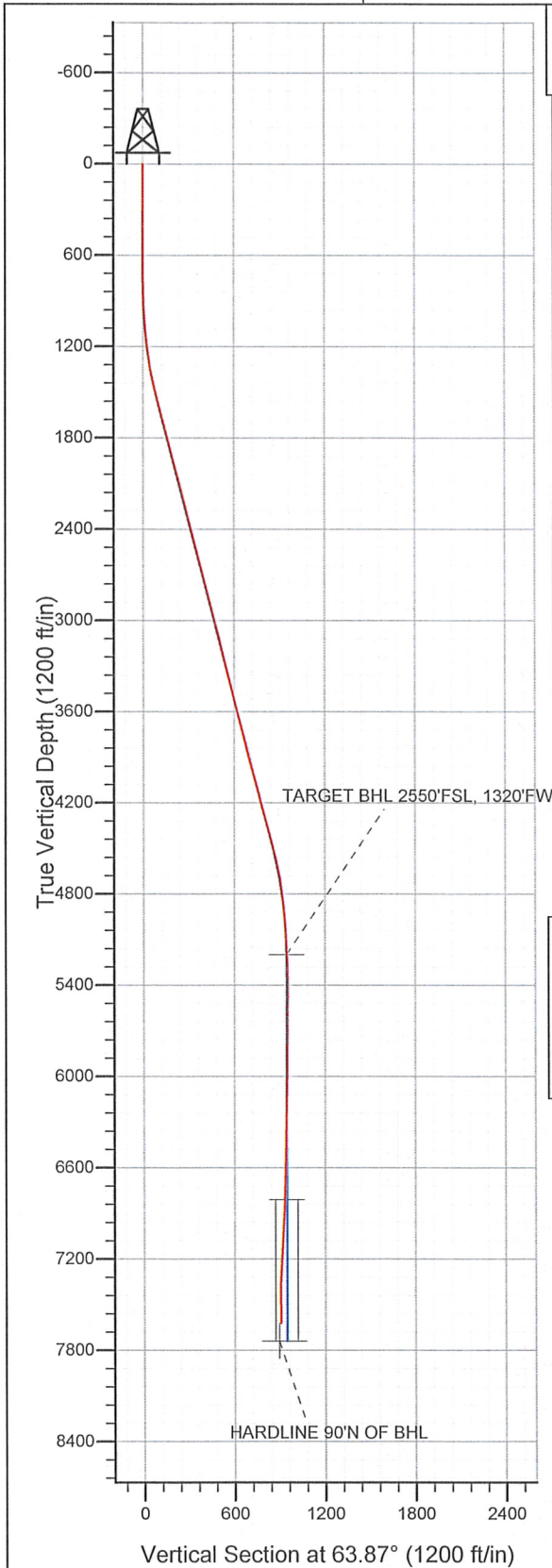
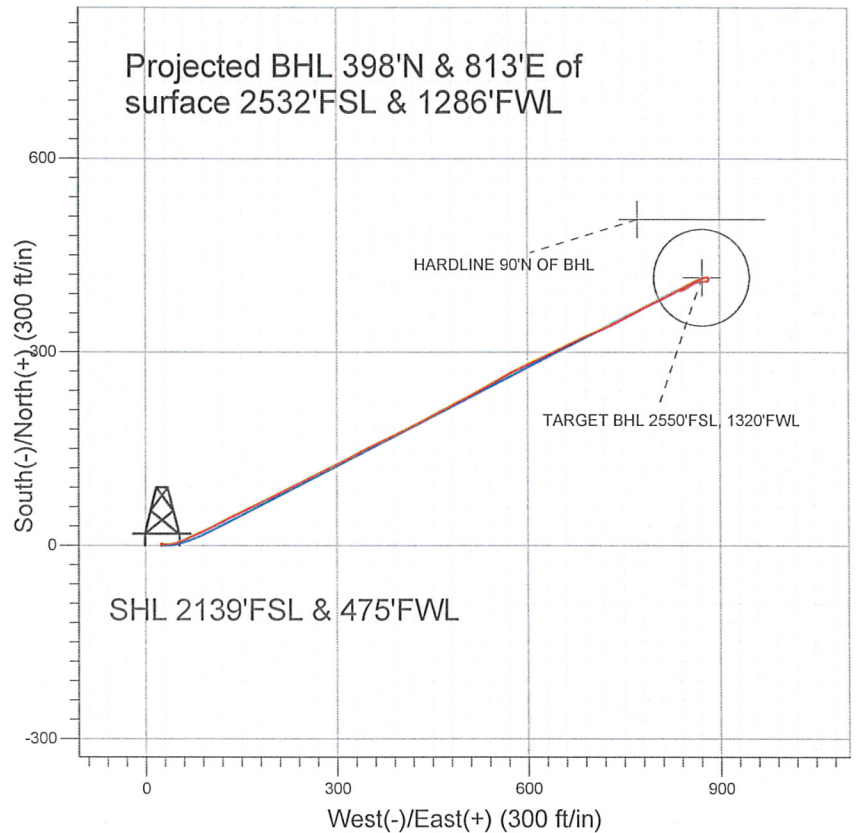


