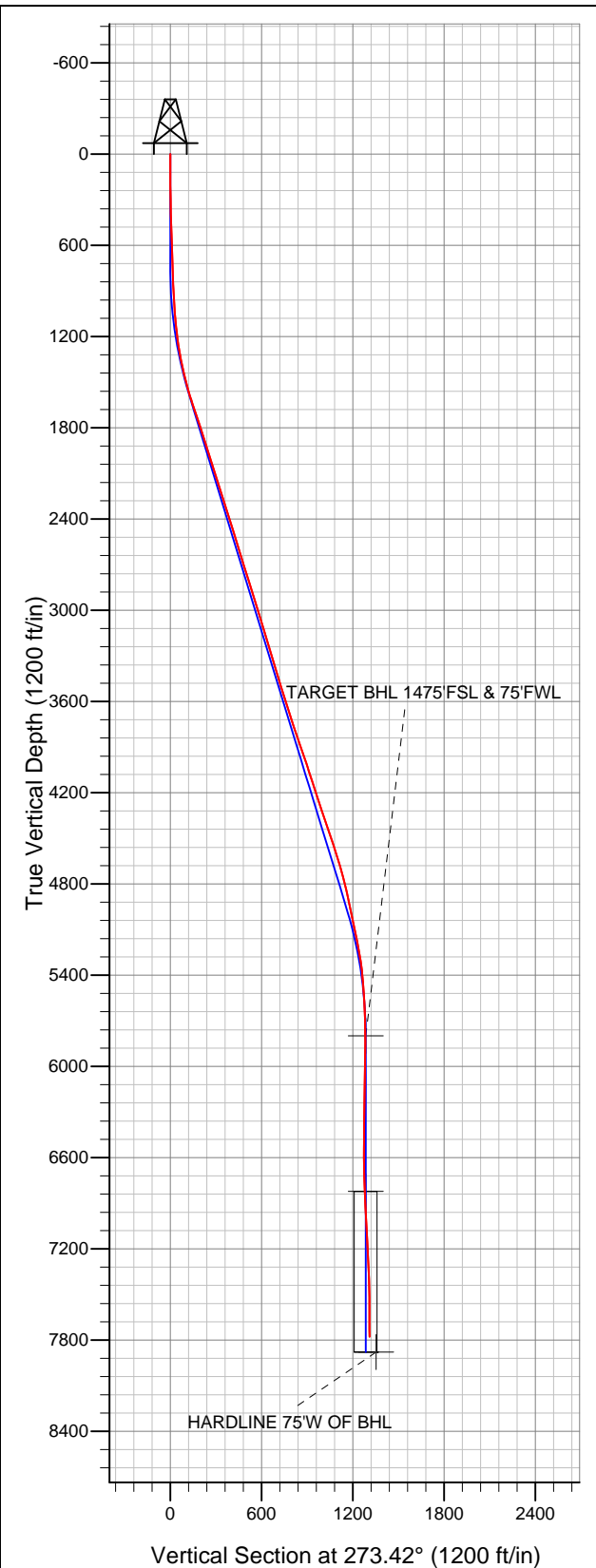




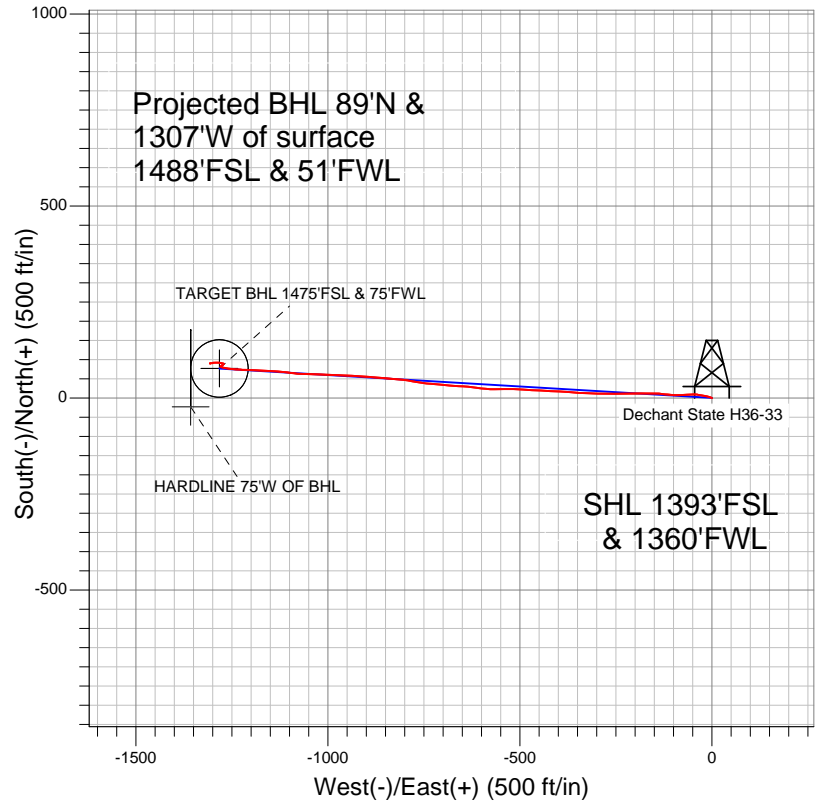
Well Name: Dechant State H36-33

Surface Location: Dechant State H36-33 Pad Sec.36-T3N-R65W
North American Datum 1983 US State Plane 1983Colorado Northern Zone
Ground Elevation: 4825.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1308964.65	3246789.66	40.178130	-104.616770	
Original Well Elev				WELL @ 4838.0ft (Original Well Elev)		



NOBLE ENERGY INC WELD COUNTY CO



- LEGEND
- Wellbore #1
 - Dechant State H36-33, Wellbore #1, Noble Dechant State H36-33 Plan #1 (12-1-11) V0
 - Survey #1

Final Survey Plot

Projected Final Survey -
7960'MD & 7778'TVD @ 1310°VS
0.40 deg Inc 195.00 deg AZ

Project: SEC.36-T3N-R65W
Site: Dechant State H36-33 Pad Sec.36-T3N-R65W
Well: Dechant State H36-33
Plan: Wellbore #1



NOBLE ENERGY INC WELD COUNTY CO

SEC.36-T3N-R65W

Dechant State H36-33 Pad Sec.36-T3N-R65W

Dechant State H36-33

Wellbore #1

Survey: Survey #1

Standard Survey Report

29 May, 2012



Company:	NOBLE ENERGY INC WELD COUNTY CO	Local Co-ordinate Reference:	Well Dechant State H36-33
Project:	SEC.36-T3N-R65W	TVD Reference:	WELL @ 4838.0ft (Original Well Elev)
Site:	Dechant State H36-33 Pad Sec.36-T3N-R65W	MD Reference:	WELL @ 4838.0ft (Original Well Elev)
Well:	Dechant State H36-33	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 H36-33 Pad Sec.36-T3N-R65W		
Site Position:		Northing:	1,308,964.66ft
From:	Lat/Long	Easting:	3,246,789.66ft
Position Uncertainty:	0.0 ft	Slot Radius:	"
		Latitude:	40.178130
		Longitude:	-104.616770
		Grid Convergence:	0.57 °

Well	Dechant State H36-33		
Well Position	+N/-S	0.0 ft	Northing: 1,308,964.65 ft
	+E/-W	0.0 ft	Easting: 3,246,789.66 ft
Position Uncertainty	0.0 ft	Wellhead Elevation:	ft
		Latitude:	40.178130
		Longitude:	-104.616770
		Ground Level:	4,825.0 ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	5/14/2012	8.64	66.86	52,934

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 (°)	
	5,800.0	0.0	0.0	273.42	

