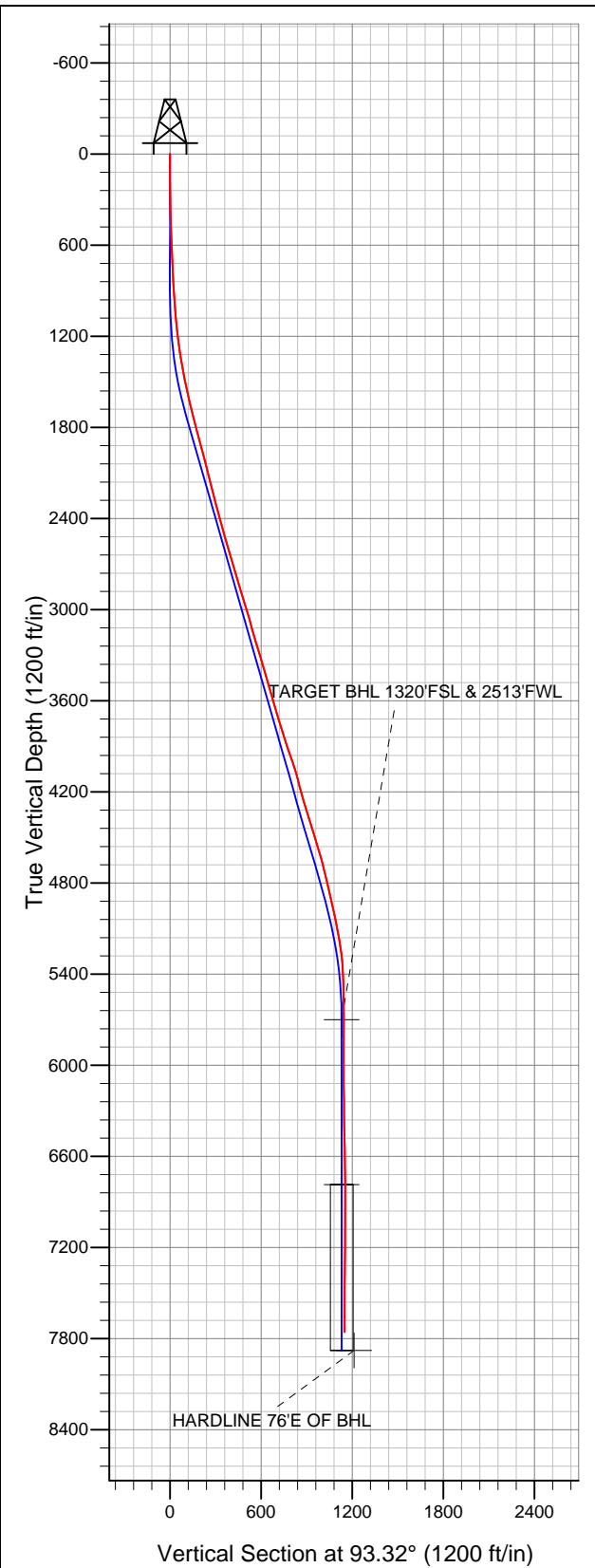




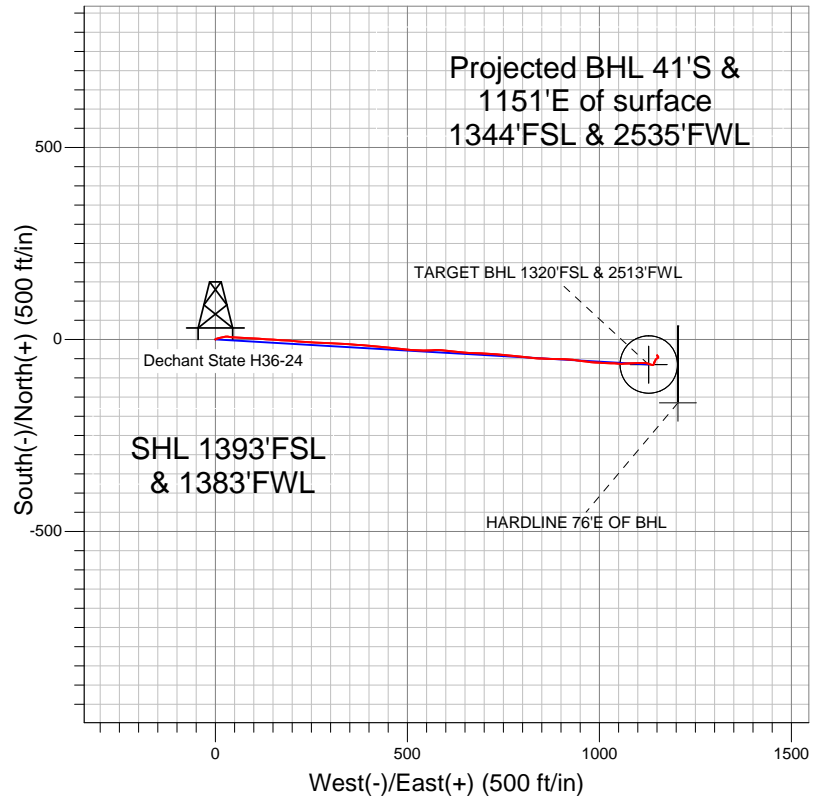
Well Name: Dechant State H36-24

Surface Location: Dechant State H36-33 Pad Sec.36-T3N-R65W
North American Datum 1983 US State Plane 1983Colorado Northern Zone
Ground Elevation: 4824.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1308964.87	3246812.02	40.178130	-104.616690	
Original Well Elev			WELL @ 4837.0ft (Original Well Elev)			



NOBLE ENERGY INC WELD COUNTY CO



- LEGEND**
- Wellbore #1
 - Dechant State H36-24, Wellbore #1, Noble Dechant State H36-24 Plan #1 (5-21-12) R V0
 - Survey #1

Final Survey Plot

Projected Final Survey -
7905'MD & 7757'TVD @ 1151'VS
0.30 deg Inc 80.00 deg AZ

Project: SEC.36-T3N-R65W
Site: Dechant State H36-33 Pad Sec.36-T3N-R65W
Well: Dechant State H36-24
Plan: Wellbore #1



NOBLE ENERGY INC WELD COUNTY CO

SEC.36-T3N-R65W

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

Dechant State H36-24

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 H36-24
Project:	SEC.36-T3N-R65W	TVD Reference:	WELL @ 4837.0ft (Original Well Elev)
Site:	Dechant State H36-33 Pad Sec.36-T3N-R65W	MD Reference:	WELL @ 4837.0ft (Original Well Elev)
