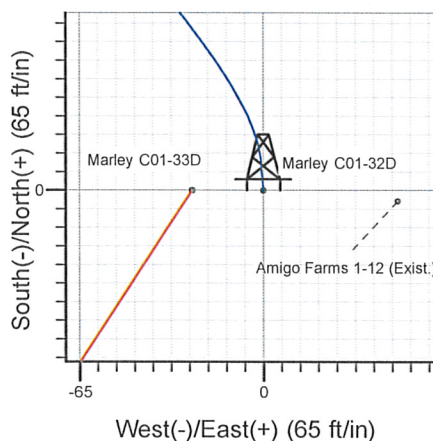
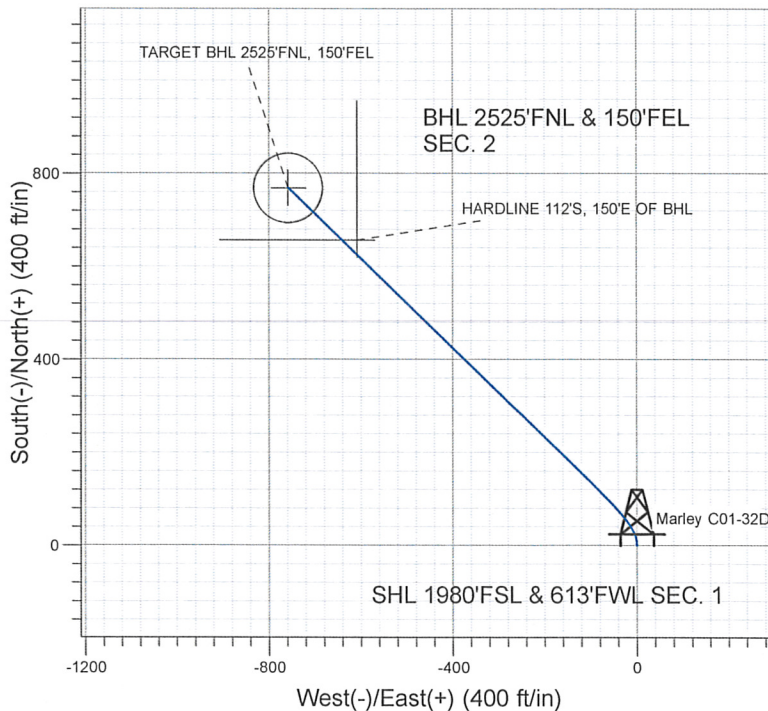
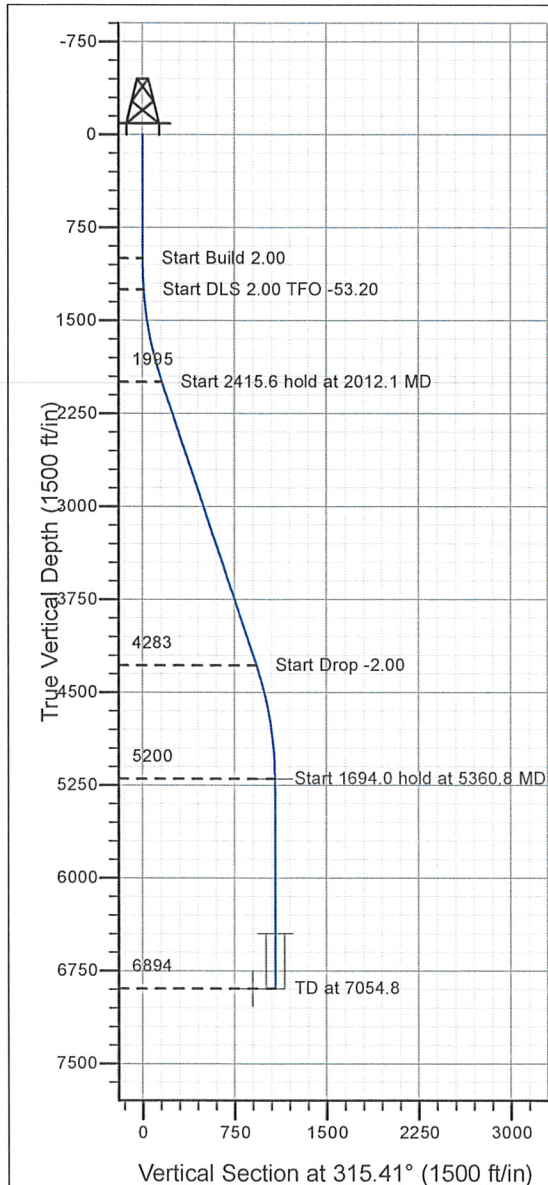


