

Well Name: **Becca D03-32D**

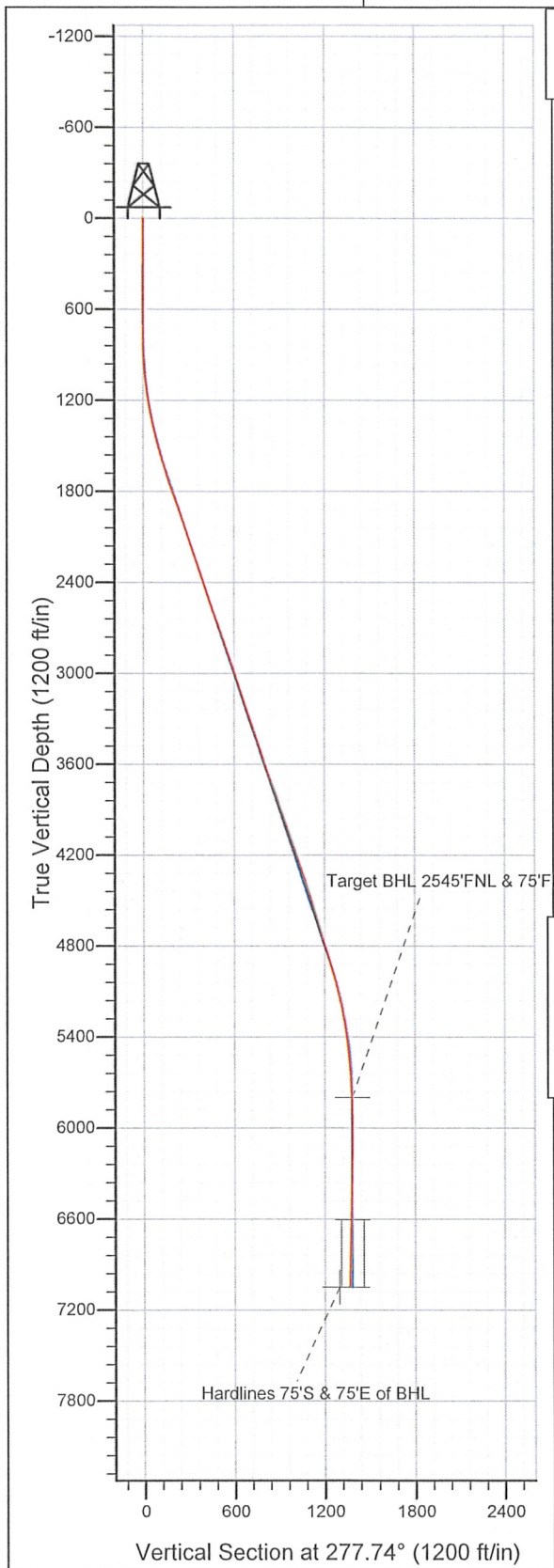
Surface Location: Becca D03-32D Pad Sec.3-T3N-R64W