Survey Program	Date 5/29/2012				
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
115.0	7,960.0	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	
115.0	0.20	118.50	115.0	-0.1	0.2	-0.2	0.17	0.17	0.00	
206.0	0.90	285.30	206.0	0.0	-0.4	0.4	1.20	0.77	183.30	
298.0	1.20	289.20	298.0	0.5	-2.0	2.0	0.34	0.33	4.24	
391.0	1.20	294.10	391.0	1.2	-3.8	3.9	0.11	0.00	5.27	
482.0	2.00	287.80	481.9	2.1	-6.2	6.3	0.90	0.88	-6.92	
574.0	2.30	285.00	573.9	3.1	-9.5	9.6	0.35	0.33	-3.04	
655.0	2.20	288.10	654.8	4.0	-12.5	12.7	0.19	-0.12	3.83	
737.0	1.80	279.30	736.7	4.7	-15.3	15.5	0.61	-0.49	-10.73	
750.0	1.80	278.60	749.7	4.7	-15.7	16.0	0.17	0.00	-5.38	
841.0	1.80	282.20	840.7	5.3	-18.5	18.8	0.12	0.00	3.96	
922.0	2.90	277.20	921.6	5.8	-21.8	22.1	1.38	1.36	-6.17	
1,045.0	4.80	280.70	1,044.3	7.1	-29.9	30.3	1.56	1.54	2.85	