Well:	Dechant State H36-24	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 H36-24		
Well Position	+N/-S	0.0 ft	Northing:
	+E/-W	0.0 ft	Easting:
Position Uncertainty	0.0 ft		Wellhead Elevation:
			Latitude:
			Longitude:
			Ground Level:

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	5/21/2012	8.64	66.86	52,932

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	93.32	

Survey Program	Date	5/29/2012			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
82.0	7,905.0	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	
82.0	0.30	35.00	82.0	0.2	0.1	0.1	0.37	0.37	0.00	
175.0	0.30	58.20	175.0	0.5	0.5	0.4	0.13	0.00	24.95	
267.0	0.50	53.10	267.0	0.9	1.0	0.9	0.22	0.22	-5.54	
360.0	1.30	74.90	360.0	1.4	2.3	2.3	0.92	0.86	23.44	
451.0	1.90	72.40	450.9	2.1	4.8	4.6	0.66	0.66	-2.75	
543.0	2.60	71.90	542.9	3.2	8.2	8.0	0.76	0.76	-0.54	
614.0	2.90	79.80	613.8	4.0	11.5	11.3	0.68	0.42	11.13	
696.0	3.00	79.80	695.7	4.8	15.7	15.4	0.12	0.12	0.00	
770.0	2.70	77.90	769.6	5.5	19.3	18.9	0.42	-0.41	-2.57	
836.0	2.40	67.70	835.5	6.3	22.1	21.7	0.82	-0.45	-15.45	
917.0	3.90	85.60	916.4	7.2	26.4	25.9	2.19	1.85	22.10	
999.0	4.60	95.70	998.2	7.1	32.4	32.0	1.25	0.85	12.32	