North American Datum 1983 US State Plane 1983 Colorado Northern Zone

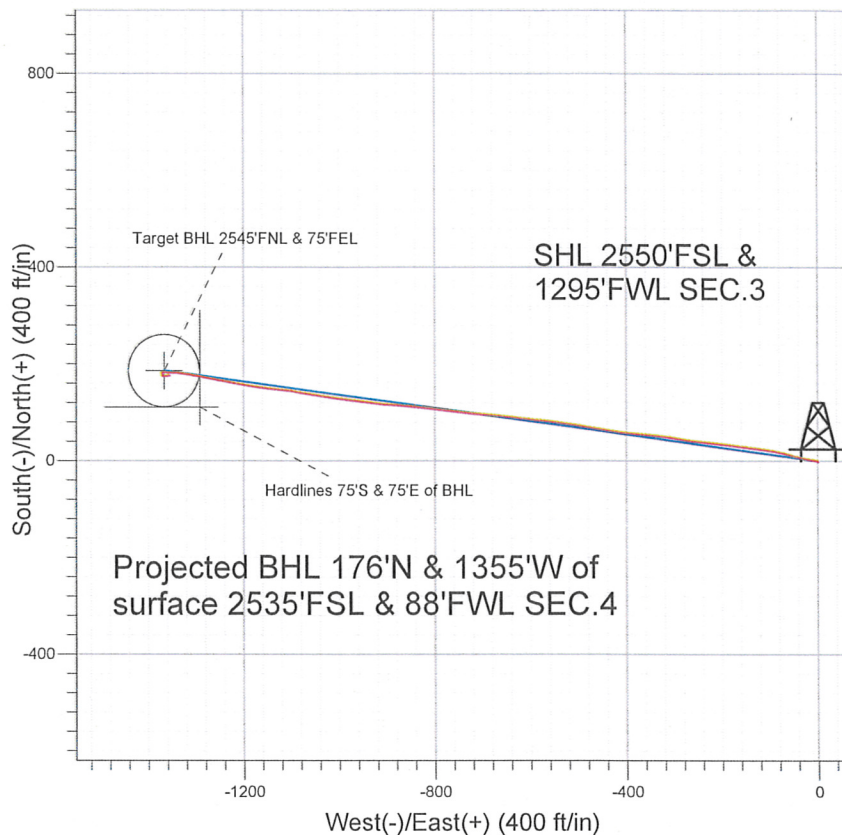
Ground Elevation: 4708.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1336909.36	3267392.50	40.254250	-104.541960	

Original Well Elev WELL @ 4721.0ft (Original Well Elev)



NOBLE ENERGY INC WELD COUNTY CO



LEGEND

- Becca D03-32D, Wellbore #1, Noble Becca D03-32D Plan #1 (8-18-10) V0
- Wellbore #1
- Survey #1

Final Survey Plot

Projected Final Survey -
7255'MD & 7045'TVD @ 1366'VS
1.3 deg Inc 78.2 deg AZ

Project: SEC.3-T3N-R64W
Site: Becca D03-32D Pad Sec.3-T3N-R64W
Well: Becca D03-32D
Plan: Wellbore #1

Company: NOBLE ENERGY INC WELD COUNTY CO
 Project: SEC.3-T3N-R64W
 Site: Becca D03-32D Pad Sec.3-T3N-R64W
 Well: Becca D03-32D
 Wellbore: Wellbore #1
 Design: Wellbore #1

Local Co-ordinate Reference: Well Becca D03-32D
 TVD Reference: WELL @ 4721.0ft (Original Well Elev)
 MD Reference: WELL @ 4721.0ft (Original Well Elev)
 North Reference: True
 Survey Calculation Method: Minimum Curvature
 Database: Landmark

Project	SEC.3-T3N-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 Becca D03-32D Pad Sec.3-T3N-R64W

Site Position:		Northing:	1,336,909.37 ft	Latitude:	40.254250
From:	Lat/Long	Easting:	3,267,392.50 ft	Longitude:	-104.541960
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.62 °

Well	Becca D03-32D					
Well Position	+N/-S	0.0 ft	Northing:	1,336,909.36 ft	Latitude:	40.254250
	+E/-W	0.0 ft	Easting:	3,267,392.50 ft	Longitude:	-104.541960
Position Uncertainty	0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,708.0 ft	

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	8/18/2010	8.84	67.00	53,167

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	277.74

Survey Program Date 6/6/2011

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
721.0	7,255.0	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
721.0	0.20	140.50	721.0	-1.0	0.8	-0.9	0.03	0.03	0.00
783.0	0.70	269.00	783.0	-1.1	0.5	-0.6	1.35	0.81	207.26
877.0	2.20	288.60	877.0	-0.5	-1.8	1.7	1.66	1.60	20.85
971.0	4.20	282.80	970.8	0.8	-6.9	6.9	2.15	2.13	-6.17
1,064.0	5.80	276.60	1,063.5	2.1	-14.9	15.0	1.81	1.72	-6.67
1,158.0	8.10	283.10	1,156.8	4.2	-26.0	26.3	2.58	2.45	6.91
1,252.0	10.30	282.80	1,249.5	7.5	-40.7	41.3	2.34	2.34	-0.32
1,347.0	12.30	285.50	1,342.7	12.1	-58.7	59.8	2.18	2.11	2.84
1,440.0	14.50	283.00	1,433.2	17.4	-79.6	81.2	2.45	2.37	-2.69
1,534.0	15.20	278.10	1,524.0	21.8	-103.3	105.3	1.53	0.74	-5.21
1,627.0	16.30	277.20	1,613.5	25.1	-128.3	130.5	1.21	1.18	-0.97
1,721.0	19.30	278.30	1,703.0	29.0	-156.7	159.2	3.21	3.19	1.17