Company:	NOBLE ENERGY INC WELD COUNTY CO	Local Co-ordinate Reference:	Well Dechant State H36-33
Project:	SEC.36-T3N-R65W	TVD Reference:	WELL @ 4838.0ft (Original Well Elev)
Site:	Dechant State H36-33 Pad Sec.36-T3N-R65W	MD Reference:	WELL @ 4838.0ft (Original Well Elev)
Well:	Dechant State H36-33	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)
1,086.0	5.00	280.20	1,085.2	7.8	-33.4	33.8	0.50	0.49	-1.22
1,167.0	7.10	276.20	1,165.7	8.9	-41.8	42.3	2.64	2.59	-4.94
1,249.0	8.30	267.20	1,247.0	9.2	-52.8	53.2	2.07	1.46	-10.98
1,331.0	9.90	264.40	1,328.0	8.2	-65.7	66.1	2.02	1.95	-3.41
1,412.0	12.40	270.40	1,407.4	7.6	-81.3	81.6	3.40	3.09	7.41
1,494.0	14.50	271.30	1,487.2	7.9	-100.4	100.7	2.57	2.56	1.10
1,576.0	16.50	276.70	1,566.2	9.5	-122.2	122.6	3.01	2.44	6.59
1,657.0	18.50	273.40	1,643.4	11.6	-146.5	146.9	2.76	2.47	-4.07
1,739.0	18.60	268.40	1,721.2	12.0	-172.6	173.0	1.94	0.12	-6.10
1,821.0	17.70	268.10	1,799.1	11.2	-198.1	198.4	1.10	-1.10	-0.37
1,902.0	18.30	270.30	1,876.1	10.9	-223.1	223.4	1.12	0.74	2.72
1,984.0	17.70	269.00	1,954.1	10.7	-248.4	248.6	0.88	-0.73	-1.59
2,066.0	17.60	272.30	2,032.3	11.0	-273.3	273.5	1.23	-0.12	4.02
2,147.0	17.30	270.60	2,109.5	11.6	-297.6	297.7	0.73	-0.37	-2.10
2,229.0	17.10	272.30	2,187.9	12.2	-321.8	322.0	0.66	-0.24	2.07
2,311.0	17.10	273.40	2,266.3	13.4	-345.9	346.1	0.39	0.00	1.34
2,392.0	18.00	274.10	2,343.5	15.0	-370.3	370.5	1.14	1.11	0.86
2,474.0	18.00	272.80	2,421.5	16.6	-395.6	395.8	0.49	0.00	-1.59
2,556.0	17.40	272.50	2,499.6	17.7	-420.5	420.8	0.74	-0.73	-0.37
2,638.0	17.40	273.70	2,577.8	19.0	-444.9	445.3	0.44	0.00	1.46
2,719.0	16.40	273.40	2,655.3	20.5	-468.4	468.8	1.24	-1.23	-0.37
2,801.0	17.40	273.70	2,733.8	22.0	-492.2	492.7	1.22	1.22	0.37
2,883.0	17.70	271.60	2,812.0	23.1	-516.9	517.4	0.85	0.37	-2.56
2,964.0	17.10	268.10	2,889.3	23.1	-541.1	541.6	1.49	-0.74	-4.32
3,046.0	17.20	270.00	2,967.6	22.7	-565.3	565.7	0.69	0.12	2.32
3,128.0	17.10	274.80	3,046.0	23.7	-589.5	589.8	1.73	-0.12	5.85
3,209.0	16.40	278.80	3,123.6	26.4	-612.6	613.1	1.66	-0.86	4.94
3,291.0	16.50	276.00	3,202.2	29.4	-635.6	636.3	0.97	0.12	-3.41
3,373.0	17.30	270.70	3,280.7	30.8	-659.4	660.1	2.12	0.98	-6.46
3,454.0	16.70	276.70	3,358.1	32.3	-683.0	683.7	2.29	-0.74	7.41
3,536.0	17.30	274.80	3,436.5	34.7	-706.9	707.7	1.00	0.73	-2.32
3,618.0	17.50	274.40	3,514.8	36.6	-731.3	732.2	0.28	0.24	-0.49
3,699.0	17.10	278.30	3,592.1	39.3	-755.2	756.2	1.51	-0.49	4.81
3,781.0	17.40	281.30	3,670.4	43.4	-779.2	780.4	1.14	0.37	3.66
3,863.0	18.10	275.30	3,748.5	47.0	-803.9	805.3	2.39	0.85	-7.32
3,944.0	19.10	275.30	3,825.3	49.4	-829.6	831.1	1.23	1.23	0.00
4,026.0	19.30	273.90	3,902.8	51.6	-856.5	858.1	0.61	0.24	-1.71
4,108.0	19.60	276.20	3,980.1	54.0	-883.7	885.3	1.00	0.37	2.80
4,189.0	17.90	272.10	4,056.8	55.9	-909.6	911.4	2.65	-2.10	-5.06
4,271.0	17.40	273.40	4,134.9	57.1	-934.5	936.2	0.78	-0.61	1.59
4,353.0	18.50	273.90	4,212.9	58.7	-959.7	961.5	1.35	1.34	0.61
4,434.0	19.00	272.30	4,289.6	60.1	-985.7	987.5	0.89	0.62	-1.98
4,516.0	18.00	270.60	4,367.4	60.8	-1,011.7	1,013.5	1.39	-1.22	-2.07
4,598.0	18.40	272.50	4,445.3	61.5	-1,037.3	1,039.1	0.87	0.49	2.32
4,680.0	18.00	270.90	4,523.2	62.2	-1,062.9	1,064.7	0.78	-0.49	-1.95
4,761.0	18.90	278.10	4,600.0	64.3	-1,088.4	1,090.3	3.02	1.11	8.89
4,843.0	16.60	275.70	4,678.1	67.3	-1,113.2	1,115.2	2.94	-2.80	-2.93
4,925.0	14.40	273.40	4,757.1	69.1	-1,135.1	1,137.1	2.79	-2.68	-2.80
5,006.0	13.60	272.70	4,835.7	70.1	-1,154.6	1,156.7	1.01	-0.99	-0.86
5,088.0	11.30	272.10	4,915.8	70.9	-1,172.3	1,174.4	2.81	-2.80	-0.73
5,170.0	11.30	276.50	4,996.2	72.1	-1,188.3	1,190.5	1.05	0.00	5.37
5,251.0	12.80	271.60	5,075.4	73.2	-1,205.1	1,207.4	2.24	1.85	-6.05
5,333.0	11.80	269.90	5,155.5	73.5	-1,222.6	1,224.8	1.30	-1.22	-2.07
5,415.0	9.90	274.80	5,236.1	74.0	-1,238.0	1,240.2	2.57	-2.32	5.98