Company:	NOBLE ENERGY INC WELD COUNTY CO	Local Co-ordinate Reference:	Well Dechant State H36-24
Project:	SEC.36-T3N-R65W	TVD Reference:	WELL @ 4837.0ft (Original Well Elev)
Site:	Dechant State H36-33 Pad Sec.36-T3N-R65W	MD Reference:	WELL @ 4837.0ft (Original Well Elev)
Well:	Dechant State H36-24	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)	
1,081.0	5.10	97.20	1,079.9	6.3	39.3	38.9	0.63	0.61	1.83	
1,163.0	6.30	95.10	1,161.5	5.5	47.4	47.0	1.49	1.46	-2.56	
1,244.0	7.40	91.80	1,241.9	4.9	57.1	56.7	1.44	1.36	-4.07	
1,326.0	9.30	93.90	1,323.0	4.3	69.0	68.6	2.35	2.32	2.56	
1,408.0	9.70	94.20	1,403.9	3.3	82.5	82.1	0.49	0.49	0.37	
1,489.0	10.80	91.30	1,483.6	2.6	96.8	96.5	1.50	1.36	-3.58	
1,571.0	12.50	94.40	1,563.9	1.8	113.4	113.1	2.21	2.07	3.78	
1,653.0	14.20	93.90	1,643.7	0.4	132.3	132.0	2.08	2.07	-0.61	
1,734.0	13.90	93.40	1,722.3	-0.8	151.9	151.7	0.40	-0.37	-0.62	
1,816.0	14.20	93.90	1,801.8	-2.1	171.8	171.6	0.39	0.37	0.61	
1,898.0	15.40	93.40	1,881.1	-3.4	192.7	192.5	1.47	1.46	-0.61	
1,979.0	14.60	93.20	1,959.3	-4.6	213.6	213.5	0.99	-0.99	-0.25	
2,061.0	14.40	95.30	2,038.7	-6.2	234.1	234.0	0.69	-0.24	2.56	
2,143.0	14.70	95.30	2,118.1	-8.1	254.6	254.6	0.37	0.37	0.00	
2,224.0	14.30	92.30	2,196.5	-9.4	274.8	274.9	1.05	-0.49	-3.70	
2,306.0	15.30	92.00	2,275.8	-10.2	295.7	295.8	1.22	1.22	-0.37	
2,388.0	14.80	90.90	2,355.0	-10.7	317.0	317.1	0.70	-0.61	-1.34	
2,469.0	15.10	93.20	2,433.2	-11.5	337.9	338.0	0.82	0.37	2.84	
2,551.0	14.90	95.70	2,512.5	-13.1	359.0	359.2	0.83	-0.24	3.05	
2,633.0	16.10	93.70	2,591.5	-14.9	380.9	381.1	1.60	1.46	-2.44	
2,714.0	16.30	94.90	2,669.3	-16.6	403.4	403.7	0.48	0.25	1.48	
2,796.0	17.70	96.00	2,747.7	-18.9	427.3	427.7	1.75	1.71	1.34	
2,878.0	17.10	96.70	2,825.9	-21.6	451.7	452.1	0.77	-0.73	0.85	
2,959.0	16.30	94.90	2,903.5	-24.0	474.8	475.4	1.18	-0.99	-2.22	
3,041.0	16.40	95.70	2,982.2	-26.1	497.8	498.5	0.30	0.12	0.98	