Well Name: **Dechant State H36-20D**
 Surface Location: Dechant State H36-32D Pad Sec.36-T3N-R65W
 North American Datum 1983 US State Plane 1983 Colorado Northern Zone
 Ground Elevation: 4831.0
 +N/-S +E/-W Northing Easting Latitude Longitude Slot
 0.0 25.1 1309698.56 3245857.45 40° 10' 48.612 N 104° 37' 12.288 W
 Original Well Elev WELL @ 4844.0ft (Original Well Elev)



NOBLE ENERGY INC WELD COUNTY CO



LEGEND

- Dechant State H36-20D, Wellbore #1, Noble Dechant State H36-20D Plan #2 (11-05-10) VI
- Wellbore #1
- Survey #1

Final Survey Plot

Projected Final Survey -
 7735'MD & 7621'TVD @ 905'VS
 0.8 deg Inc 6.5 deg AZ

Project: SEC.36-T3N-R65W
 Site: Dechant State H36-32D Pad Sec.36-T3N-R65W
 Well: Dechant State H36-20D
 Plan: Wellbore #1

Company:	NOBLE ENERGY INC WELD COUNTY CO	Local Co-ordinate Reference:	Site Dechant State H36-32D Pad Sec.36-T3N-R65W
Project:	SEC.36-T3N-R65W	TVD Reference:	WELL @ 4844.0ft (Original Well Elev)
Site:	Dechant State H36-32D Pad Sec.36-T3N-R65W	MD Reference:	WELL @ 4844.0ft (Original Well Elev)
Well:	Dechant State H36-20D	North Reference:	True
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	Landmark

Project	SEC.36-T3N-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	Dechant State H36-32D Pad Sec.36-T3N-R65W				
Site Position:		Northing:	1,309,698.32 ft	Latitude:	40° 10' 48.612 N
From:	Lat/Long	Easting:	3,245,832.30 ft	Longitude:	104° 37' 12.612 W
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.57 °

Well	Dechant State H36-20D					
Well Position	+N/-S	0.0 ft	Northing:	1,309,698.56 ft	Latitude:	40° 10' 48.612 N
	+E/-W	25.1 ft	Easting:	3,245,857.45 ft	Longitude:	104° 37' 12.288 W
Position Uncertainty	0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,831.0 ft	

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	11/5/2010	8.85	66.92	53,096

Design	Wellbore #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(ft)	(ft)	(ft)	(°)	
	0.0	0.0	25.1	63.87	

Survey Program	Date 5/9/2011				
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
781.0	7,735.0	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	25.1	0.0	0.00	0.00	0.00
781.0	0.40	351.10	781.0	2.7	24.7	0.8	0.05	0.05	0.00
874.0	1.70	99.10	874.0	2.8	26.0	2.0	2.00	1.40	116.13
967.0	3.90	90.10	966.9	2.6	30.6	6.0	2.41	2.37	-9.68
1,060.0	5.20	92.30	1,059.6	2.4	37.9	12.5	1.41	1.40	2.37
1,155.0	6.60	73.20	1,154.1	3.8	47.5	21.7	2.52	1.47	-20.11
1,248.0	8.00	66.30	1,246.3	7.9	58.5	33.5	1.77	1.51	-7.42
1,341.0	10.40	65.40	1,338.1	14.0	72.1	48.3	2.59	2.58	-0.97
1,435.0	12.10	66.20	1,430.3	21.5	88.8	66.6	1.82	1.81	0.85
1,529.0	14.00	62.30	1,521.9	30.8	107.9	87.9	2.23	2.02	-4.15
1,621.0	15.10	63.60	1,610.9	41.3	128.5	111.0	1.25	1.20	1.41
1,715.0	14.60	64.30	1,701.8	51.9	150.1	135.1	0.57	-0.53	0.74

