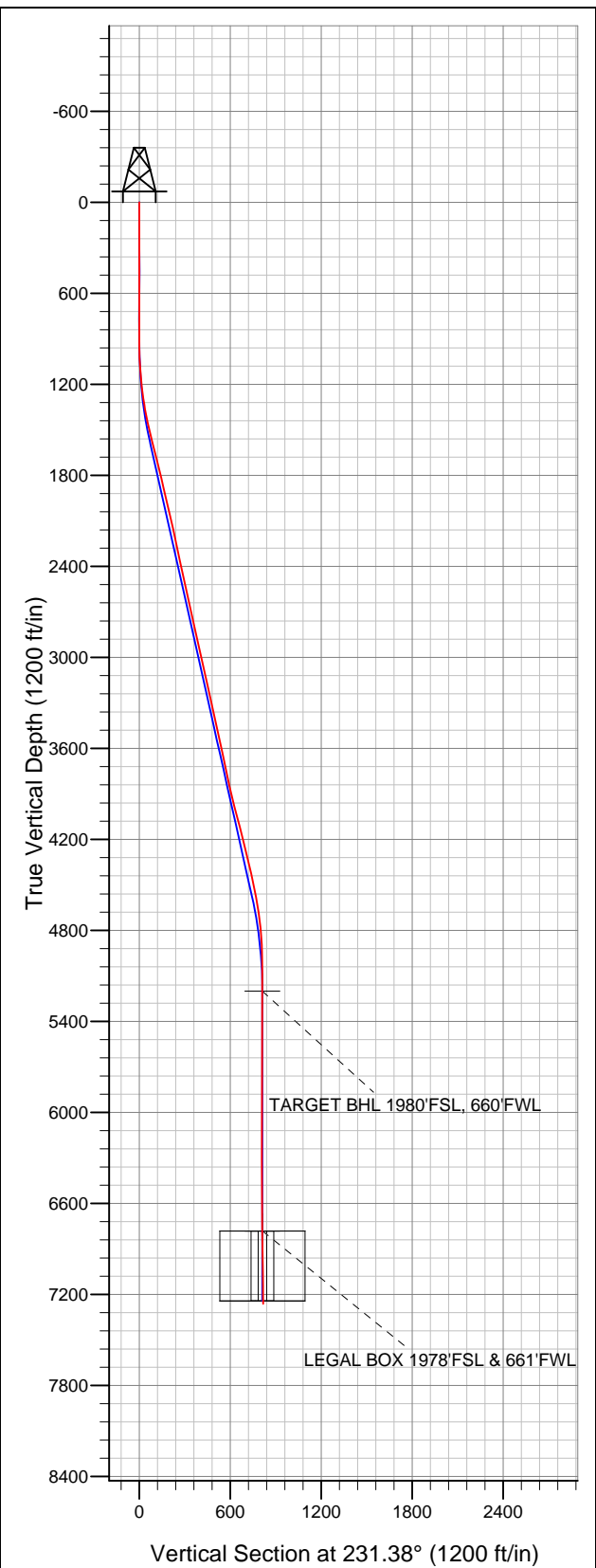


Well Name: Cecil USX AB35-12D

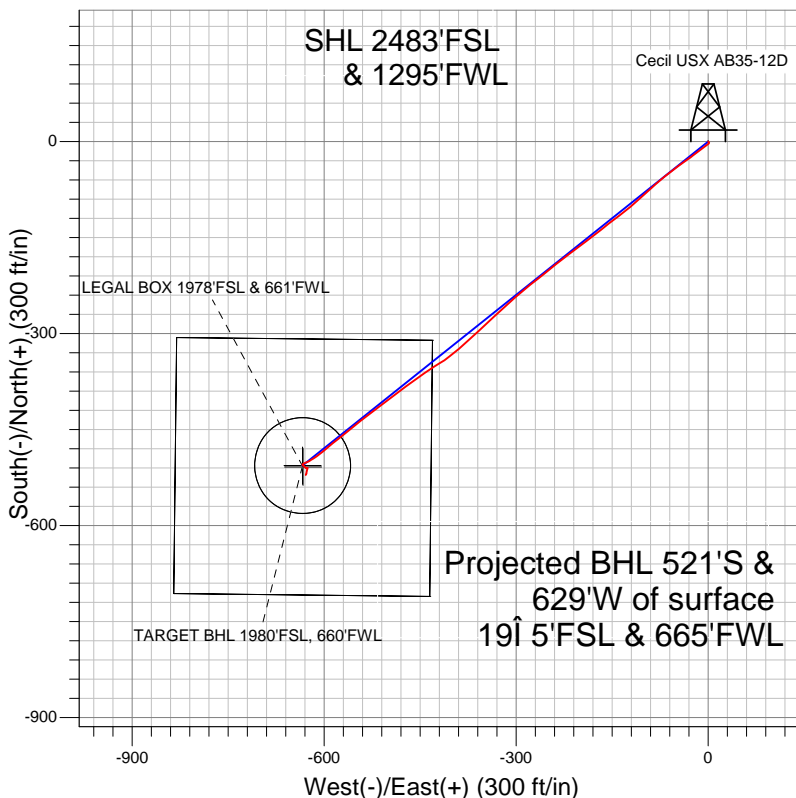
Surface Location: Cecil USX AB35-12D Pad Sec.35-T7N-R64W
 North American Datum 1983 US State Plane 1983 Colorado Northern Zone
 Ground Elevation: 4835.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1437192.73	3271832.76	40.529380	-104.522090	

