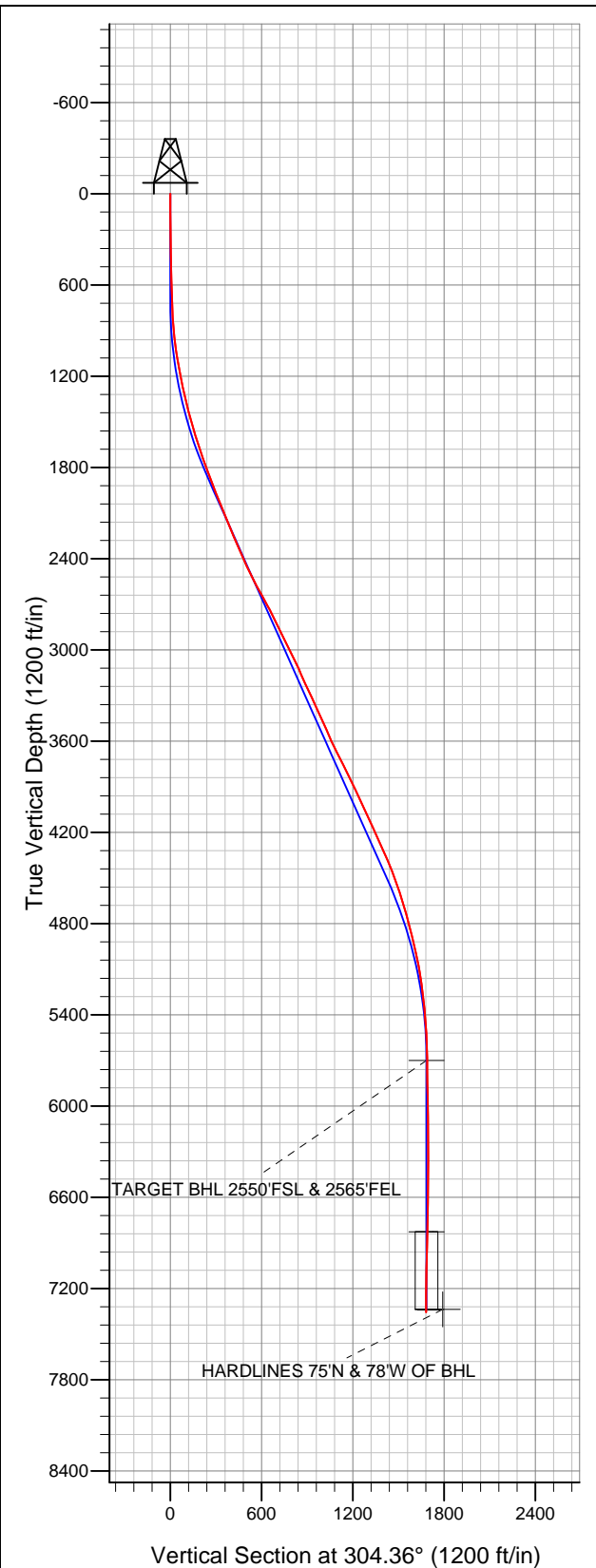


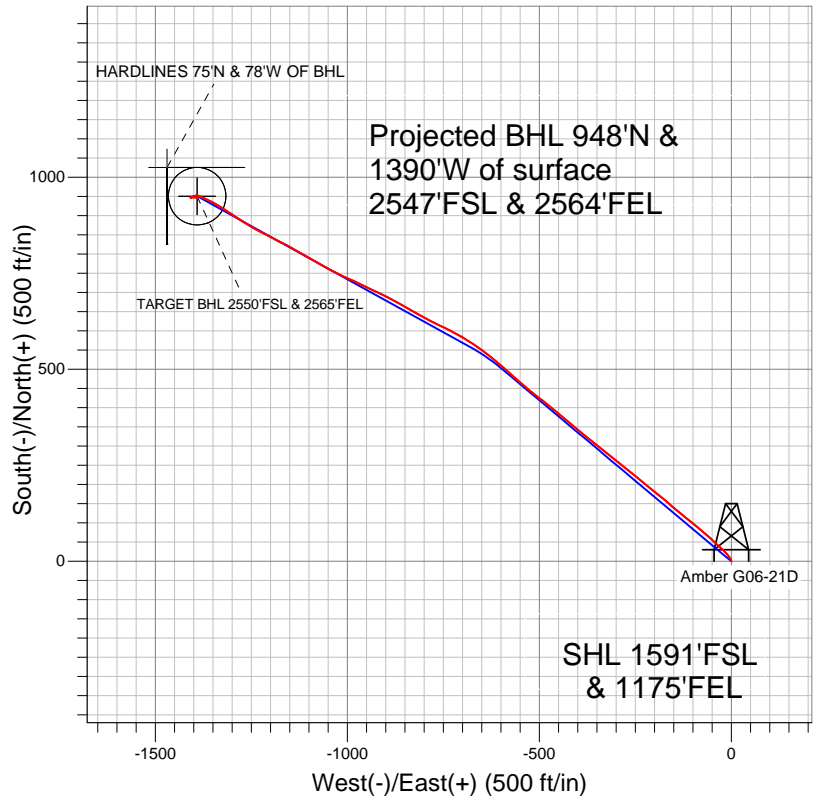
Well Name: Amber G06-21D

Surface Location: Amber G06-22D Pad Sec.6-T4N-R65W
North American Datum 1983 US State Plane 1983Colorado Northern Zone
Ground Elevation: 4684.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1367254.95	3222786.32	40.338760	-104.700790	
Original Well Elev		WELL @ 4697.0ft (Original Well Elev)				



NOBLE ENERGY INC WELD COUNTY CO



- LEGEND**
- Wellbore #1
 - Amber G06-21D, Wellbore #1, Noble Amber G06-21D Plan #2 (9-09-11) V0
 - Survey #1

Final Survey Plot

Projected Final Survey -
7685'MD & 7356'TVD @ 1683'VS
0.40 deg Inc 60.00 deg AZ

Project: SEC.6-T4N-R65W
Site: Amber G06-22D Pad Sec.6-T4N-R65W
Well: Amber G06-21D
Plan: Wellbore #1



NOBLE ENERGY INC WELD COUNTY CO

SEC.6-T4N-R65W

Amber G06-22D Pad Sec.6-T4N-R65W

Amber G06-21D

Wellbore #1

Survey: Survey #1

Standard Survey Report

08 May, 2012



Company:	NOBLE ENERGY INC WELD COUNTY CO	Local Co-ordinate Reference:	Well Amber G06-21D
Project:	SEC.6-T4N-R65W	TVD Reference:	WELL @ 4697.0ft (Original Well Elev)
Site:	Amber G06-22D Pad Sec.6-T4N-R65W	MD Reference:	WELL @ 4697.0ft (Original Well Elev)
Well:	Amber G06-21D	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Project	SEC.6-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	Amber G06-22D Pad Sec.6-T4N-R65W		
Site Position:		Northing:	1,367,298.61 ft
From:	Lat/Long	Easting:	3,222,777.56 ft
Position Uncertainty:	0.0 ft	Slot Radius:	"
		Latitude:	40.338880
		Longitude:	-104.700820
		Grid Convergence:	0.52 °

Well	Amber G06-21D		
Well Position	+N/-S	0.0 ft	Northing: 1,367,254.95 ft
	+E/-W	0.0 ft	Easting: 3,222,786.32 ft
Position Uncertainty	0.0 ft	Wellhead Elevation:	ft
		Latitude:	40.338760
		Longitude:	-104.700790
		Ground Level:	4,684.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	9/12/2011	8.79	67.00	53,082

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 (°)	
	5,700.0	0.0	0.0	304.36	

