



NOBLE ENERGY INC WELD COUNTY CO

SEC.14-T4N-R65W

Boulter G14-29D Pad Sec.14-T4N-65W

Boulter G14-29D

Wellbore #1

Plan: Noble Boulter G14-29D Plan #1 11-03-10

Standard Planning Report

05 November, 2010



Database: Landmark
 Company: NOBLE ENERGY INC WELD COUNTY CO
 Project: SEC.14-T4N-R65W
 Site: Boulter G14-29D Pad Sec.14-T4N-65W
 Well: Boulter G14-29D
 Wellbore: Wellbore #1
 Design: Noble Boulter G14-29D Plan #1 11-03-10

Local Co-ordinate Reference: Well Boulter G14-29D
 TVD Reference: WELL @ 4707.0ft (Original Well Elev)
 MD Reference: WELL @ 4707.0ft (Original Well Elev)
 North Reference: True
 Survey Calculation Method: Minimum Curvature

Project	SEC.14-T4N-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	Boulter G14-29D Pad Sec.14-T4N-65W				
Site Position:		Northing:	1,360,140.34 ft	Latitude:	40° 19' 7.464 N
From:	Lat/Long	Easting:	3,241,815.40 ft	Longitude:	104° 37' 58.008 W
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.56 °

Well	Boulter G14-29D					
Well Position	+N/-S	0.0 ft	Northing:	1,360,140.33 ft	Latitude:	40° 19' 7.464 N
	+E/-W	0.0 ft	Easting:	3,241,815.40 ft	Longitude:	104° 37' 58.008 W
Position Uncertainty	0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,694.0 ft	

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	11/3/2010	8.87	67.03	53,169

Design	Noble Boulter G14-29D Plan #1 11-03-10				
Audit Notes:					
Version:	Phase:	PROTOTYPE	Tie On Depth:	0.0	
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(ft)	(ft)	(ft)	(°)	
	0.0	0.0	0.0	297.08	

Plan Sections										
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	
850.0	0.00	0.00	850.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,354.3	10.09	297.08	1,351.7	20.2	-39.4	2.00	2.00	0.00	297.08	
4,550.3	10.09	297.08	4,498.3	274.9	-537.8	0.00	0.00	0.00	0.00	
5,054.6	0.00	0.00	5,000.0	295.1	-577.2	2.00	-2.00	0.00	180.00	TARGET BHL 75'FI
7,751.6	0.00	0.00	7,697.0	295.1	-577.2	0.00	0.00	0.00	0.00	