Original Well Elev WELL @ 4848.0ft (Original Well Elev)



NOBLE ENERGY INC WELD COUNTY CO



LEGEND

- Survey #1
- Cecil USX AB35-12D, Wellbore #1, Noble Cecil USX AB35-12D Plan #1 2-11-11 V0
- Wellbore #1

Final Survey Plot

Projected Final Survey -
 7351' MD & 7263' TVD @ 816' VS
 0.50 deg Inc 203.40 deg AZ

Project: SEC.35-T7N-R64W
 Site: Cecil USX AB35-12D Pad Sec.35-T7N-R64W
 Well: Cecil USX AB35-12D
 Plan: Wellbore #1



NOBLE ENERGY INC WELD COUNTY CO

SEC.35-T7N-R64W

Cecil USX AB35-12D Pad Sec.35-T7N-R64W

Cecil USX AB35-12D

Wellbore #1

Survey: Survey #1

Standard Survey Report

03 January, 2012



Company:	NOBLE ENERGY INC WELD COUNTY CO	Local Co-ordinate Reference:	Well Cecil USX AB35-12D
Project:	SEC.35-T7N-R64W	TVD Reference:	WELL @ 4848.0ft (Original Well Elev)
Site:	Cecil USX AB35-12D Pad Sec.35-T7N-R64W	MD Reference:	WELL @ 4848.0ft (Original Well Elev)
Well:	Cecil USX AB35-12D	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Project	SEC.35-T7N-R64W, 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	Cecil USX AB35-12D Pad Sec.35-T7N-R64W		
Site Position:		Northing:	1,437,192.74 ft
From:	Lat/Long	Easting:	3,271,832.76 ft
Position Uncertainty:	0.0 ft	Slot Radius:	"
		Latitude:	40.529380
		Longitude:	-104.522090
		Grid Convergence:	0.63 °

Well	Cecil USX AB35-12D		
Well Position	+N/-S	0.0 ft	Northing: 1,437,192.73 ft
	+E/-W	0.0 ft	Easting: 3,271,832.76 ft
Position Uncertainty	0.0 ft	Wellhead Elevation:	ft
		Latitude:	40.529380
		Longitude:	-104.522090
		Ground Level:	4,835.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/9/2011	8.68	67.18	53,174

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	231.38	

Survey Program	Date	1/3/2012			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
930.0	7,351.0	Survey #1 (Wellbore #1)	MWD	MWD - Standard	

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	
930.0	0.30	143.60	930.0	-2.0	1.4	0.1	0.03	0.03	0.00	
961.0	0.60	186.70	961.0	-2.2	1.5	0.2	1.40	0.97	139.03	
1,054.0	2.90	231.90	1,053.9	-4.1	-0.4	2.9	2.70	2.47	48.60	
1,148.0	4.60	233.60	1,147.7	-7.8	-5.3	9.1	1.81	1.81	1.81	
1,241.0	7.40	231.90	1,240.2	-13.7	-13.1	18.8	3.02	3.01	-1.83	
1,334.0	8.90	232.70	1,332.3	-21.8	-23.5	32.0	1.62	1.61	0.86	
1,428.0	11.40	235.40	1,424.8	-31.5	-36.9	48.5	2.71	2.66	2.87	
1,522.0	14.00	233.30	1,516.5	-43.5	-53.7	69.1	2.81	2.77	-2.23	
1,616.0	14.20	229.20	1,607.7	-57.9	-71.5	92.0	1.08	0.21	-4.36	
1,709.0	14.20	228.70	1,697.8	-72.9	-88.7	114.8	0.13	0.00	-0.54	
1,803.0	13.50	227.30	1,789.1	-87.9	-105.5	137.3	0.83	-0.74	-1.49	
1,897.0	12.80	230.10	1,880.6	-102.0	-121.5	158.6	1.01	-0.74	2.98	