Well Name: Marley C01-32D

Surface Location: Marley C01-32D Pad Sec.1-T4N-R64W
North American Datum 1983 , US State Plane 1983 , Colorado Northern Zone
Ground Elevation: 4611.0

+N/-S+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	1368113.583277077	31 40° 20'	22.596 N104° 30'	21.636 W
Original Well Elev WELL @ 4624.0ft (Original Well Elev)					

NOBLE ENERGY INC WELD COUNTY CO



Marley C01-32D Pad Sec.1-T4N-R64W
Marley C01-32D
Noble Marley C01-32D Plan #1 11-18-09
16:25, November 18 2009

Azimuths to True North
Magnetic North: 8.89°

Magnetic Field
Strength: 53314.0snT
Dip Angle: 67.11°
Date: 11/18/2009
Model: IGRF200510



WELLBORE TARGET DETAILS (LAT/LONG)

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
TARGET BHL 2525'FNL, 150'FEL	5200.0	769.1	-758.2	40° 20' 30.196 N	104° 30' 31.427 W	Point
TARGET CIRCLE 2525'FNL, 150'FEL	6448.0	769.1	-758.2	40° 20' 30.196 N	104° 30' 31.428 W	Circle (Radius: 75.0)
HARDLINE 112'S, 150'E OF BHL	6894.0	657.1	-608.2	40° 20' 29.089 N	104° 30' 29.490 W	Polygon

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	1000.0	0.00	0.00	1000.0	0.0	0.0	0.00	0.00	0.0	
3	1250.0	5.00	355.00	1249.7	10.9	-1.0	2.00	355.00	8.4	
4	2012.1	18.66	313.86	1994.7	129.1	-92.3	2.00	-53.20	156.8	
5	4427.7	18.66	313.86	4283.3	664.7	-649.6	0.00	0.00	929.4	
6	5360.8	0.00	0.00	5200.0	769.1	-758.2	2.00	180.00	1080.0	TARGET BHL 2525'FNL, 150'FEL
7	7054.8	0.00	0.00	6894.0	769.1	-758.2	0.00	0.00	1080.0	



Directional

NOBLE ENERGY INC WELD COUNTY CO

SEC.1-T4N-R64W

Marley C01-32D Pad Sec.1-T4N-R64W

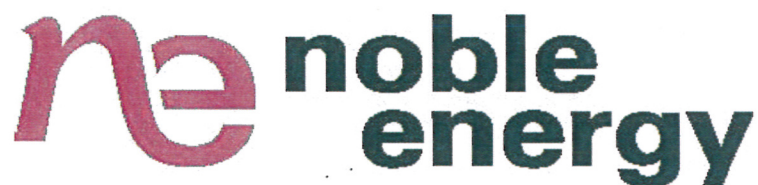
Marley C01-32D

Wellbore #1

Plan: Noble Marley C01-32D Plan #1 11-18-09

Standard Planning Report

18 November, 2009



Database:	EDM den0-adp01 Server Data	Local Co-ordinate Reference:	Well Marley C01-32D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 4624.0ft (Original Well Elev)
Project:	SEC.1-T4N-R64W	MD Reference:	WELL @ 4624.0ft (Original Well Elev)
Site:	Marley C01-32D Pad Sec.1-T4N-R64W	North Reference:	True
Well:	Marley C01-32D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Noble Marley C01-32D Plan #1 11-18-09		

