2	545.2	0.00	0.00	0.00
3,320.0	14.43	216.68	3,253.5	-428.5	-353.2	555.2	0.00	0.00	0.00
3,360.0	14.43	216.68	3,292.2	-436.5	-359.1	565.1	0.00	0.00	0.00
3,400.0	14.43	216.68	3,331.0	-444.5	-365.1	575.1	0.00	0.00	0.00
3,440.0	14.43	216.68	3,369.7	-452.5	-371.0	585.1	0.00	0.00	0.00
3,480.0	14.43	216.68	3,408.4	-460.5	-377.0	595.0	0.00	0.00	0.00
3,520.0	14.43	216.68	3,447.2	-468.5	-382.9	605.0	0.00	0.00	0.00
3,560.0	14.43	216.68	3,485.9	-476.5	-388.9	614.9	0.00	0.00	0.00
3,600.0	14.43	216.68	3,524.6	-484.4	-394.8	624.9	0.00	0.00	0.00
3,640.0	14.43	216.68	3,563.4	-492.4	-400.8	634.9	0.00	0.00	0.00
3,680.0	14.43	216.68	3,602.1	-500.4	-406.7	644.8	0.00	0.00	0.00
3,720.0	14.43	216.68	3,640.9	-508.4	-412.7	654.8	0.00	0.00	0.00
3,760.0	14.43	216.68	3,679.6	-516.4	-418.7	664.8	0.00	0.00	0.00
3,800.0	14.43	216.68	3,718.3	-524.4	-424.6	674.7	0.00	0.00	0.00
3,840.0	14.43	216.68	3,757.1	-532.4	-430.6	684.7	0.00	0.00	0.00
3,880.0	14.43	216.68	3,795.8	-540.4	-436.5	694.6	0.00	0.00	0.00
3,920.0	14.43	216.68	3,834.6	-548.4	-442.5	704.6	0.00	0.00	0.00
3,960.0	14.43	216.68	3,873.3	-556.4	-448.4	714.6	0.00	0.00	0.00
4,000.0	14.43	216.68	3,912.0	-564.4	-454.4	724.5	0.00	0.00	0.00
4,040.0	14.43	216.68	3,950.8	-572.4	-460.3	734.5	0.00	0.00	0.00
4,080.0	14.43	216.68	3,989.5	-580.4	-466.3	744.5	0.00	0.00	0.00

Database: Landmark
 Company: NOBLE ENERGY INC WELD COUNTY CO
 Project: SEC.4-T4N-R65W
 Site: McClellan PC G04-18D Pad
 Sec.4-T4N-R65W
 Well: McClellan PC G04-18D
 Wellbore: Wellbore #1
 Design: Noble McClellan PC G04-18D Plan #2 (12-20-1

Local Co-ordinate Reference: Well McClellan PC G04-18D
 TVD Reference: WELL @ 4682.0ft (Original Well Elev)
 MD Reference: WELL @ 4682.0ft (Original Well Elev)
 North Reference: True