Company:	NOBLE ENERGY INC WELD COUNTY CO	Local Co-ordinate Reference:	Well Cecil USX AB35-12D
Project:	SEC.35-T7N-R64W	TVD Reference:	WELL @ 4848.0ft (Original Well Elev)
Site:	Cecil USX AB35-12D Pad Sec.35-T7N-R64W	MD Reference:	WELL @ 4848.0ft (Original Well Elev)
Well:	Cecil USX AB35-12D	North Reference:	True
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)
1,990.0	13.50	232.90	1,971.2	-115.2	-138.1	179.8	1.02	0.75	3.01
2,084.0	13.50	232.60	2,062.6	-128.5	-155.5	201.7	0.07	0.00	-0.32
2,177.0	12.50	231.30	2,153.2	-141.4	-172.0	222.6	1.12	-1.08	-1.40
2,271.0	11.90	231.50	2,245.1	-153.7	-187.5	242.5	0.64	-0.64	0.21
2,365.0	11.80	234.10	2,337.1	-165.4	-202.9	261.8	0.58	-0.11	2.77
2,458.0	12.00	234.30	2,428.1	-176.6	-218.5	280.9	0.22	0.22	0.22
2,552.0	11.90	231.70	2,520.0	-188.3	-234.0	300.4	0.58	-0.11	-2.77
2,646.0	12.50	229.70	2,611.9	-200.9	-249.4	320.3	0.78	0.64	-2.13
2,740.0	13.40	231.90	2,703.5	-214.2	-265.7	341.3	1.09	0.96	2.34
2,833.0	12.90	230.30	2,794.1	-227.5	-282.2	362.5	0.66	-0.54	-1.72
2,927.0	12.80	229.60	2,885.7	-241.0	-298.2	383.4	0.20	-0.11	-0.74
3,022.0	12.50	228.50	2,978.4	-254.6	-313.9	404.2	0.40	-0.32	-1.16
3,115.0	12.50	226.90	3,069.2	-268.1	-328.8	424.2	0.37	0.00	-1.72
3,208.0	11.70	226.40	3,160.2	-281.5	-343.0	443.7	0.87	-0.86	-0.54
3,302.0	13.40	227.80	3,251.9	-295.4	-357.9	464.0	1.84	1.81	1.49
3,395.0	12.80	227.10	3,342.5	-309.7	-373.5	485.1	0.67	-0.65	-0.75
3,493.0	12.20	230.30	3,438.2	-323.7	-389.4	506.2	0.93	-0.61	3.27
3,585.0	12.00	231.30	3,528.1	-335.9	-404.3	525.5	0.31	-0.22	1.09
3,678.0	12.00	239.10	3,619.1	-346.9	-420.2	544.8	1.74	0.00	8.39
3,772.0	11.40	234.80	3,711.1	-357.2	-436.1	563.7	1.13	-0.64	-4.57
3,865.0	12.50	235.20	3,802.1	-368.3	-451.9	582.9	1.19	1.18	0.43
3,959.0	13.60	234.30	3,893.7	-380.5	-469.2	604.1	1.19	1.17	-0.96
4,052.0	14.50	232.60	3,983.9	-394.0	-487.4	626.7	1.06	0.97	-1.83
4,145.0	15.30	232.40	4,073.8	-408.5	-506.3	650.6	0.86	0.86	-0.22
4,239.0	14.20	233.10	4,164.7	-423.0	-525.4	674.5	1.19	-1.17	0.74
4,333.0	13.40	232.00	4,256.0	-436.7	-543.2	696.9	0.90	-0.85	-1.17
4,426.0	13.20	230.40	4,346.5	-450.1	-559.9	718.3	0.45	-0.22	-1.72
4,520.0	13.10	231.90	4,438.0	-463.5	-576.5	739.7	0.38	-0.11	1.60
4,614.0	11.00	229.70	4,529.9	-475.9	-591.7	759.3	2.29	-2.23	-2.34
4,707.0	10.00	230.40	4,621.4	-486.7	-604.7	776.3	1.08	-1.08	0.75
4,802.0	8.00	238.50	4,715.2	-495.5	-616.7	791.1	2.49	-2.11	8.53
4,895.0	5.50	246.30	4,807.6	-500.6	-626.3	801.8	2.86	-2.69	8.39
4,988.0	2.00	243.60	4,900.4	-503.1	-631.9	807.7	3.77	-3.76	-2.90
5,081.0	1.00	210.40	4,993.3	-504.6	-633.7	810.1	1.38	-1.08	-35.70
5,175.0	1.00	131.00	5,087.3	-505.8	-633.5	810.7	1.36	0.00	-84.47
5,269.0	0.70	118.10	5,181.3	-506.6	-632.4	810.3	0.38	-0.32	-13.72
5,287.7	0.66	119.66	5,200.0	-506.7	-632.2	810.2	0.24	-0.22	8.35
TARGET BHL 1980'FSL, 660'FWL									
5,363.0	0.50	128.50	5,275.3	-507.1	-631.6	810.0	0.24	-0.21	11.74
5,458.0	0.40	162.20	5,370.3	-507.7	-631.1	810.0	0.29	-0.11	35.47
5,551.0	0.30	131.10	5,463.3	-508.2	-630.9	810.1	0.23	-0.11	-33.44
5,641.0	0.70	132.20	5,553.3	-508.7	-630.3	810.0	0.44	0.44	1.22
5,734.0	0.60	138.20	5,646.3	-509.5	-629.5	809.8	0.13	-0.11	6.45
5,827.0	0.40	140.60	5,739.3	-510.1	-629.0	809.8	0.22	-0.22	2.58
5,921.0	0.30	110.90	5,833.3	-510.4	-628.6	809.7	0.22	-0.11	-31.60
6,015.0	0.40	88.60	5,927.3	-510.5	-628.0	809.3	0.18	0.11	-23.72
6,108.0	0.70	64.30	6,020.3	-510.2	-627.2	808.5	0.40	0.32	-26.13
6,201.0	0.20	57.30	6,113.3	-509.9	-626.5	807.8	0.54	-0.54	-7.53
6,294.0	0.10	94.20	6,206.3	-509.8	-626.3	807.5	0.14	-0.11	39.68
6,388.0	0.30	101.30	6,300.3	-509.9	-626.0	807.3	0.21	0.21	7.55
6,483.0	0.40	192.80	6,395.3	-510.2	-625.8	807.4	0.53	0.11	96.32
6,577.0	0.40	194.90	6,489.3	-510.9	-626.0	807.9	0.02	0.00	2.23
6,670.0	0.60	197.80	6,582.3	-511.7	-626.2	808.6	0.22	0.22	3.12
6,764.0	0.90	198.30	6,676.3	-512.8	-626.6	809.6	0.32	0.32	0.53