3,123.0	16.50	94.10	3,060.8	-28.1	520.9	521.7	0.57	0.12	-1.95	
3,205.0	15.70	88.10	3,139.6	-28.5	543.6	544.4	2.25	-0.98	-7.32	
3,286.0	16.50	88.10	3,217.4	-27.8	566.1	566.7	0.99	0.99	0.00	
3,368.0	16.20	95.30	3,296.1	-28.5	589.1	589.8	2.50	-0.37	8.78	
3,450.0	16.70	96.40	3,374.8	-30.8	612.2	613.0	0.72	0.61	1.34	
3,531.0	17.10	95.30	3,452.3	-33.2	635.6	636.5	0.63	0.49	-1.36	
3,613.0	16.70	94.60	3,530.7	-35.3	659.4	660.3	0.55	-0.49	-0.85	
3,695.0	15.70	89.70	3,609.5	-36.2	682.2	683.2	2.06	-1.22	-5.98	
3,776.0	15.30	93.90	3,687.5	-36.8	703.8	704.8	1.47	-0.49	5.19	
3,858.0	17.40	93.90	3,766.2	-38.4	726.9	727.9	2.56	2.56	0.00	
3,940.0	17.90	95.70	3,844.4	-40.5	751.6	752.7	0.90	0.61	2.20	
4,021.0	19.30	95.50	3,921.1	-43.0	777.4	778.5	1.73	1.73	-0.25	
4,103.0	18.90	96.70	3,998.6	-45.9	804.0	805.3	0.68	-0.49	1.46	
4,185.0	16.30	96.40	4,076.8	-48.7	828.7	830.1	3.17	-3.17	-0.37	
4,266.0	14.40	90.00	4,154.9	-50.0	850.0	851.5	3.14	-2.35	-7.90	
4,348.0	15.50	92.80	4,234.1	-50.5	871.2	872.6	1.60	1.34	3.41	
4,430.0	17.70	90.40	4,312.7	-51.1	894.6	896.0	2.81	2.68	-2.93	
4,511.0	16.40	93.70	4,390.1	-51.9	918.3	919.8	2.00	-1.60	4.07	
4,593.0	17.90	98.50	4,468.5	-54.6	942.3	943.9	2.51	1.83	5.85	
4,675.0	16.90	96.70	4,546.7	-57.8	966.6	968.4	1.38	-1.22	-2.20	
4,756.0	15.70	94.80	4,624.5	-60.1	989.2	991.1	1.62	-1.48	-2.35	
4,838.0	14.10	92.30	4,703.7	-61.4	1,010.3	1,012.1	2.10	-1.95	-3.05	
4,920.0	13.50	91.10	4,783.3	-62.0	1,029.8	1,031.7	0.81	-0.73	-1.46	
5,001.0	12.90	95.10	4,862.2	-63.0	1,048.3	1,050.2	1.35	-0.74	4.94	
5,083.0	12.00	86.90	4,942.3	-63.4	1,065.9	1,067.8	2.42	-1.10	-10.00	
5,165.0	12.60	86.30	5,022.4	-62.3	1,083.4	1,085.2	0.75	0.73	-0.73	
5,247.0	11.40	87.20	5,102.6	-61.3	1,100.4	1,102.1	1.48	-1.46	1.10	
5,328.0	9.40	91.80	5,182.3	-61.2	1,115.0	1,116.7	2.67	-2.47	5.68	
5,410.0	7.20	107.80	5,263.4	-62.9	1,126.6	1,128.3	3.87	-2.68	19.51	