Project	SEC.1-T4N-R64W, Weld County, Colorado		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		Using geodetic scale factor

Site	Marley C01-32D Pad Sec.1-T4N-R64W		
Site Position:		Northing:	1,368,113.59 ft
From:	Lat/Long	Easting:	3,277,077.31 ft
Position Uncertainty:	0.0 ft	Slot Radius:	"
		Latitude:	40° 20' 22.596 N
		Longitude:	104° 30' 21.636 W
		Grid Convergence:	0.64 °

Well	Marley C01-32D		
Well Position	+N/-S	0.0 ft	Northing:
	+E/-W	0.0 ft	Easting:
Position Uncertainty	0.0 ft	Wellhead Elevation:	ft
		Latitude:	40° 20' 22.596 N
		Longitude:	104° 30' 21.636 W
		Ground Level:	4,611.0 ft

Wellbore	Wellbore #1		
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Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	11/18/2009	8.89	67.11	53,314

Design	Noble Marley C01-32D Plan #1 11-18-09		
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Audit Notes:

Version: Phase: PROTOTYPE Tie On Depth: 0.0

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	315.41

Plan Sections										
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Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,250.0	5.00	355.00	1,249.7	10.9	-1.0	2.00	2.00	0.00	355.00	
2,012.1	18.66	313.86	1,994.7	129.1	-92.3	2.00	1.79	-5.40	-53.20	
4,427.7	18.66	313.86	4,283.3	664.7	-649.6	0.00	0.00	0.00	0.00	
5,360.8	0.00	0.00	5,200.0	769.1	-758.2	2.00	-2.00	0.00	180.00	TARGET BHL 2525
7,054.8	0.00	0.00	6,894.0	769.1	-758.2	0.00	0.00	0.00	0.00	

Database: EDM den0-adp01 Server Data
 Company: NOBLE ENERGY INC WELD COUNTY CO
 Project: SEC.1-T4N-R64W
 Site: Marley C01-32D Pad Sec.1-T4N-R64W
 Well: Marley C01-32D
 Wellbore: Wellbore #1
 Design: Noble Marley C01-32D Plan #1 11-18-09

Local Co-ordinate Reference: Well Marley C01-32D
 TVD Reference: WELL @ 4624.0ft (Original Well Elev)
 MD Reference: WELL @ 4624.0ft (Original Well Elev)
 North Reference: True
 Survey Calculation Method: Minimum Curvature