Survey Program	Date	5/8/2012			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
114.0	7,685.0	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	
114.0	0.40	4.10	114.0	0.4	0.0	0.2	0.35	0.35	0.00	
206.0	0.90	345.80	206.0	1.4	-0.1	0.9	0.58	0.54	-19.89	
298.0	1.30	338.10	298.0	3.1	-0.7	2.3	0.46	0.43	-8.37	
390.0	1.10	339.70	390.0	4.9	-1.4	3.9	0.22	-0.22	1.74	
482.0	1.50	323.30	481.9	6.7	-2.4	5.8	0.59	0.43	-17.83	
574.0	1.60	329.30	573.9	8.7	-3.8	8.1	0.21	0.11	6.52	
663.0	1.60	328.60	662.9	10.9	-5.1	10.3	0.02	0.00	-0.79	
706.0	1.60	325.20	705.8	11.9	-5.7	11.4	0.22	0.00	-7.91	
787.0	3.10	321.40	786.8	14.5	-7.7	14.6	1.86	1.85	-4.69	
869.0	4.90	317.50	868.6	18.8	-11.5	20.1	2.22	2.20	-4.76	
951.0	6.80	317.30	950.1	25.0	-17.1	28.3	2.32	2.32	-0.24	
1,032.0	8.40	311.20	1,030.4	32.4	-24.9	38.8	2.21	1.98	-7.53	