Company:	NOBLE ENERGY INC WELD COUNTY CO	Local Co-ordinate Reference:	Well Dechant State H36-24
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Site:	Dechant State H36-33 Pad Sec.36-T3N-R65W	MD Reference:	WELL @ 4837.0ft (Original Well Elev)
Well:	Dechant State H36-24	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)
5,492.0	4.60	108.70	5,345.0	-65.6	1,134.6	1,136.5	3.17	-3.17	1.10
5,573.0	2.10	91.10	5,425.8	-66.6	1,139.1	1,141.1	3.30	-3.09	-21.73
5,655.0	1.80	29.60	5,507.8	-65.5	1,141.3	1,143.2	2.45	-0.37	-75.00
5,737.0	1.80	18.50	5,589.8	-63.2	1,142.3	1,144.1	0.42	0.00	-13.54
5,818.0	1.20	20.80	5,670.7	-61.2	1,143.0	1,144.7	0.74	-0.74	2.84
5,847.2	0.59	11.34	5,700.0	-60.8	1,143.2	1,144.8	2.14	-2.09	-32.35
TARGET BHL 1320'FSL & 2513'FWL									
5,900.0	0.60	227.70	5,752.7	-60.7	1,143.0	1,144.6	2.14	0.02	-272.30
5,982.0	0.20	169.50	5,834.7	-61.1	1,142.7	1,144.4	0.64	-0.49	-70.98
6,063.0	0.20	342.60	5,915.7	-61.1	1,142.7	1,144.3	0.49	0.00	213.70
6,145.0	0.40	30.10	5,997.7	-60.7	1,142.8	1,144.4	0.37	0.24	57.93
6,227.0	1.00	26.00	6,079.7	-59.9	1,143.3	1,144.8	0.73	0.73	-5.00
6,308.0	0.90	19.00	6,160.7	-58.6	1,143.8	1,145.3	0.19	-0.12	-8.64
6,390.0	1.40	27.60	6,242.7	-57.1	1,144.5	1,145.9	0.64	0.61	10.49
6,472.0	1.60	29.20	6,324.7	-55.2	1,145.5	1,146.8	0.25	0.24	1.95
6,553.0	1.70	24.80	6,405.6	-53.2	1,146.5	1,147.7	0.20	0.12	-5.43
6,635.0	1.80	42.60	6,487.6	-51.1	1,147.9	1,149.0	0.67	0.12	21.71
6,717.0	1.50	66.30	6,569.6	-49.7	1,149.8	1,150.7	0.90	-0.37	28.90
6,798.0	1.10	56.10	6,650.5	-48.9	1,151.4	1,152.3	0.57	-0.49	-12.59
6,880.0	0.80	54.30	6,732.5	-48.1	1,152.5	1,153.4	0.37	-0.37	-2.20
6,934.1	0.78	34.54	6,786.6	-47.6	1,153.0	1,153.8	0.50	-0.04	-36.52
TARGET CIRCLE 1320'FSL & 2513'FWL									
6,962.0	0.80	24.50	6,814.5	-47.2	1,153.2	1,154.0	0.50	0.09	-35.99
7,043.0	0.90	12.70	6,895.5	-46.1	1,153.6	1,154.3	0.25	0.12	-14.57
7,125.0	0.60	323.10	6,977.5	-45.1	1,153.5	1,154.1	0.84	-0.37	-60.49
7,207.0	0.80	323.10	7,059.5	-44.3	1,152.9	1,153.5	0.24	0.24	0.00
7,289.0	0.80	304.00	7,141.5	-43.5	1,152.1	1,152.6	0.32	0.00	-23.29
7,370.0	0.50	1.80	7,222.5	-42.9	1,151.6	1,152.1	0.84	-0.37	71.36
7,452.0	0.50	324.50	7,304.5	-42.2	1,151.4	1,151.9	0.39	0.00	-45.49
7,534.0	0.40	236.30	7,386.5	-42.1	1,151.0	1,151.5	0.77	-0.12	-107.56
7,615.0	0.40	286.50	7,467.5	-42.2	1,150.4	1,151.0	0.42	0.00	61.98
7,697.0	0.30	315.60	7,549.5	-41.9	1,150.0	1,150.5	0.24	-0.12	35.49
7,779.0	0.20	53.30	7,631.5	-41.7	1,150.0	1,150.5	0.47	-0.12	119.15
7,860.0	0.30	71.00	7,712.5	-41.5	1,150.3	1,150.8	0.15	0.12	21.85
7,905.0	0.30	80.00	7,757.5	-41.5	1,150.5	1,151.0	0.10	0.00	20.00
HARDLINE 76'E OF BHL									

Checked By: _____	Approved By: _____	Date: _____
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