Planned 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
40.0	0.00	0.00	40.0	0.0	0.0	0.0	0.00	0.00	0.00
80.0	0.00	0.00	80.0	0.0	0.0	0.0	0.00	0.00	0.00
120.0	0.00	0.00	120.0	0.0	0.0	0.0	0.00	0.00	0.00
160.0	0.00	0.00	160.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
240.0	0.00	0.00	240.0	0.0	0.0	0.0	0.00	0.00	0.00
280.0	0.00	0.00	280.0	0.0	0.0	0.0	0.00	0.00	0.00
320.0	0.00	0.00	320.0	0.0	0.0	0.0	0.00	0.00	0.00
360.0	0.00	0.00	360.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
440.0	0.00	0.00	440.0	0.0	0.0	0.0	0.00	0.00	0.00
480.0	0.00	0.00	480.0	0.0	0.0	0.0	0.00	0.00	0.00
520.0	0.00	0.00	520.0	0.0	0.0	0.0	0.00	0.00	0.00
560.0	0.00	0.00	560.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
640.0	0.00	0.00	640.0	0.0	0.0	0.0	0.00	0.00	0.00
680.0	0.00	0.00	680.0	0.0	0.0	0.0	0.00	0.00	0.00
720.0	0.00	0.00	720.0	0.0	0.0	0.0	0.00	0.00	0.00
760.0	0.00	0.00	760.0	0.0	0.0	0.0	0.00	0.00	0.00
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	0.00
840.0	0.00	0.00	840.0	0.0	0.0	0.0	0.00	0.00	0.00
880.0	0.00	0.00	880.0	0.0	0.0	0.0	0.00	0.00	0.00
920.0	0.00	0.00	920.0	0.0	0.0	0.0	0.00	0.00	0.00
960.0	0.00	0.00	960.0	0.0	0.0	0.0	0.00	0.00	0.00
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	0.00
1,040.0	0.80	355.00	1,040.0	0.3	0.0	0.2	2.00	2.00	0.00
1,080.0	1.60	355.00	1,080.0	1.1	-0.1	0.9	2.00	2.00	0.00
1,120.0	2.40	355.00	1,120.0	2.5	-0.2	1.9	2.00	2.00	0.00
1,160.0	3.20	355.00	1,159.9	4.4	-0.4	3.4	2.00	2.00	0.00
1,200.0	4.00	355.00	1,199.8	7.0	-0.6	5.4	2.00	2.00	0.00
1,240.0	4.80	355.00	1,239.7	10.0	-0.9	7.7	2.00	2.00	0.00
1,250.0	5.00	355.00	1,249.7	10.9	-1.0	8.4	2.00	2.00	0.00
1,280.0	5.38	349.87	1,279.6	13.5	-1.3	10.6	2.00	1.27	-17.10
1,320.0	5.95	344.11	1,319.4	17.4	-2.2	13.9	2.00	1.41	-14.39
1,360.0	6.56	339.39	1,359.1	21.5	-3.6	17.8	2.00	1.53	-11.81
1,400.0	7.21	335.49	1,398.8	25.9	-5.4	22.3	2.00	1.62	-9.75
1,440.0	7.89	332.25	1,438.5	30.6	-7.7	27.3	2.00	1.69	-8.11
1,480.0	8.58	329.52	1,478.1	35.7	-10.5	32.8	2.00	1.75	-6.82
1,520.0	9.30	327.20	1,517.6	40.9	-13.8	38.8	2.00	1.79	-5.79
1,560.0	10.03	325.22	1,557.0	46.5	-17.5	45.4	2.00	1.82	-4.96
1,600.0	10.76	323.50	1,596.4	52.4	-21.7	52.6	2.00	1.84	-4.29
1,640.0	11.51	322.00	1,635.6	58.5	-26.4	60.2	2.00	1.86	-3.75
1,680.0	12.26	320.69	1,674.8	65.0	-31.6	68.4	2.00	1.88	-3.29
1,720.0	13.02	319.52	1,713.8	71.7	-37.2	77.1	2.00	1.90	-2.92
1,760.0	13.78	318.48	1,752.7	78.7	-43.3	86.4	2.00	1.91	-2.60
1,800.0	14.55	317.55	1,791.5	85.9	-49.8	96.2	2.00	1.92	-2.33
1,840.0	15.32	316.70	1,830.1	93.5	-56.8	106.5	2.00	1.93	-2.10
1,880.0	16.09	315.94	1,868.6	101.3	-64.3	117.3	2.00	1.93	-1.91
1,920.0	16.87	315.25	1,907.0	109.4	-72.3	128.7	2.00	1.94	-1.74
1,960.0	17.65	314.61	1,945.2	117.8	-80.7	140.5	2.00	1.94	-1.59
2,000.0	18.43	314.03	1,983.2	126.5	-89.5	152.9	2.00	1.95	-1.46
2,012.1	18.66	313.86	1,994.7	129.1	-92.3	156.8	2.00	1.95	-1.38
2,040.0	18.66	313.86	2,021.1	135.3	-98.7	165.7	0.00	0.00	0.00

Database: EDM den0-adp01 Server Data
Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.1-T4N-R64W
Site: Marley C01-32D Pad Sec.1-T4N-R64W
Well: Marley C01-32D
Wellbore: Wellbore #1
Design: Noble Marley C01-32D Plan #1 11-18-09