Company:	NOBLE ENERGY INC WELD COUNTY CO	Local Co-ordinate Reference:	Well Amber G06-21D
Project:	SEC.6-T4N-R65W	TVD Reference:	WELL @ 4697.0ft (Original Well Elev)
Site:	Amber G06-22D Pad Sec.6-T4N-R65W	MD Reference:	WELL @ 4697.0ft (Original Well Elev)
Well:	Amber G06-21D	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)	
1,114.0	9.80	314.30	1,111.4	41.2	-34.4	51.6	1.81	1.71	3.78	
1,196.0	10.80	313.10	1,192.1	51.4	-45.0	66.1	1.25	1.22	-1.46	
1,277.0	12.30	312.80	1,271.4	62.4	-56.8	82.1	1.85	1.85	-0.37	
1,359.0	13.90	309.10	1,351.3	74.5	-70.9	100.6	2.20	1.95	-4.51	
1,441.0	14.70	309.40	1,430.8	87.4	-86.6	120.8	0.98	0.98	0.37	
1,522.0	15.70	309.80	1,508.9	100.9	-102.9	141.9	1.24	1.23	0.49	
1,604.0	16.90	309.90	1,587.6	115.6	-120.6	164.8	1.46	1.46	0.12	
1,686.0	18.70	308.00	1,665.7	131.4	-140.1	189.8	2.31	2.20	-2.32	
1,767.0	19.10	311.90	1,742.3	148.2	-160.2	215.9	1.64	0.49	4.81	
1,849.0	20.50	308.70	1,819.5	166.2	-181.4	243.5	2.16	1.71	-3.90	
1,930.0	21.10	308.70	1,895.2	184.2	-203.8	272.2	0.74	0.74	0.00	
2,012.0	21.60	310.30	1,971.6	203.1	-226.9	301.9	0.94	0.61	1.95	
2,094.0	22.40	308.90	2,047.6	222.7	-250.5	332.5	1.17	0.98	-1.71	
2,175.0	23.00	309.40	2,122.3	242.5	-274.8	363.7	0.78	0.74	0.62	
2,257.0	21.90	307.10	2,198.1	261.9	-299.4	394.9	1.72	-1.34	-2.80	
2,339.0	22.50	308.90	2,274.0	280.9	-323.8	425.8	1.11	0.73	2.20	
2,420.0	23.60	309.40	2,348.6	301.0	-348.4	457.4	1.38	1.36	0.62	
2,502.0	24.20	308.90	2,423.5	321.9	-374.1	490.5	0.77	0.73	-0.61	
2,584.0	27.30	309.90	2,497.4	344.5	-401.6	526.0	3.82	3.78	1.22	
2,665.0	28.30	310.10	2,569.0	368.8	-430.6	563.6	1.24	1.23	0.25	
2,747.0	28.50	308.90	2,641.2	393.6	-460.7	602.4	0.74	0.24	-1.46	
2,828.0	28.50	309.40	2,712.4	418.0	-490.6	641.0	0.29	0.00	0.62	
2,910.0	25.90	307.10	2,785.3	441.3	-520.0	678.3	3.42	-3.17	-2.80	
2,992.0	26.40	311.40	2,858.9	464.1	-548.0	714.3	2.39	0.61	5.24	
3,073.0	26.90	312.20	2,931.3	488.3	-575.1	750.3	0.76	0.62	0.99	
3,155.0	26.30	310.80	3,004.6	512.7	-602.6	786.8	1.06	-0.73	-1.71	
3,237.0	25.90	307.70	3,078.3	535.5	-630.5	822.7	1.73	-0.49	-3.78	
3,318.0	23.70	305.90	3,151.8	555.9	-657.7	856.6	2.87	-2.72	-2.22	
3,400.0	24.20	301.70	3,226.7	574.4	-685.3	889.9	2.17	0.61	-5.12	
3,482.0	25.20	299.20	3,301.2	591.7	-714.9	924.1	1.76	1.22	-3.05	
3,563.0	25.60	294.80	3,374.4	607.5	-745.8	958.5	2.38	0.49	-5.43	
3,645.0	24.70	296.90	3,448.6	622.6	-777.2	993.0	1.55	-1.10	2.56	
3,727.0	23.60	299.20	3,523.5	638.4	-806.8	1,026.3	1.77	-1.34	2.80	
3,808.0	24.30	300.80	3,597.5	654.8	-835.3	1,059.1	1.18	0.86	1.98	
3,890.0	26.60	298.20	3,671.5	672.2	-865.9	1,094.2	3.12	2.80	-3.17	
3,971.0	26.90	295.90	3,743.9	688.7	-898.4	1,130.4	1.33	0.37	-2.84	
4,053.0	26.80	296.60	3,817.0	705.1	-931.6	1,167.0	0.40	-0.12	0.85	
4,135.0	26.60	295.90	3,890.3	721.4	-964.7	1,203.5	0.45	-0.24	-0.85	
4,216.0	25.40	294.00	3,963.1	736.4	-996.9	1,238.5	1.80	-1.48	-2.35	
4,298.0	24.90	296.10	4,037.3	751.2	-1,028.4	1,272.9	1.25	-0.61	2.56	
4,380.0	23.70	297.50	4,112.0	766.4	-1,058.5	1,306.4	1.62	-1.46	1.71	
4,461.0	25.00	302.40	4,185.8	783.0	-1,087.4	1,339.6	2.96	1.60	6.05	
4,543.0	24.60	298.70	4,260.3	800.5	-1,117.0	1,373.9	1.95	-0.49	-4.51	
4,625.0	24.20	298.70	4,334.9	816.8	-1,146.8	1,407.6	0.49	-0.49	0.00	
4,706.0	22.00	297.50	4,409.5	831.8	-1,174.8	1,439.2	2.78	-2.72	-1.48	
4,788.0	21.20	296.90	4,485.7	845.6	-1,201.6	1,469.2	1.01	-0.98	-0.73	
4,869.0	19.80	298.90	4,561.6	858.8	-1,226.7	1,497.4	1.93	-1.73	2.47	
4,951.0	16.90	298.70	4,639.4	871.3	-1,249.3	1,523.1	3.54	-3.54	-0.24	
5,033.0	16.00	302.40	4,718.0	883.1	-1,269.3	1,546.2	1.68	-1.10	4.51	
5,114.0	14.00	303.10	4,796.3	894.4	-1,286.9	1,567.2	2.48	-2.47	0.86	
5,196.0	14.40	304.00	4,875.8	905.5	-1,303.7	1,587.3	0.56	0.49	1.10	
5,278.0	13.10	303.10	4,955.4	916.3	-1,319.9	1,606.8	1.61	-1.59	-1.10	
5,359.0	11.60	302.70	5,034.5	925.7	-1,334.5	1,624.1	1.85	-1.85	-0.49	
5,441.0	9.80	298.20	5,115.1	933.4	-1,347.6	1,639.3	2.42	-2.20	-5.49	