Company:	NOBLE ENERGY INC WELD COUNTY CO	Local Co-ordinate Reference:	Well Dechant State H36-33
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Site:	Dechant State H36-33 Pad Sec.36-T3N-R65W	MD Reference:	WELL @ 4838.0ft (Original Well Elev)
Well:	Dechant State H36-33	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)
5,496.0	8.40	277.20	5,316.0	75.4	-1,250.8	1,253.1	1.91	-1.85	2.96
5,578.0	5.50	279.70	5,397.4	76.8	-1,260.6	1,263.0	3.55	-3.54	3.05
5,660.0	4.30	279.20	5,479.1	77.9	-1,267.6	1,269.9	1.46	-1.46	-0.61
5,741.0	3.30	285.10	5,560.0	79.0	-1,272.8	1,275.3	1.32	-1.23	7.28
5,823.0	2.70	290.60	5,641.8	80.3	-1,276.9	1,279.4	0.81	-0.73	6.71
5,905.0	0.50	305.50	5,723.8	81.2	-1,279.0	1,281.6	2.71	-2.68	18.17
5,981.2	0.40	343.04	5,800.0	81.7	-1,279.3	1,281.9	0.40	-0.13	49.28
TARGET BHL 1475'FSL & 75'FWL									
5,986.0	0.40	345.80	5,804.8	81.7	-1,279.3	1,281.9	0.40	0.01	57.30
6,068.0	0.60	43.30	5,886.8	82.3	-1,279.1	1,281.8	0.62	0.24	70.12
6,150.0	0.70	43.80	5,968.8	82.9	-1,278.5	1,281.2	0.12	0.12	0.61
6,231.0	1.10	54.00	6,049.8	83.8	-1,277.5	1,280.2	0.53	0.49	12.59
6,313.0	1.30	55.60	6,131.8	84.7	-1,276.1	1,278.9	0.25	0.24	1.95
6,395.0	1.40	58.00	6,213.7	85.8	-1,274.5	1,277.3	0.14	0.12	2.93
6,476.0	1.10	52.40	6,294.7	86.8	-1,273.0	1,275.9	0.40	-0.37	-6.91
6,558.0	0.90	50.70	6,376.7	87.7	-1,271.9	1,274.9	0.25	-0.24	-2.07
6,640.0	0.60	42.90	6,458.7	88.4	-1,271.1	1,274.1	0.39	-0.37	-9.51
6,722.0	0.20	337.70	6,540.7	88.9	-1,270.9	1,273.9	0.67	-0.49	-79.51
6,803.0	0.60	300.40	6,621.7	89.2	-1,271.3	1,274.4	0.56	0.49	-46.05
6,885.0	1.30	287.30	6,703.7	89.7	-1,272.6	1,275.6	0.89	0.85	-15.98
6,967.0	1.70	284.80	6,785.7	90.3	-1,274.6	1,277.7	0.49	0.49	-3.05
7,003.5	1.96	280.06	6,822.2	90.5	-1,275.8	1,278.9	0.83	0.72	-12.97
TARGET CIRCLE 1475'FSL & 75'FWL									
7,048.0	2.30	275.80	6,866.6	90.8	-1,277.4	1,280.5	0.83	0.75	-9.59
7,130.0	2.90	277.80	6,948.5	91.2	-1,281.1	1,284.3	0.74	0.73	2.44
7,212.0	2.50	274.20	7,030.4	91.6	-1,284.9	1,288.1	0.53	-0.49	-4.39
7,293.0	3.20	269.90	7,111.3	91.7	-1,289.0	1,292.1	0.90	0.86	-5.31
7,375.0	3.50	269.30	7,193.2	91.7	-1,293.7	1,296.9	0.37	0.37	-0.73
7,457.0	3.80	259.10	7,275.0	91.2	-1,298.9	1,302.0	0.87	0.37	-12.44
7,538.0	1.70	270.00	7,355.9	90.7	-1,302.8	1,305.8	2.66	-2.59	13.46
7,620.0	1.10	272.70	7,437.9	90.7	-1,304.8	1,307.8	0.74	-0.73	3.29
7,702.0	0.50	236.60	7,519.9	90.5	-1,305.8	1,308.9	0.92	-0.73	-44.02
7,783.0	0.40	249.60	7,600.9	90.2	-1,306.4	1,309.5	0.18	-0.12	16.05
7,865.0	0.30	215.70	7,682.9	90.0	-1,306.8	1,309.8	0.27	-0.12	-41.34
7,915.0	0.40	198.00	7,732.9	89.7	-1,306.9	1,310.0	0.29	0.20	-35.40
7,960.0	0.40	195.00	7,777.9	89.4	-1,307.0	1,310.0	0.05	0.00	-6.67
HARDLINE 75'W OF BHL									

Checked By: _____ Approved By: _____ Date: _____