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Local Co-ordinate Reference: Well Becca D03-32D
TVD Reference: WELL @ 4721.0ft (Original Well Elev)
MD Reference: WELL @ 4721.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature
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)
1,814.0	19.20	275.90	1,790.8	32.8	-187.2	189.9	0.86	-0.11	-2.58
1,907.0	19.50	275.90	1,878.6	36.0	-217.8	220.7	0.32	0.32	0.00
2,001.0	18.70	275.70	1,967.4	39.1	-248.4	251.4	0.85	-0.85	-0.21
2,092.0	18.90	279.40	2,053.5	43.0	-277.5	280.7	1.33	0.22	4.07
2,186.0	19.00	277.90	2,142.5	47.5	-307.7	311.3	0.53	0.11	-1.60
2,280.0	17.80	276.90	2,231.6	51.4	-337.1	340.9	1.32	-1.28	-1.06
2,373.0	18.20	273.80	2,320.1	54.0	-365.7	369.6	1.12	0.43	-3.33
2,467.0	18.10	276.10	2,409.4	56.6	-394.8	398.9	0.77	-0.11	2.45
2,560.0	18.70	277.40	2,497.7	60.0	-424.0	428.2	0.78	0.65	1.40
2,653.0	20.20	280.40	2,585.4	64.8	-454.6	459.2	1.94	1.61	3.23
2,746.0	19.90	278.80	2,672.7	70.2	-486.0	491.0	0.67	-0.32	-1.72
2,841.0	19.30	278.10	2,762.2	74.9	-517.5	522.9	0.68	-0.63	-0.74
2,935.0	18.70	278.40	2,851.1	79.2	-547.8	553.5	0.65	-0.64	0.32
3,029.0	18.10	275.10	2,940.3	82.7	-577.3	583.2	1.28	-0.64	-3.51
3,122.0	19.30	276.50	3,028.4	85.8	-606.9	612.9	1.38	1.29	1.51
3,215.0	18.20	276.40	3,116.4	89.1	-636.6	642.8	1.18	-1.18	-0.11
3,309.0	18.20	275.90	3,205.7	92.3	-665.8	672.2	0.17	0.00	-0.53
3,402.0	18.00	274.50	3,294.1	94.9	-694.6	701.0	0.51	-0.22	-1.51
3,495.0	18.80	275.60	3,382.4	97.5	-723.8	730.4	0.94	0.86	1.18
3,589.0	18.50	278.10	3,471.5	101.1	-753.7	760.4	0.91	-0.32	2.66
3,682.0	18.90	276.70	3,559.5	104.9	-783.2	790.2	0.65	0.43	-1.51
3,776.0	19.80	276.40	3,648.2	108.4	-814.2	821.4	0.96	0.96	-0.32
3,869.0	19.90	276.10	3,735.7	111.9	-845.6	852.9	0.15	0.11	-0.32
3,962.0	20.00	274.40	3,823.1	114.8	-877.2	884.6	0.63	0.11	-1.83
4,055.0	18.60	274.10	3,910.9	117.1	-907.8	915.3	1.51	-1.51	-0.32
4,150.0	20.00	276.60	4,000.6	120.0	-939.1	946.7	1.71	1.47	2.63
4,243.0	18.10	278.00	4,088.5	123.9	-969.2	977.0	2.10	-2.04	1.51
4,338.0	19.30	277.40	4,178.4	127.9	-999.4	1,007.5	1.28	1.26	-0.63
4,431.0	19.30	278.90	4,266.2	132.3	-1,029.8	1,038.2	0.53	0.00	1.61
4,525.0	18.70	279.30	4,355.1	137.1	-1,060.0	1,068.8	0.65	-0.64	0.43
4,619.0	18.20	279.50	4,444.3	142.0	-1,089.4	1,098.6	0.54	-0.53	0.21
4,712.0	16.10	276.30	4,533.1	145.8	-1,116.5	1,126.0	2.47	-2.26	-3.44
4,806.0	16.90	276.50	4,623.3	148.8	-1,143.0	1,152.7	0.85	0.85	0.21
4,900.0	16.00	276.70	4,713.4	151.8	-1,169.5	1,179.3	0.96	-0.96	0.21
4,996.0	16.60	279.80	4,805.5	155.7	-1,196.1	1,206.2	1.10	0.63	3.23
5,090.0	18.00	281.40	4,895.3	160.9	-1,223.6	1,234.1	1.57	1.49	1.70
5,183.0	16.50	280.70	4,984.1	166.2	-1,250.7	1,261.6	1.63	-1.61	-0.75
5,276.0	14.00	281.00	5,073.8	170.8	-1,274.7	1,286.1	2.69	-2.69	0.32
5,371.0	12.70	280.10	5,166.3	174.8	-1,296.2	1,308.0	1.39	-1.37	-0.95
5,464.0	10.00	280.80	5,257.4	178.1	-1,314.2	1,326.3	2.91	-2.90	0.75
5,557.0	8.40	278.00	5,349.2	180.5	-1,328.9	1,341.1	1.79	-1.72	-3.01
5,650.0	7.30	271.90	5,441.4	181.7	-1,341.5	1,353.8	1.48	-1.18	-6.56
5,744.0	5.40	271.40	5,534.8	182.0	-1,351.9	1,364.1	2.02	-2.02	-0.53
5,838.0	4.00	271.00	5,628.5	182.2	-1,359.6	1,371.8	1.49	-1.49	-0.43
5,932.0	2.90	265.80	5,722.3	182.0	-1,365.3	1,377.4	1.22	-1.17	-5.53
6,009.7	1.65	265.37	5,800.0	181.8	-1,368.4	1,380.4	1.61	-1.61	-0.55
Target BHL 2545'FNL & 75'FEL									
6,025.0	1.40	265.20	5,815.2	181.8	-1,368.8	1,380.8	1.61	-1.61	-1.14
6,119.0	0.60	288.30	5,909.2	181.8	-1,370.4	1,382.4	0.94	-0.85	24.57
6,213.0	0.30	259.50	6,003.2	181.9	-1,371.1	1,383.1	0.39	-0.32	-30.64
6,306.0	0.60	173.00	6,096.2	181.4	-1,371.3	1,383.2	0.70	0.32	-93.01
6,399.0	1.30	160.00	6,189.2	179.9	-1,370.8	1,382.6	0.78	0.75	-13.98
6,493.0	2.40	173.40	6,283.1	177.0	-1,370.2	1,381.6	1.25	1.17	14.26
6,586.0	1.10	117.90	6,376.1	174.6	-1,369.2	1,380.3	2.14	-1.40	-59.68