Local Co-ordinate Reference: Well Marley C01-32D
TVD Reference: WELL @ 4624.0ft (Original Well Elev)
MD Reference: WELL @ 4624.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

Planned 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)
2,080.0	18.66	313.86	2,059.0	144.2	-108.0	178.5	0.00	0.00	0.00
2,120.0	18.66	313.86	2,096.9	153.1	-117.2	191.3	0.00	0.00	0.00
2,160.0	18.66	313.86	2,134.8	161.9	-126.4	204.1	0.00	0.00	0.00
2,200.0	18.66	313.86	2,172.7	170.8	-135.6	216.9	0.00	0.00	0.00
2,240.0	18.66	313.86	2,210.6	179.7	-144.9	229.6	0.00	0.00	0.00
2,280.0	18.66	313.86	2,248.5	188.5	-154.1	242.4	0.00	0.00	0.00
2,320.0	18.66	313.86	2,286.4	197.4	-163.3	255.2	0.00	0.00	0.00
2,360.0	18.66	313.86	2,324.3	206.3	-172.6	268.0	0.00	0.00	0.00
2,400.0	18.66	313.86	2,362.2	215.1	-181.8	280.8	0.00	0.00	0.00
2,440.0	18.66	313.86	2,400.1	224.0	-191.0	293.6	0.00	0.00	0.00
2,480.0	18.66	313.86	2,438.0	232.9	-200.2	306.4	0.00	0.00	0.00
2,520.0	18.66	313.86	2,475.9	241.7	-209.5	319.2	0.00	0.00	0.00
2,560.0	18.66	313.86	2,513.8	250.6	-218.7	332.0	0.00	0.00	0.00
2,600.0	18.66	313.86	2,551.7	259.5	-227.9	344.8	0.00	0.00	0.00
2,640.0	18.66	313.86	2,589.6	268.4	-237.2	357.6	0.00	0.00	0.00
2,680.0	18.66	313.86	2,627.5	277.2	-246.4	370.4	0.00	0.00	0.00
2,720.0	18.66	313.86	2,665.4	286.1	-255.6	383.2	0.00	0.00	0.00
2,760.0	18.66	313.86	2,703.3	295.0	-264.8	396.0	0.00	0.00	0.00
2,800.0	18.66	313.86	2,741.2	303.8	-274.1	408.8	0.00	0.00	0.00
2,840.0	18.66	313.86	2,779.1	312.7	-283.3	421.6	0.00	0.00	0.00
2,880.0	18.66	313.86	2,817.0	321.6	-292.5	434.4	0.00	0.00	0.00
2,920.0	18.66	313.86	2,854.9	330.4	-301.8	447.2	0.00	0.00	0.00
2,960.0	18.66	313.86	2,892.8	339.3	-311.0	460.0	0.00	0.00	0.00
3,000.0	18.66	313.86	2,930.7	348.2	-320.2	472.7	0.00	0.00	0.00
3,040.0	18.66	313.86	2,968.6	357.0	-329.4	485.5	0.00	0.00	0.00