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 (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,120.0	14.43	216.68	4,028.2	-588.3	-472.2	754.4	0.00	0.00	0.00
4,160.0	14.43	216.68	4,067.0	-596.3	-478.2	764.4	0.00	0.00	0.00
4,200.0	14.43	216.68	4,105.7	-604.3	-484.1	774.3	0.00	0.00	0.00
4,240.0	14.43	216.68	4,144.5	-612.3	-490.1	784.3	0.00	0.00	0.00
4,280.0	14.43	216.68	4,183.2	-620.3	-496.1	794.3	0.00	0.00	0.00
4,320.0	14.43	216.68	4,221.9	-628.3	-502.0	804.2	0.00	0.00	0.00
4,360.0	14.43	216.68	4,260.7	-636.3	-508.0	814.2	0.00	0.00	0.00
4,386.3	14.43	216.68	4,286.2	-641.6	-511.9	820.8	0.00	0.00	0.00
4,400.0	14.16	216.68	4,299.4	-644.3	-513.9	824.1	2.00	-2.00	0.00
4,440.0	13.36	216.68	4,338.3	-651.9	-519.6	833.6	2.00	-2.00	0.00
4,480.0	12.56	216.68	4,377.3	-659.1	-524.9	842.6	2.00	-2.00	0.00
4,520.0	11.76	216.68	4,416.4	-665.8	-530.0	851.0	2.00	-2.00	0.00
4,560.0	10.96	216.68	4,455.6	-672.2	-534.7	858.9	2.00	-2.00	0.00
4,600.0	10.16	216.68	4,494.9	-678.0	-539.0	866.2	2.00	-2.00	0.00
4,640.0	9.36	216.68	4,534.3	-683.5	-543.1	873.0	2.00	-2.00	0.00
4,680.0	8.56	216.68	4,573.8	-688.5	-546.8	879.2	2.00	-2.00	0.00
4,720.0	7.76	216.68	4,613.4	-693.0	-550.2	884.9	2.00	-2.00	0.00
4,760.0	6.96	216.68	4,653.1	-697.1	-553.3	890.0	2.00	-2.00	0.00
4,800.0	6.16	216.68	4,692.8	-700.8	-556.0	894.6	2.00	-2.00	0.00
4,840.0	5.36	216.68	4,732.6	-704.0	-558.4	898.6	2.00	-2.00	0.00
4,880.0	4.56	216.68	4,772.5	-706.8	-560.5	902.0	2.00	-2.00	0.00
4,920.0	3.76	216.68	4,812.4	-709.1	-562.2	904.9	2.00	-2.00	0.00
4,960.0	2.96	216.68	4,852.3	-711.0	-563.6	907.3	2.00	-2.00	0.00
5,000.0	2.16	216.68	4,892.3	-712.4	-564.6	909.0	2.00	-2.00	0.00
5,040.0	1.36	216.68	4,932.3	-713.4	-565.4	910.3	2.00	-2.00	0.00
5,080.0	0.56	216.68	4,972.2	-713.9	-565.8	910.9	2.00	-2.00	0.00
5,107.8	0.00	0.00	5,000.0	-714.0	-565.9	911.1	2.00	-2.00	0.00
TARGET BHL 1275'FNL, 2565'FEL									
5,120.0	0.00	0.00	5,012.2	-714.0	-565.9	911.1	0.00	0.00	0.00
5,160.0	0.00	0.00	5,052.2	-714.0	-565.9	911.1	0.00	0.00	0.00
5,200.0	0.00	0.00	5,092.2	-714.0	-565.9	911.1	0.00	0.00	0.00
5,240.0	0.00	0.00	5,132.2	-714.0	-565.9	911.1	0.00	0.00	0.00
5,280.0	0.00	0.00	5,172.2	-714.0	-565.9	911.1	0.00	0.00	0.00
5,320.0	0.00	0.00	5,212.2	-714.0	-565.9	911.1	0.00	0.00	0.00
5,360.0	0.00	0.00	5,252.2	-714.0	-565.9	911.1	0.00	0.00	0.00
5,400.0	0.00	0.00	5,292.2	-714.0	-565.9	911.1	0.00	0.00	0.00
5,440.0	0.00	0.00	5,332.2	-714.0	-565.9	911.1	0.00	0.00	0.00
5,480.0	0.00	0.00	5,372.2	-714.0	-565.9	911.1	0.00	0.00	0.00
5,520.0	0.00	0.00	5,412.2	-714.0	-565.9	911.1	0.00	0.00	0.00
5,560.0	0.00	0.00	5,452.2	-714.0	-565.9	911.1	0.00	0.00	0.00
5,600.0	0.00	0.00	5,492.2	-714.0	-565.9	911.1	0.00	0.00	0.00
5,640.0	0.00	0.00	5,532.2	-714.0	-565.9	911.1	0.00	0.00	0.00
5,680.0	0.00	0.00	5,572.2	-714.0	-565.9	911.1	0.00	0.00	0.00
5,720.0	0.00	0.00	5,612.2	-714.0	-565.9	911.1	0.00	0.00	0.00
5,760.0	0.00	0.00	5,652.2	-714.0	-565.9	911.1	0.00	0.00	0.00
5,800.0	0.00	0.00	5,692.2	-714.0	-565.9	911.1	0.00	0.00	0.00
5,840.0	0.00	0.00	5,732.2	-714.0	-565.9	911.1	0.00	0.00	0.00
5,880.0	0.00	0.00	5,772.2	-714.0	-565.9	911.1	0.00	0.00	0.00
5,920.0	0.00	0.00	5,812.2	-714.0	-565.9	911.1	0.00	0.00	0.00
5,960.0	0.00	0.00	5,852.2	-714.0	-565.9	911.1	0.00	0.00	0.00
6,000.0	0.00	0.00	5,892.2	-714.0	-565.9	911.1	0.00	0.00	0.00
6,040.0	0.00	0.00	5,932.2	-714.0	-565.9	911.1	0.00	0.00	0.00
6,080.0	0.00	0.00	5,972.2	-714.0	-565.9	911.1	0.00	0.00	0.00

Database: Landmark
 Company: NOBLE ENERGY INC WELD COUNTY CO
 Project: SEC.4-T4N-R65W
 Site: McClellan PC G04-18D Pad
 Sec.4-T4N-R65W
 Well: McClellan PC G04-18D
 Wellbore: Wellbore #1
 Design: Noble McClellan PC G04-18D Plan #2 (12-20-1

Local Co-ordinate Reference: Well McClellan PC G04-18D
 TVD Reference: WELL @ 4682.0ft (Original Well Elev)
 MD Reference: WELL @ 4682.0ft (Original Well Elev)
 North Reference: True