Company:	NOBLE ENERGY INC WELD COUNTY CO	Local Co-ordinate Reference:	Well Amber G06-21D
Project:	SEC.6-T4N-R65W	TVD Reference:	WELL @ 4697.0ft (Original Well Elev)
Site:	Amber G06-22D Pad Sec.6-T4N-R65W	MD Reference:	WELL @ 4697.0ft (Original Well Elev)
Well:	Amber G06-21D	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)
5,523.0	8.30	295.50	5,196.1	939.3	-1,359.1	1,652.1	1.90	-1.83	-3.29
5,604.0	6.80	294.10	5,276.4	943.8	-1,368.7	1,662.5	1.87	-1.85	-1.73
5,686.0	5.50	294.80	5,357.9	947.4	-1,376.7	1,671.2	1.59	-1.59	0.85
5,768.0	4.60	292.40	5,439.6	950.3	-1,383.3	1,678.3	1.13	-1.10	-2.93
5,849.0	3.40	283.20	5,520.4	952.1	-1,388.7	1,683.7	1.68	-1.48	-11.36
5,931.0	1.80	266.70	5,602.3	952.6	-1,392.3	1,687.0	2.13	-1.95	-20.12
6,012.0	1.90	249.30	5,683.3	952.0	-1,394.9	1,688.8	0.70	0.12	-21.48
6,028.7	1.72	250.01	5,699.9	951.8	-1,395.3	1,689.1	1.11	-1.10	4.26
TARGET BHL 2550'FSL & 2565'FEL									
6,094.0	1.00	255.30	5,765.2	951.4	-1,396.8	1,690.0	1.11	-1.10	8.10
6,176.0	1.30	258.80	5,847.2	951.0	-1,398.4	1,691.1	0.38	0.37	4.27
6,257.0	1.40	266.00	5,928.2	950.7	-1,400.3	1,692.6	0.24	0.12	8.89
6,339.0	1.40	232.60	6,010.2	950.1	-1,402.1	1,693.7	0.98	0.00	-40.73
6,421.0	1.50	228.40	6,092.1	948.7	-1,403.7	1,694.2	0.18	0.12	-5.12
6,502.0	1.70	226.50	6,173.1	947.2	-1,405.4	1,694.7	0.26	0.25	-2.35
6,584.0	1.10	269.30	6,255.1	946.4	-1,407.0	1,695.6	1.42	-0.73	52.20
6,666.0	1.10	329.30	6,337.1	947.0	-1,408.2	1,697.0	1.34	0.00	73.17
6,747.0	0.60	50.00	6,418.1	948.0	-1,408.3	1,697.6	1.44	-0.62	99.63
6,829.0	1.10	83.20	6,500.1	948.3	-1,407.2	1,696.9	0.83	0.61	40.49
6,910.0	1.40	92.50	6,581.0	948.4	-1,405.4	1,695.5	0.45	0.37	11.48
6,992.0	1.40	93.90	6,663.0	948.3	-1,403.4	1,693.7	0.04	0.00	1.71
7,074.0	1.40	95.80	6,745.0	948.1	-1,401.4	1,692.0	0.06	0.00	2.32
7,155.0	1.40	100.80	6,826.0	947.8	-1,399.5	1,690.2	0.15	0.00	6.17
7,156.2	1.40	100.73	6,827.2	947.8	-1,399.4	1,690.2	0.14	-0.01	-5.60
TARGET CIRCLE 2550'FSL & 2565'FEL									
7,237.0	1.40	96.20	6,907.9	947.5	-1,397.5	1,688.4	0.14	0.00	-5.61
7,319.0	1.40	93.20	6,989.9	947.4	-1,395.5	1,686.7	0.09	0.00	-3.66
7,400.0	1.10	93.20	7,070.9	947.3	-1,393.7	1,685.2	0.37	-0.37	0.00
7,482.0	0.90	90.00	7,152.9	947.2	-1,392.3	1,684.0	0.25	-0.24	-3.90
7,564.0	0.60	69.00	7,234.9	947.4	-1,391.3	1,683.2	0.49	-0.37	-25.61
7,640.0	0.50	64.20	7,310.9	947.7	-1,390.6	1,682.8	0.14	-0.13	-6.32
7,665.9	0.44	62.02	7,336.7	947.8	-1,390.4	1,682.7	0.23	-0.22	-8.44
HARDLINES 75'N & 78'W OF BHL									
7,685.0	0.40	60.00	7,355.9	947.8	-1,390.3	1,682.6	0.23	-0.22	-10.55

Checked By: _____ Approved By: _____ Date: _____