Company: NOBLE ENERGY INC WELD COUNTY CO
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 Site: Dechant State H36-32D Pad Sec.36-T3N-R65W
 Well: Dechant State H36-20D
 Wellbore: Wellbore #1
 Design: Wellbore #1

Local Co-ordinate Reference: Site Dechant State H36-32D Pad Sec.36-T3N-R65W
 TVD Reference: WELL @ 4844.0ft (Original Well Elev)
 MD Reference: WELL @ 4844.0ft (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)
1,809.0	14.20	63.30	1,792.8	62.2	171.1	158.4	0.50	-0.43	-1.06
1,904.0	15.50	63.70	1,884.7	73.1	192.9	182.8	1.37	1.37	0.42
1,998.0	15.00	63.40	1,975.3	84.1	215.0	207.5	0.54	-0.53	-0.32
2,091.0	14.90	65.20	2,065.2	94.5	236.6	231.5	0.51	-0.11	1.94
2,184.0	15.10	63.90	2,155.0	104.8	258.4	255.6	0.42	0.22	-1.40
2,277.0	14.20	62.60	2,245.0	115.4	279.4	279.1	1.03	-0.97	-1.40
2,370.0	14.40	64.30	2,335.1	125.7	299.9	302.0	0.50	0.22	1.83
2,463.0	13.90	62.10	2,425.3	135.9	320.2	324.8	0.79	-0.54	-2.37
2,557.0	13.80	61.00	2,516.6	146.6	340.0	347.2	0.30	-0.11	-1.17
2,651.0	14.20	65.70	2,607.8	156.8	360.3	370.0	1.28	0.43	5.00
2,746.0	14.80	64.00	2,699.8	166.9	381.8	393.8	0.77	0.63	-1.79
2,839.0	14.90	63.70	2,789.6	177.4	403.2	417.6	0.14	0.11	-0.32
2,933.0	14.90	63.20	2,880.5	188.2	424.9	441.8	0.14	0.00	-0.53
3,026.0	14.20	61.50	2,970.5	199.1	445.5	465.1	0.88	-0.75	-1.83
3,120.0	14.60	63.30	3,061.6	209.9	466.3	488.5	0.64	0.43	1.91
3,213.0	13.00	61.80	3,151.9	220.1	486.0	510.7	1.76	-1.72	-1.61
3,306.0	13.80	61.90	3,242.3	230.3	505.0	532.2	0.86	0.86	0.11
3,399.0	13.70	62.30	3,332.7	240.6	524.5	554.3	0.15	-0.11	0.43
3,493.0	14.70	59.90	3,423.8	251.8	544.7	577.3	1.23	1.06	-2.55
3,587.0	14.90	61.70	3,514.7	263.5	565.6	601.3	0.53	0.21	1.91
3,680.0	14.60	62.70	3,604.6	274.5	586.6	625.0	0.42	-0.32	1.08
3,773.0	14.90	65.50	3,694.5	284.9	607.9	648.6	0.83	0.32	3.01
3,867.0	13.70	65.60	3,785.6	294.5	629.0	671.8	1.28	-1.28	0.11
3,961.0	13.60	63.10	3,877.0	304.1	649.0	694.0	0.64	-0.11	-2.66
4,054.0	15.80	64.60	3,966.9	314.5	670.2	717.6	2.40	2.37	1.61
4,148.0	15.20	65.20	4,057.5	325.1	692.9	742.7	0.66	-0.64	0.64
4,242.0	13.70	68.00	4,148.5	334.4	714.4	766.1	1.76	-1.60	2.98
4,336.0	15.50	61.80	4,239.5	344.6	735.8	789.8	2.53	1.91	-6.60
4,429.0	15.40	62.40	4,329.1	356.1	757.7	814.6	0.20	-0.11	0.65
4,522.0	14.50	62.90	4,419.0	367.2	779.0	838.5	0.98	-0.97	0.54
4,616.0	14.20	63.80	4,510.1	377.6	799.9	861.8	0.40	-0.32	0.96
4,710.0	12.70	62.50	4,601.5	387.5	819.4	883.7	1.63	-1.60	-1.38
4,804.0	9.90	61.80	4,693.6	396.1	835.7	902.1	2.98	-2.98	-0.74
4,897.0	7.50	60.40	4,785.6	402.9	848.0	916.2	2.59	-2.58	-1.51
4,991.0	5.50	64.30	4,879.0	407.8	857.4	926.8	2.18	-2.13	4.15
5,084.0	4.50	63.30	4,971.6	411.4	864.7	934.9	1.08	-1.08	-1.08
5,178.0	3.60	66.60	5,065.4	414.2	870.7	941.5	0.99	-0.96	3.51
5,271.0	2.50	71.60	5,158.2	416.0	875.3	946.5	1.22	-1.18	5.38
5,312.6	2.41	80.83	5,199.8	416.5	877.0	948.2	0.97	-0.21	22.21
TARGET BHL 2550'FSL, 1320'FWL									
5,365.0	2.40	93.00	5,252.2	416.6	879.2	950.2	0.97	-0.03	23.21
5,458.0	0.70	130.90	5,345.1	416.1	881.5	952.1	2.04	-1.83	40.75
5,551.0	0.40	162.40	5,438.1	415.4	882.1	952.3	0.45	-0.32	33.87
5,644.0	0.10	148.20	5,531.1	415.0	882.2	952.3	0.33	-0.32	-15.27
5,737.0	0.30	119.30	5,624.1	414.9	882.5	952.4	0.23	0.22	-31.08
5,831.0	0.40	189.80	5,718.1	414.4	882.6	952.4	0.44	0.11	75.00
5,924.0	0.70	202.40	5,811.1	413.6	882.4	951.7	0.35	0.32	13.55
6,018.0	0.80	212.30	5,905.1	412.5	881.8	950.8	0.17	0.11	10.53
6,112.0	1.10	214.60	5,999.1	411.2	880.9	949.4	0.32	0.32	2.45
6,207.0	1.30	248.80	6,094.1	410.0	879.4	947.5	0.77	0.21	36.00
6,301.0	1.00	276.60	6,188.0	409.8	877.6	945.8	0.66	-0.32	29.57
6,394.0	0.70	277.50	6,281.0	409.9	876.2	944.6	0.32	-0.32	0.97
6,488.0	1.20	263.70	6,375.0	409.9	874.7	943.2	0.58	0.53	-14.68