Company:	NOBLE ENERGY INC WELD COUNTY CO	Local Co-ordinate Reference:	Well Cecil USX AB35-12D
Project:	SEC.35-T7N-R64W	TVD Reference:	WELL @ 4848.0ft (Original Well Elev)
Site:	Cecil USX AB35-12D Pad Sec.35-T7N-R64W	MD Reference:	WELL @ 4848.0ft (Original Well Elev)
Well:	Cecil USX AB35-12D	North Reference:	True
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)	
6,858.0	1.00	197.20	6,770.2	-514.3	-627.1	810.9	0.11	0.11	-1.17	
6,870.7	1.01	196.35	6,782.9	-514.5	-627.1	811.1	0.16	0.10	-6.69	
LEGAL BOX 1978'FSL & 661'FWL - TARGET CIRCLE 1980'FSL & 660'FWL										
6,952.0	1.10	191.40	6,864.2	-516.0	-627.5	812.3	0.16	0.11	-6.09	
7,045.0	1.30	177.20	6,957.2	-517.9	-627.6	813.6	0.38	0.22	-15.27	
7,139.0	0.60	219.20	7,051.2	-519.4	-627.9	814.7	1.00	-0.74	44.68	
7,232.0	0.50	203.00	7,144.2	-520.1	-628.3	815.5	0.20	-0.11	-17.42	
7,299.0	0.50	203.40	7,211.2	-520.6	-628.6	816.1	0.01	0.00	0.60	
7,351.0	0.50	203.40	7,263.2	-521.1	-628.7	816.5	0.00	0.00	0.00	

Checked By: _____	Approved By: _____	Date: _____
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