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 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
850.0	0.00	0.00	850.0	0.0	0.0	0.0	0.00	0.00	0.00
880.0	0.60	297.08	880.0	0.1	-0.1	0.2	2.00	2.00	0.00
920.0	1.40	297.08	920.0	0.4	-0.8	0.9	2.00	2.00	0.00
960.0	2.20	297.08	960.0	1.0	-1.9	2.1	2.00	2.00	0.00
1,000.0	3.00	297.08	999.9	1.8	-3.5	3.9	2.00	2.00	0.00
1,040.0	3.80	297.08	1,039.9	2.9	-5.6	6.3	2.00	2.00	0.00
1,080.0	4.60	297.08	1,079.8	4.2	-8.2	9.2	2.00	2.00	0.00
1,120.0	5.40	297.08	1,119.6	5.8	-11.3	12.7	2.00	2.00	0.00
1,160.0	6.20	297.08	1,159.4	7.6	-14.9	16.8	2.00	2.00	0.00
1,200.0	7.00	297.08	1,199.1	9.7	-19.0	21.4	2.00	2.00	0.00
1,240.0	7.80	297.08	1,238.8	12.1	-23.6	26.5	2.00	2.00	0.00
1,280.0	8.60	297.08	1,278.4	14.7	-28.7	32.2	2.00	2.00	0.00
1,320.0	9.40	297.08	1,317.9	17.5	-34.3	38.5	2.00	2.00	0.00
1,354.3	10.09	297.08	1,351.7	20.2	-39.4	44.3	2.00	2.00	0.00
1,360.0	10.09	297.08	1,357.3	20.6	-40.3	45.3	0.00	0.00	0.00
1,400.0	10.09	297.08	1,396.7	23.8	-46.5	52.3	0.00	0.00	0.00
1,440.0	10.09	297.08	1,436.1	27.0	-52.8	59.3	0.00	0.00	0.00
1,480.0	10.09	297.08	1,475.5	30.2	-59.0	66.3	0.00	0.00	0.00
1,520.0	10.09	297.08	1,514.8	33.4	-65.3	73.3	0.00	0.00	0.00
1,560.0	10.09	297.08	1,554.2	36.6	-71.5	80.3	0.00	0.00	0.00
1,600.0	10.09	297.08	1,593.6	39.7	-77.7	87.3	0.00	0.00	0.00
1,640.0	10.09	297.08	1,633.0	42.9	-84.0	94.3	0.00	0.00	0.00
1,680.0	10.09	297.08	1,672.4	46.1	-90.2	101.3	0.00	0.00	0.00
1,720.0	10.09	297.08	1,711.7	49.3	-96.4	108.3	0.00	0.00	0.00
1,760.0	10.09	297.08	1,751.1	52.5	-102.7	115.3	0.00	0.00	0.00
1,800.0	10.09	297.08	1,790.5	55.7	-108.9	122.3	0.00	0.00	0.00
1,840.0	10.09	297.08	1,829.9	58.9	-115.2	129.3	0.00	0.00	0.00
1,880.0	10.09	297.08	1,869.3	62.1	-121.4	136.3	0.00	0.00	0.00
1,920.0	10.09	297.08	1,908.7	65.3	-127.6	143.3	0.00	0.00	0.00
1,960.0	10.09	297.08	1,948.0	68.4	-133.9	150.4	0.00	0.00	0.00
2,000.0	10.09	297.08	1,987.4	71.6	-140.1	157.4	0.00	0.00	0.00
2,040.0	10.09	297.08	2,026.8	74.8	-146.3	164.4	0.00	0.00	0.00