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6,679.0	1.00	94.00	6,469.1	174.2	-1,367.6	1,378.6	0.48	-0.11	-25.70
6,773.0	1.20	79.90	6,563.1	174.3	-1,365.9	1,376.9	0.36	0.21	-15.00
6,815.9	1.20	80.68	6,606.0	174.4	-1,365.0	1,376.0	0.04	0.00	1.83
Target Circle 2545'FNL & 75'FEL									
6,866.0	1.20	81.60	6,656.0	174.6	-1,363.9	1,375.0	0.04	0.00	1.83
6,960.0	1.20	75.20	6,750.0	175.0	-1,362.0	1,373.2	0.14	0.00	-6.81
7,053.0	1.50	83.60	6,843.0	175.4	-1,359.9	1,371.1	0.39	0.32	9.03
7,147.0	1.40	82.70	6,937.0	175.7	-1,357.5	1,368.8	0.11	-0.11	-0.96
7,210.0	1.30	78.20	7,000.0	175.9	-1,356.0	1,367.4	0.23	-0.16	-7.14
7,255.0	1.30	78.20	7,044.9	176.1	-1,355.0	1,366.4	0.00	0.00	0.00
Hardlines 75'S & 75'E of BHL									

Checked By: _____ Approved By: _____ Date: _____