Company: NOBLE ENERGY INC WELD COUNTY CO
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6,581.0	1.60	265.20	6,468.0	409.7	872.4	941.1	0.43	0.43	1.61
6,675.0	1.40	270.90	6,562.0	409.6	870.0	938.9	0.27	-0.21	6.06
6,768.0	1.20	269.00	6,654.9	409.6	867.8	937.0	0.22	-0.22	-2.04
6,862.0	1.90	250.00	6,748.9	409.0	865.4	934.5	0.91	0.74	-20.21
6,921.8	2.09	249.87	6,808.6	408.3	863.4	932.5	0.32	0.32	-0.22
TARGET CIRCLE 2550'FNL, 1320'FWL									
6,956.0	2.20	249.80	6,842.8	407.9	862.2	931.2	0.32	0.32	-0.19
7,049.0	2.60	240.60	6,935.8	406.2	858.7	927.3	0.60	0.43	-9.89
7,143.0	2.60	234.40	7,029.7	403.9	855.1	923.1	0.30	0.00	-6.60
7,237.0	2.90	238.00	7,123.6	401.4	851.4	918.6	0.37	0.32	3.83
7,331.0	3.80	239.00	7,217.4	398.6	846.7	913.1	0.96	0.96	1.06
7,424.0	4.00	253.60	7,310.2	396.1	840.9	906.9	1.09	0.22	15.70
7,518.0	0.50	353.30	7,404.1	395.6	837.8	903.8	4.38	-3.72	106.06
7,612.0	0.40	28.40	7,498.1	396.2	837.9	904.2	0.31	-0.11	37.34
7,690.0	0.80	6.50	7,576.1	397.0	838.1	904.7	0.58	0.51	-28.08
7,735.0	0.80	6.50	7,621.1	397.7	838.1	905.0	0.00	0.00	0.00

HARDLINE 90°N OF BHL

Checked By: _____ Approved By: _____ Date: _____