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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	10.09	297.08	2,066.2	78.0	-152.6	171.4	0.00	0.00	0.00
2,120.0	10.09	297.08	2,105.6	81.2	-158.8	178.4	0.00	0.00	0.00
2,160.0	10.09	297.08	2,144.9	84.4	-165.1	185.4	0.00	0.00	0.00
2,200.0	10.09	297.08	2,184.3	87.6	-171.3	192.4	0.00	0.00	0.00
2,240.0	10.09	297.08	2,223.7	90.8	-177.5	199.4	0.00	0.00	0.00
2,280.0	10.09	297.08	2,263.1	94.0	-183.8	206.4	0.00	0.00	0.00
2,320.0	10.09	297.08	2,302.5	97.1	-190.0	213.4	0.00	0.00	0.00
2,360.0	10.09	297.08	2,341.9	100.3	-196.2	220.4	0.00	0.00	0.00
2,400.0	10.09	297.08	2,381.2	103.5	-202.5	227.4	0.00	0.00	0.00
2,440.0	10.09	297.08	2,420.6	106.7	-208.7	234.4	0.00	0.00	0.00
2,480.0	10.09	297.08	2,460.0	109.9	-215.0	241.4	0.00	0.00	0.00
2,520.0	10.09	297.08	2,499.4	113.1	-221.2	248.4	0.00	0.00	0.00
2,560.0	10.09	297.08	2,538.8	116.3	-227.4	255.4	0.00	0.00	0.00
2,600.0	10.09	297.08	2,578.1	119.5	-233.7	262.4	0.00	0.00	0.00
2,640.0	10.09	297.08	2,617.5	122.7	-239.9	269.4	0.00	0.00	0.00
2,680.0	10.09	297.08	2,656.9	125.8	-246.2	276.5	0.00	0.00	0.00
2,720.0	10.09	297.08	2,696.3	129.0	-252.4	283.5	0.00	0.00	0.00
2,760.0	10.09	297.08	2,735.7	132.2	-258.6	290.5	0.00	0.00	0.00
2,800.0	10.09	297.08	2,775.1	135.4	-264.9	297.5	0.00	0.00	0.00
2,840.0	10.09	297.08	2,814.4	138.6	-271.1	304.5	0.00	0.00	0.00
2,880.0	10.09	297.08	2,853.8	141.8	-277.3	311.5	0.00	0.00	0.00
2,920.0	10.09	297.08	2,893.2	145.0	-283.6	318.5	0.00	0.00	0.00
2,960.0	10.09	297.08	2,932.6	148.2	-289.8	325.5	0.00	0.00	0.00
3,000.0	10.09	297.08	2,972.0	151.4	-296.1	332.5	0.00	0.00	0.00
3,040.0	10.09	297.08	3,011.3	154.5	-302.3	339.5	0.00	0.00	0.00
3,080.0	10.09	297.08	3,050.7	157.7	-308.5	346.5	0.00	0.00	0.00
3,120.0	10.09	297.08	3,090.1	160.9	-314.8	353.5	0.00	0.00	0.00
3,160.0	10.09	297.08	3,129.5	164.1	-321.0	360.5	0.00	0.00	0.00
3,200.0	10.09	297.08	3,168.9	167.3	-327.2	367.5	0.00	0.00	0.00
3,240.0	10.09	297.08	3,208.3	170.5	-333.5	374.5	0.00	0.00	0.00
3,280.0	10.09	297.08	3,247.6	173.7	-339.7	381.5	0.00	0.00	0.00
3,320.0	10.09	297.08	3,287.0	176.9	-346.0	388.5	0.00	0.00	0.00
3,360.0	10.09	297.08	3,326.4	180.1	-352.2	395.5	0.00	0.00	0.00
3,400.0	10.09	297.08	3,365.8	183.2	-358.4	402.6	0.00	0.00	0.00
3,440.0	10.09	297.08	3,405.2	186.4	-364.7	409.6	0.00	0.00	0.00
3,480.0	10.09	297.08	3,444.5	189.6	-370.9	416.6	0.00	0.00	0.00
3,520.0	10.09	297.08	3,483.9	192.8	-377.1	423.6	0.00	0.00	0.00
3,560.0	10.09	297.08	3,523.3	196.0	-383.4	430.6	0.00	0.00	0.00
3,600.0	10.09	297.08	3,562.7	199.2	-389.6	437.6	0.00	0.00	0.00
3,640.0	10.09	297.08	3,602.1	202.4	-395.9	444.6	0.00	0.00	0.00
3,680.0	10.09	297.08	3,641.5	205.6	-402.1	451.6	0.00	0.00	0.00
3,720.0	10.09	297.08	3,680.8	208.8	-408.3	458.6	0.00	0.00	0.00
3,760.0	10.09	297.08	3,720.2	211.9	-414.6	465.6	0.00	0.00	0.00
3,800.0	10.09	297.08	3,759.6	215.1	-420.8	472.6	0.00	0.00	0.00
3,840.0	10.09	297.08	3,799.0	218.3	-427.0	479.6	0.00	0.00	0.00
3,880.0	10.09	297.08	3,838.4	221.5	-433.3	486.6	0.00	0.00	0.00
3,920.0	10.09	297.08	3,877.7	224.7	-439.5	493.6	0.00	0.00	0.00
3,960.0	10.09	297.08	3,917.1	227.9	-445.8	500.6	0.00	0.00	0.00
4,000.0	10.09	297.08	3,956.5	231.1	-452.0	507.6	0.00	0.00	0.00
4,040.0	10.09	297.08	3,995.9	234.3	-458.2	514.6	0.00	0.00	0.00
4,080.0	10.09	297.08	4,035.3	237.5	-464.5	521.6	0.00	0.00	0.00
4,120.0	10.09	297.08	4,074.7	240.6	-470.7	528.7	0.00	0.00	0.00
4,160.0	10.09	297.08	4,114.0	243.8	-476.9	535.7	0.00	0.00	0.00
4,200.0	10.09	297.08	4,153.4	247.0	-483.2	542.7	0.00	0.00	0.00