3,080.0	18.66	313.86	3,006.5	365.9	-338.7	498.3	0.00	0.00	0.00
3,120.0	18.66	313.86	3,044.3	374.8	-347.9	511.1	0.00	0.00	0.00
3,160.0	18.66	313.86	3,082.2	383.7	-357.1	523.9	0.00	0.00	0.00
3,200.0	18.66	313.86	3,120.1	392.5	-366.3	536.7	0.00	0.00	0.00
3,240.0	18.66	313.86	3,158.0	401.4	-375.6	549.5	0.00	0.00	0.00
3,280.0	18.66	313.86	3,195.9	410.3	-384.8	562.3	0.00	0.00	0.00
3,320.0	18.66	313.86	3,233.8	419.1	-394.0	575.1	0.00	0.00	0.00
3,360.0	18.66	313.86	3,271.7	428.0	-403.3	587.9	0.00	0.00	0.00
3,400.0	18.66	313.86	3,309.6	436.9	-412.5	600.7	0.00	0.00	0.00
3,440.0	18.66	313.86	3,347.5	445.7	-421.7	613.5	0.00	0.00	0.00
3,480.0	18.66	313.86	3,385.4	454.6	-430.9	626.3	0.00	0.00	0.00
3,520.0	18.66	313.86	3,423.3	463.5	-440.2	639.1	0.00	0.00	0.00
3,560.0	18.66	313.86	3,461.2	472.3	-449.4	651.9	0.00	0.00	0.00
3,600.0	18.66	313.86	3,499.1	481.2	-458.6	664.7	0.00	0.00	0.00
3,640.0	18.66	313.86	3,537.0	490.1	-467.9	677.5	0.00	0.00	0.00
3,680.0	18.66	313.86	3,574.9	499.0	-477.1	690.3	0.00	0.00	0.00
3,720.0	18.66	313.86	3,612.8	507.8	-486.3	703.1	0.00	0.00	0.00
3,760.0	18.66	313.86	3,650.7	516.7	-495.5	715.8	0.00	0.00	0.00
3,800.0	18.66	313.86	3,688.6	525.6	-504.8	728.6	0.00	0.00	0.00
3,840.0	18.66	313.86	3,726.5	534.4	-514.0	741.4	0.00	0.00	0.00
3,880.0	18.66	313.86	3,764.4	543.3	-523.2	754.2	0.00	0.00	0.00
3,920.0	18.66	313.86	3,802.3	552.2	-532.5	767.0	0.00	0.00	0.00
3,960.0	18.66	313.86	3,840.2	561.0	-541.7	779.8	0.00	0.00	0.00
4,000.0	18.66	313.86	3,878.1	569.9	-550.9	792.6	0.00	0.00	0.00
4,040.0	18.66	313.86	3,916.0	578.8	-560.1	805.4	0.00	0.00	0.00
4,080.0	18.66	313.86	3,953.9	587.6	-569.4	818.2	0.00	0.00	0.00
4,120.0	18.66	313.86	3,991.8	596.5	-578.6	831.0	0.00	0.00	0.00
4,160.0	18.66	313.86	4,029.7	605.4	-587.8	843.8	0.00	0.00	0.00
4,200.0	18.66	313.86	4,067.6	614.3	-597.1	856.6	0.00	0.00	0.00