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 (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
6,120.0	0.00	0.00	6,012.2	-714.0	-565.9	911.1	0.00	0.00	0.00
6,160.0	0.00	0.00	6,052.2	-714.0	-565.9	911.1	0.00	0.00	0.00
6,200.0	0.00	0.00	6,092.2	-714.0	-565.9	911.1	0.00	0.00	0.00
6,240.0	0.00	0.00	6,132.2	-714.0	-565.9	911.1	0.00	0.00	0.00
6,280.0	0.00	0.00	6,172.2	-714.0	-565.9	911.1	0.00	0.00	0.00
6,320.0	0.00	0.00	6,212.2	-714.0	-565.9	911.1	0.00	0.00	0.00
6,360.0	0.00	0.00	6,252.2	-714.0	-565.9	911.1	0.00	0.00	0.00
6,400.0	0.00	0.00	6,292.2	-714.0	-565.9	911.1	0.00	0.00	0.00
6,440.0	0.00	0.00	6,332.2	-714.0	-565.9	911.1	0.00	0.00	0.00
6,480.0	0.00	0.00	6,372.2	-714.0	-565.9	911.1	0.00	0.00	0.00
6,520.0	0.00	0.00	6,412.2	-714.0	-565.9	911.1	0.00	0.00	0.00
6,560.0	0.00	0.00	6,452.2	-714.0	-565.9	911.1	0.00	0.00	0.00
6,600.0	0.00	0.00	6,492.2	-714.0	-565.9	911.1	0.00	0.00	0.00
6,640.0	0.00	0.00	6,532.2	-714.0	-565.9	911.1	0.00	0.00	0.00
6,680.0	0.00	0.00	6,572.2	-714.0	-565.9	911.1	0.00	0.00	0.00
6,720.0	0.00	0.00	6,612.2	-714.0	-565.9	911.1	0.00	0.00	0.00
6,760.0	0.00	0.00	6,652.2	-714.0	-565.9	911.1	0.00	0.00	0.00
6,800.0	0.00	0.00	6,692.2	-714.0	-565.9	911.1	0.00	0.00	0.00
6,840.0	0.00	0.00	6,732.2	-714.0	-565.9	911.1	0.00	0.00	0.00
6,849.8	0.00	0.00	6,742.0	-714.0	-565.9	911.1	0.00	0.00	0.00
TARGET CIRCLE 1275'FNL, 2565'FEL									
6,880.0	0.00	0.00	6,772.2	-714.0	-565.9	911.1	0.00	0.00	0.00
6,920.0	0.00	0.00	6,812.2	-714.0	-565.9	911.1	0.00	0.00	0.00
6,960.0	0.00	0.00	6,852.2	-714.0	-565.9	911.1	0.00	0.00	0.00
7,000.0	0.00	0.00	6,892.2	-714.0	-565.9	911.1	0.00	0.00	0.00
7,040.0	0.00	0.00	6,932.2	-714.0	-565.9	911.1	0.00	0.00	0.00
7,080.0	0.00	0.00	6,972.2	-714.0	-565.9	911.1	0.00	0.00	0.00
7,120.0	0.00	0.00	7,012.2	-714.0	-565.9	911.1	0.00	0.00	0.00
7,160.0	0.00	0.00	7,052.2	-714.0	-565.9	911.1	0.00	0.00	0.00
7,200.0	0.00	0.00	7,092.2	-714.0	-565.9	911.1	0.00	0.00	0.00
7,240.0	0.00	0.00	7,132.2	-714.0	-565.9	911.1	0.00	0.00	0.00
7,280.0	0.00	0.00	7,172.2	-714.0	-565.9	911.1	0.00	0.00	0.00
7,319.8	0.00	0.00	7,212.0	-714.0	-565.9	911.1	0.00	0.00	0.00
HARDLINE 75'W OF BHL									

Targets

Target Name	- hit/miss target	- Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
HARDLINE 75'W OF I			0.00	0.00	7,212.0	-814.0	-640.9	1,369,504.41	3,231,856.27	40.344706	-104.668179
- plan misses target center by 125.0ft at 7319.8ft MD (7212.0 TVD, -714.0 N, -565.9 E)											
- Polygon											
Point 1					7,212.0	0.0	0.0	1,369,504.41	3,231,856.27		
Point 2					7,212.0	200.0	0.0	1,369,704.39	3,231,854.38		
TARGET CIRCLE 1275'F			0.00	0.00	6,742.0	-714.0	-565.9	1,369,605.07	3,231,930.36	40.344980	-104.667910
- plan hits target center											
- Circle (radius 75.0)											
TARGET BHL 1275'F			0.00	0.00	5,000.0	-714.0	-565.9	1,369,605.07	3,231,930.36	40.344980	-104.667910
- plan hits target center											
- Point											

Database:	Landmark	Local Co-ordinate Reference:	Well McClellan PC G04-18D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 4682.0ft (Original Well Elev)
Project:	SEC.4-T4N-R65W	MD Reference:	WELL @ 4682.0ft (Original Well Elev)
Site:	McClellan PC G04-18D Pad	North Reference:	True
	Sec.4-T4N-R65W		
Well:	McClellan PC G04-18D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Noble McClellan PC G04-18D Plan #2 (12-20-1		