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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	10.09	297.08	4,192.8	250.2	-489.4	549.7	0.00	0.00	0.00
4,280.0	10.09	297.08	4,232.2	253.4	-495.7	556.7	0.00	0.00	0.00
4,320.0	10.09	297.08	4,271.6	256.6	-501.9	563.7	0.00	0.00	0.00
4,360.0	10.09	297.08	4,310.9	259.8	-508.1	570.7	0.00	0.00	0.00
4,400.0	10.09	297.08	4,350.3	263.0	-514.4	577.7	0.00	0.00	0.00
4,440.0	10.09	297.08	4,389.7	266.2	-520.6	584.7	0.00	0.00	0.00
4,480.0	10.09	297.08	4,429.1	269.3	-526.8	591.7	0.00	0.00	0.00
4,520.0	10.09	297.08	4,468.5	272.5	-533.1	598.7	0.00	0.00	0.00
4,550.3	10.09	297.08	4,498.3	274.9	-537.8	604.0	0.00	0.00	0.00
4,560.0	9.89	297.08	4,507.9	275.7	-539.3	605.7	2.00	-2.00	0.00
4,600.0	9.09	297.08	4,547.3	278.7	-545.2	612.3	2.00	-2.00	0.00
4,640.0	8.29	297.08	4,586.8	281.5	-550.6	618.3	2.00	-2.00	0.00
4,680.0	7.49	297.08	4,626.5	284.0	-555.5	623.8	2.00	-2.00	0.00
4,720.0	6.69	297.08	4,666.2	286.2	-559.8	628.8	2.00	-2.00	0.00
4,760.0	5.89	297.08	4,705.9	288.2	-563.8	633.2	2.00	-2.00	0.00
4,800.0	5.09	297.08	4,745.7	290.0	-567.2	637.0	2.00	-2.00	0.00
4,840.0	4.29	297.08	4,785.6	291.4	-570.1	640.3	2.00	-2.00	0.00
4,880.0	3.49	297.08	4,825.5	292.7	-572.5	643.0	2.00	-2.00	0.00
4,920.0	2.69	297.08	4,865.5	293.7	-574.4	645.1	2.00	-2.00	0.00
4,960.0	1.89	297.08	4,905.4	294.4	-575.8	646.7	2.00	-2.00	0.00
5,000.0	1.09	297.08	4,945.4	294.9	-576.8	647.8	2.00	-2.00	0.00
5,040.0	0.29	297.08	4,985.4	295.1	-577.2	648.2	2.00	-2.00	0.00
5,054.6	0.00	0.00	5,000.0	295.1	-577.2	648.3	2.00	-2.00	0.00
5,080.0	0.00	0.00	5,025.4	295.1	-577.2	648.3	0.00	0.00	0.00
5,120.0	0.00	0.00	5,065.4	295.1	-577.2	648.3	0.00	0.00	0.00
5,160.0	0.00	0.00	5,105.4	295.1	-577.2	648.3	0.00	0.00	0.00
5,200.0	0.00	0.00	5,145.4	295.1	-577.2	648.3	0.00	0.00	0.00
5,240.0	0.00	0.00	5,185.4	295.1	-577.2	648.3	0.00	0.00	0.00
5,280.0	0.00	0.00	5,225.4	295.1	-577.2	648.3	0.00	0.00	0.00
5,320.0	0.00	0.00	5,265.4	295.1	-577.2	648.3	0.00	0.00	0.00
5,360.0	0.00	0.00	5,305.4	295.1	-577.2	648.3	0.00	0.00	0.00
5,400.0	0.00	0.00	5,345.4	295.1	-577.2	648.3	0.00	0.00	0.00
5,440.0	0.00	0.00	5,385.4	295.1	-577.2	648.3	0.00	0.00	0.00
5,480.0	0.00	0.00	5,425.4	295.1	-577.2	648.3	0.00	0.00	0.00
5,520.0	0.00	0.00	5,465.4	295.1	-577.2	648.3	0.00	0.00	0.00
5,560.0	0.00	0.00	5,505.4	295.1	-577.2	648.3	0.00	0.00	0.00
5,600.0	0.00	0.00	5,545.4	295.1	-577.2	648.3	0.00	0.00	0.00
5,640.0	0.00	0.00	5,585.4	295.1	-577.2	648.3	0.00	0.00	0.00
5,680.0	0.00	0.00	5,625.4	295.1	-577.2	648.3	0.00	0.00	0.00
5,720.0	0.00	0.00	5,665.4	295.1	-577.2	648.3	0.00	0.00	0.00
5,760.0	0.00	0.00	5,705.4	295.1	-577.2	648.3	0.00	0.00	0.00
5,800.0	0.00	0.00	5,745.4	295.1	-577.2	648.3	0.00	0.00	0.00
5,840.0	0.00	0.00	5,785.4	295.1	-577.2	648.3	0.00	0.00	0.00
5,880.0	0.00	0.00	5,825.4	295.1	-577.2	648.3	0.00	0.00	0.00
5,920.0	0.00	0.00	5,865.4	295.1	-577.2	648.3	0.00	0.00	0.00
5,960.0	0.00	0.00	5,905.4	295.1	-577.2	648.3	0.00	0.00	0.00
6,000.0	0.00	0.00	5,945.4	295.1	-577.2	648.3	0.00	0.00	0.00
6,040.0	0.00	0.00	5,985.4	295.1	-577.2	648.3	0.00	0.00	0.00
6,080.0	0.00	0.00	6,025.4	295.1	-577.2	648.3	0.00	0.00	0.00
6,120.0	0.00	0.00	6,065.4	295.1	-577.2	648.3	0.00	0.00	0.00
6,160.0	0.00	0.00	6,105.4	295.1	-577.2	648.3	0.00	0.00	0.00
6,200.0	0.00	0.00	6,145.4	295.1	-577.2	648.3	0.00	0.00	0.00
6,240.0	0.00	0.00	6,185.4	295.1	-577.2	648.3	0.00	0.00	0.00
6,280.0	0.00	0.00	6,225.4	295.1	-577.2	648.3	0.00	0.00	0.00