Database:	EDM den0-adp01 Server Data	Local Co-ordinate Reference:	Well Marley C01-32D
Company:	NOBLE ENERGY INC WELD COUNTY CO	TVD Reference:	WELL @ 4624.0ft (Original Well Elev)
Project:	SEC.1-T4N-R64W	MD Reference:	WELL @ 4624.0ft (Original Well Elev)
Site:	Marley C01-32D Pad Sec.1-T4N-R64W	North Reference:	True
Well:	Marley C01-32D	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Noble Marley C01-32D Plan #1 11-18-09		

Planned 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)
4,240.0	18.66	313.86	4,105.5	623.1	-606.3	869.4	0.00	0.00	0.00
4,280.0	18.66	313.86	4,143.4	632.0	-615.5	882.2	0.00	0.00	0.00
4,320.0	18.66	313.86	4,181.3	640.9	-624.7	895.0	0.00	0.00	0.00
4,360.0	18.66	313.86	4,219.2	649.7	-634.0	907.8	0.00	0.00	0.00
4,400.0	18.66	313.86	4,257.0	658.6	-643.2	920.6	0.00	0.00	0.00
4,427.7	18.66	313.86	4,283.3	664.7	-649.6	929.4	0.00	0.00	0.00
4,440.0	18.42	313.86	4,295.0	667.5	-652.4	933.3	2.00	-2.00	0.00
4,480.0	17.62	313.86	4,333.0	676.0	-661.3	945.7	2.00	-2.00	0.00
4,520.0	16.82	313.86	4,371.2	684.2	-669.9	957.5	2.00	-2.00	0.00
4,560.0	16.02	313.86	4,409.6	692.1	-678.0	968.8	2.00	-2.00	0.00
4,600.0	15.22	313.86	4,448.1	699.5	-685.8	979.6	2.00	-2.00	0.00
4,640.0	14.42	313.86	4,486.8	706.6	-693.2	989.8	2.00	-2.00	0.00
4,680.0	13.62	313.86	4,525.6	713.3	-700.1	999.5	2.00	-2.00	0.00
4,720.0	12.82	313.86	4,564.5	719.7	-706.7	1,008.7	2.00	-2.00	0.00
4,760.0	12.02	313.86	4,603.6	725.6	-712.9	1,017.2	2.00	-2.00	0.00
4,800.0	11.22	313.86	4,642.8	731.2	-718.7	1,025.3	2.00	-2.00	0.00
4,840.0	10.42	313.86	4,682.0	736.4	-724.2	1,032.8	2.00	-2.00	0.00
4,880.0	9.62	313.86	4,721.4	741.2	-729.2	1,039.8	2.00	-2.00	0.00
4,920.0	8.82	313.86	4,760.9	745.7	-733.8	1,046.2	2.00	-2.00	0.00
4,960.0	8.02	313.86	4,800.5	749.7	-738.0	1,052.0	2.00	-2.00	0.00
5,000.0	7.22	313.86	4,840.1	753.4	-741.8	1,057.3	2.00	-2.00	0.00
5,040.0	6.42	313.86	4,879.9	756.7	-745.3	1,062.1	2.00	-2.00	0.00
5,080.0	5.62	313.86	4,919.6	759.6	-748.3	1,066.3	2.00	-2.00	0.00
5,120.0	4.82	313.86	4,959.5	762.1	-750.9	1,069.9	2.00	-2.00	0.00
5,160.0	4.02	313.86	4,999.3	764.2	-753.1	1,073.0	2.00	-2.00	0.00
5,200.0	3.22	313.86	5,039.3	766.0	-754.9	1,075.5	2.00	-2.00	0.00
5,240.0	2.42	313.86	5,079.2	767.4	-756.4	1,077.5	2.00	-2.00	0.00
5,280.0	1.62	313.86	5,119.2	768.3	-757.4	1,078.9	2.00	-2.00	0.00
5,320.0	0.82	313.86	5,159.2	768.9	-758.0	1,079.7	2.00	-2.00	0.00
5,360.0	0.02	313.86	5,199.2	769.1	-758.2	1,080.0	2.00	-2.00	0.00
5,360.8	0.00	0.00	5,200.0	769.1	-758.2	1,080.0	2.00	-2.00	0.00
TARGET BHL 2525'FNL, 150'FEL									
5,400.0	0.00	0.00	5,239.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
5,440.0	0.00	0.00	5,279.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
5,480.0	0.00	0.00	5,319.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
5,520.0	0.00	0.00	5,359.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
5,560.0	0.00	0.00	5,399.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,439.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
5,640.0	0.00	0.00	5,479.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
5,680.0	0.00	0.00	5,519.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
5,720.0	0.00	0.00	5,559.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
5,760.0	0.00	0.00	5,599.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,639.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
5,840.0	0.00	0.00	5,679.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
5,880.0	0.00	0.00	5,719.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
5,920.0	0.00	0.00	5,759.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
5,960.0	0.00	0.00	5,799.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
6,000.0	0.00	0.00	5,839.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
6,040.0	0.00	0.00	5,879.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
6,080.0	0.00	0.00	5,919.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
6,120.0	0.00	0.00	5,959.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
6,160.0	0.00	0.00	5,999.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,039.2	769.1	-758.2	1,080.0	0.00	0.00	0.00