Database: Landmark
 Company: NOBLE ENERGY INC WELD COUNTY CO
 Project: SEC.14-T4N-R65W
 Site: Boulder G14-29D Pad Sec.14-T4N-65W
 Well: Boulder G14-29D
 Wellbore: Wellbore #1
 Design: Noble Boulder G14-29D Plan #1 11-03-10

Local Co-ordinate Reference: Well Boulder G14-29D
 TVD Reference: WELL @ 4707.0ft (Original Well Elev)
 MD Reference: WELL @ 4707.0ft (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)
6,320.0	0.00	0.00	6,265.4	295.1	-577.2	648.3	0.00	0.00	0.00
6,360.0	0.00	0.00	6,305.4	295.1	-577.2	648.3	0.00	0.00	0.00
6,400.0	0.00	0.00	6,345.4	295.1	-577.2	648.3	0.00	0.00	0.00
6,440.0	0.00	0.00	6,385.4	295.1	-577.2	648.3	0.00	0.00	0.00
6,480.0	0.00	0.00	6,425.4	295.1	-577.2	648.3	0.00	0.00	0.00
6,520.0	0.00	0.00	6,465.4	295.1	-577.2	648.3	0.00	0.00	0.00
6,560.0	0.00	0.00	6,505.4	295.1	-577.2	648.3	0.00	0.00	0.00
6,600.0	0.00	0.00	6,545.4	295.1	-577.2	648.3	0.00	0.00	0.00
6,640.0	0.00	0.00	6,585.4	295.1	-577.2	648.3	0.00	0.00	0.00
6,680.0	0.00	0.00	6,625.4	295.1	-577.2	648.3	0.00	0.00	0.00
6,720.0	0.00	0.00	6,665.4	295.1	-577.2	648.3	0.00	0.00	0.00
6,760.0	0.00	0.00	6,705.4	295.1	-577.2	648.3	0.00	0.00	0.00
6,800.0	0.00	0.00	6,745.4	295.1	-577.2	648.3	0.00	0.00	0.00
6,840.0	0.00	0.00	6,785.4	295.1	-577.2	648.3	0.00	0.00	0.00
6,880.0	0.00	0.00	6,825.4	295.1	-577.2	648.3	0.00	0.00	0.00
6,920.0	0.00	0.00	6,865.4	295.1	-577.2	648.3	0.00	0.00	0.00
6,960.0	0.00	0.00	6,905.4	295.1	-577.2	648.3	0.00	0.00	0.00
7,000.0	0.00	0.00	6,945.4	295.1	-577.2	648.3	0.00	0.00	0.00
7,040.0	0.00	0.00	6,985.4	295.1	-577.2	648.3	0.00	0.00	0.00
7,080.0	0.00	0.00	7,025.4	295.1	-577.2	648.3	0.00	0.00	0.00
7,120.0	0.00	0.00	7,065.4	295.1	-577.2	648.3	0.00	0.00	0.00
7,160.0	0.00	0.00	7,105.4	295.1	-577.2	648.3	0.00	0.00	0.00
7,200.0	0.00	0.00	7,145.4	295.1	-577.2	648.3	0.00	0.00	0.00
7,240.0	0.00	0.00	7,185.4	295.1	-577.2	648.3	0.00	0.00	0.00
7,280.0	0.00	0.00	7,225.4	295.1	-577.2	648.3	0.00	0.00	0.00
7,320.0	0.00	0.00	7,265.4	295.1	-577.2	648.3	0.00	0.00	0.00
7,360.0	0.00	0.00	7,305.4	295.1	-577.2	648.3	0.00	0.00	0.00
7,400.0	0.00	0.00	7,345.4	295.1	-577.2	648.3	0.00	0.00	0.00
7,440.0	0.00	0.00	7,385.4	295.1	-577.2	648.3	0.00	0.00	0.00
7,480.0	0.00	0.00	7,425.4	295.1	-577.2	648.3	0.00	0.00	0.00
7,520.0	0.00	0.00	7,465.4	295.1	-577.2	648.3	0.00	0.00	0.00
7,560.0	0.00	0.00	7,505.4	295.1	-577.2	648.3	0.00	0.00	0.00
7,600.0	0.00	0.00	7,545.4	295.1	-577.2	648.3	0.00	0.00	0.00
7,640.0	0.00	0.00	7,585.4	295.1	-577.2	648.3	0.00	0.00	0.00
7,680.0	0.00	0.00	7,625.4	295.1	-577.2	648.3	0.00	0.00	0.00
7,720.0	0.00	0.00	7,665.4	295.1	-577.2	648.3	0.00	0.00	0.00
7,751.6	0.00	0.00	7,697.0	295.1	-577.2	648.3	0.00	0.00	0.00

Database: Landmark
Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.14-T4N-R65W
Site: Boulter G14-29D Pad Sec.14-T4N-65W
Well: Boulter G14-29D
Wellbore: Wellbore #1
Design: Noble Boulter G14-29D Plan #1 11-03-10

Local Co-ordinate Reference: Well Boulter G14-29D
TVD Reference: WELL @ 4707.0ft (Original Well Elev)
MD Reference: WELL @ 4707.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
HARD LINES 75'N of - plan misses by 125.0ft at 7751.6ft MD (7697.0 TVD, 295.1 N, -577.2 E) - Polygon	0.00	0.00	7,697.0	370.1	-477.2	1,360,505.73	3,241,334.63	40° 19' 11.121 N	104° 38' 4.169 W
Point 1			7,697.0	0.0	0.0	1,360,505.73	3,241,334.63		
Point 2			7,697.0	0.0	-200.0	1,360,503.77	3,241,134.65		
TARGET BHL 75'FNL - plan hits target - Point	0.00	0.00	5,000.0	295.1	-577.2	1,360,429.76	3,241,235.34	40° 19' 10.380 N	104° 38' 5.460 W
TARGET CIRCLE 75' - plan hits target - Circle (radius 75.0)	0.00	0.00	6,727.0	295.1	-577.2	1,360,429.76	3,241,235.34	40° 19' 10.380 N	104° 38' 5.460 W

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
500.0	500.0	8 5/8"	8-5/8	12-1/4

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
6,781.6	6,727.0	NIOBRARA		0.00	
7,101.6	7,047.0	CODELL		0.00	
7,491.6	7,437.0	D-SAND		0.00	
7,551.6	7,497.0	J-SAND		0.00	