Database: EDM den0-adp01 Server Data
 Company: NOBLE ENERGY INC WELD COUNTY CO
 Project: SEC.1-T4N-R64W
 Site: Marley C01-32D Pad Sec.1-T4N-R64W
 Well: Marley C01-32D
 Wellbore: Wellbore #1
 Design: Noble Marley C01-32D Plan #1 11-18-09

Local Co-ordinate Reference: Well Marley C01-32D
 TVD Reference: WELL @ 4624.0ft (Original Well Elev)
 MD Reference: WELL @ 4624.0ft (Original Well Elev)
 North Reference: True
 Survey Calculation Method: Minimum Curvature

Planned 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)
6,240.0	0.00	0.00	6,079.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
6,280.0	0.00	0.00	6,119.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
6,320.0	0.00	0.00	6,159.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
6,360.0	0.00	0.00	6,199.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,239.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
6,440.0	0.00	0.00	6,279.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
6,480.0	0.00	0.00	6,319.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
6,520.0	0.00	0.00	6,359.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
6,560.0	0.00	0.00	6,399.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,439.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
6,608.8	0.00	0.00	6,448.0	769.1	-758.2	1,080.0	0.00	0.00	0.00
NIOBRARA - TARGET CIRCLE 2525'FNL, 150'FEL									
6,640.0	0.00	0.00	6,479.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
6,680.0	0.00	0.00	6,519.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
6,720.0	0.00	0.00	6,559.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
6,760.0	0.00	0.00	6,599.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,639.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
6,840.0	0.00	0.00	6,679.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
6,880.0	0.00	0.00	6,719.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
6,904.8	0.00	0.00	6,744.0	769.1	-758.2	1,080.0	0.00	0.00	0.00
CODELL									
6,920.0	0.00	0.00	6,759.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
6,960.0	0.00	0.00	6,799.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
7,000.0	0.00	0.00	6,839.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
7,040.0	0.00	0.00	6,879.2	769.1	-758.2	1,080.0	0.00	0.00	0.00
7,054.8	0.00	0.00	6,894.0	769.1	-758.2	1,080.0	0.00	0.00	0.00
HARDLINE 112'S, 150'E OF BHL									

Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
HARDLINE 112'S, 150'E	0.00	0.00	6,894.0	657.1	-608.2	1,368,763.80	3,276,461.81	40° 20' 29.089 N	104° 30' 29.490 W
- plan misses target center by 187.2ft at 7054.8ft MD (6894.0 TVD, 769.1 N, -758.2 E)									
- Polygon									
Point 1			6,894.0	0.0	0.0	1,368,763.80	3,276,461.81		
Point 2			6,894.0	0.0	-300.0	1,368,760.43	3,276,161.84		
Point 3			6,894.0	0.0	0.0	1,368,763.80	3,276,461.81		
Point 4			6,894.0	300.0	0.0	1,369,063.77	3,276,458.45		
TARGET BHL 2525'F	0.00	0.00	5,200.0	769.1	-758.2	1,368,874.12	3,276,310.58	40° 20' 30.196 N	104° 30' 31.427 W
- plan hits target center									
- Point									
TARGET CIRCLE 2525'F	0.00	0.00	6,448.0	769.1	-758.2	1,368,874.10	3,276,310.57	40° 20' 30.196 N	104° 30' 31.428 W
- plan hits target center									
- Circle (radius 75.0)									

Database: EDM den0-adp01 Server Data
Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.1-T4N-R64W
Site: Marley C01-32D Pad Sec.1-T4N-R64W
Well: Marley C01-32D
Wellbore: Wellbore #1
Design: Noble Marley C01-32D Plan #1 11-18-09

Local Co-ordinate Reference: Well Marley C01-32D
TVD Reference: WELL @ 4624.0ft (Original Well Elev)
MD Reference: WELL @ 4624.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
6,608.8	6,448.0	NIOBRARA		0.00	
6,904.8	6,744.0	CODELL		0.00	