

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	750.0	0.00	0.00	750.0	0.0	0.0	0.00	0.00	0.0	
3	1574.5	16.49	336.00	1563.2	107.6	-47.9	2.00	336.00	111.8	
4	2624.5	16.49	336.00	2570.0	379.9	-169.2	0.00	0.00	394.5	
5	3041.4	16.49	306.32	2970.4	469.2	-241.0	2.00	-104.24	508.8	
6	5144.2	16.49	306.32	4986.7	822.8	-722.0	0.00	0.00	1094.4	
7	5968.8	0.00	0.00	5800.0	892.6	-817.0	2.00	180.00	1210.0	TARGET BHL 2560'FSL & 75'FWL
8	7498.8	0.00	0.00	7330.0	892.6	-817.0	0.00	0.00	1210.0	



NOBLE ENERGY INC WELD COUNTY CO

SEC.7-T4N-R65W

Stewart G07-20D Pad Sec.7-T4N-R65W

Stewart Federal G07-32D

Wellbore #1

Plan: Noble Stewart Federal G07-32D Plan #1 (9-16-11)

Standard Planning Report

20 September, 2011



Database: Landmark
Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.7-T4N-R65W
Site: Stewart G07-20D Pad Sec.7-T4N-R65W
Well: Stewart Federal G07-32D
Wellbore: Wellbore #1
Design: Noble Stewart Federal G07-32D Plan #1 (9-16-

Local Co-ordinate Reference: Well Stewart Federal G07-32D
TVD Reference: WELL @ 4710.0ft (Original Well Elev)
MD Reference: WELL @ 4710.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

Project	SEC.7-T4N-R65W		
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 Stewart G07-20D Pad Sec.7-T4N-R65W

Site Position:		Northing:	1,361,995.46 ft	Latitude:	40.324400
From:	Lat/Long	Easting:	3,219,649.46 ft	Longitude:	-104.712210
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0.51 °

Well	Stewart Federal G07-32D					
Well Position	+N/-S	3.6 ft	Northing:	1,361,998.89 ft	Latitude:	40.324410
	+E/-W	-22.3 ft	Easting:	3,219,627.12 ft	Longitude:	-104.712290
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,697.0 ft

Wellbore Wellbore #1

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	9/16/2011	8.80	66.99	53,072

Design Noble Stewart Federal G07-32D Plan #1 (9-16-11)

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	317.53

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	
750.0	0.00	0.00	750.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,574.5	16.49	336.00	1,563.2	107.6	-47.9	2.00	2.00	0.00	336.00	
2,624.5	16.49	336.00	2,570.0	379.9	-169.2	0.00	0.00	0.00	0.00	
3,041.4	16.49	306.32	2,970.4	469.2	-241.0	2.00	0.00	-7.12	-104.24	
5,144.2	16.49	306.32	4,986.7	822.8	-722.0	0.00	0.00	0.00	0.00	
5,968.8	0.00	0.00	5,800.0	892.6	-817.0	2.00	-2.00	0.00	180.00	TARGET BHL 256C
7,498.8	0.00	0.00	7,330.0	892.6	-817.0	0.00	0.00	0.00	0.00	

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Site: Stewart G07-20D Pad Sec.7-T4N-R65W
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Wellbore: Wellbore #1
Design: Noble Stewart Federal G07-32D Plan #1 (9-16-

Local Co-ordinate Reference: Well Stewart Federal G07-32D
TVD Reference: WELL @ 4710.0ft (Original Well Elev)
MD Reference: WELL @ 4710.0ft (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
550.0	0.00	0.00	550.0	0.0	0.0	0.0	0.00	0.00	0.00
8 5/8"									
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
750.0	0.00	0.00	750.0	0.0	0.0	0.0	0.00	0.00	0.00
760.0	0.20	336.00	760.0	0.0	0.0	0.0	2.00	2.00	0.00
800.0	1.00	336.00	800.0	0.4	-0.2	0.4	2.00	2.00	0.00
840.0	1.80	336.00	840.0	1.3	-0.6	1.3	2.00	2.00	0.00
880.0	2.60	336.00	880.0	2.7	-1.2	2.8	2.00	2.00	0.00
920.0	3.40	336.00	919.9	4.6	-2.1	4.8	2.00	2.00	0.00
960.0	4.20	336.00	959.8	7.0	-3.1	7.3	2.00	2.00	0.00
1,000.0	5.00	336.00	999.7	10.0	-4.4	10.3	2.00	2.00	0.00
1,040.0	5.80	336.00	1,039.5	13.4	-6.0	13.9	2.00	2.00	0.00
1,080.0	6.60	336.00	1,079.3	17.3	-7.7	18.0	2.00	2.00	0.00
1,120.0	7.40	336.00	1,119.0	21.8	-9.7	22.6	2.00	2.00	0.00
1,160.0	8.20	336.00	1,158.6	26.8	-11.9	27.8	2.00	2.00	0.00
1,200.0	9.00	336.00	1,198.2	32.2	-14.3	33.5	2.00	2.00	0.00
1,240.0	9.80	336.00	1,237.6	38.2	-17.0	39.7	2.00	2.00	0.00
1,280.0	10.60	336.00	1,277.0	44.7	-19.9	46.4	2.00	2.00	0.00
1,320.0	11.40	336.00	1,316.2	51.6	-23.0	53.6	2.00	2.00	0.00
1,360.0	12.20	336.00	1,355.4	59.1	-26.3	61.4	2.00	2.00	0.00
1,400.0	13.00	336.00	1,394.4	67.1	-29.9	69.6	2.00	2.00	0.00
1,440.0	13.80	336.00	1,433.3	75.5	-33.6	78.4	2.00	2.00	0.00
1,480.0	14.60	336.00	1,472.1	84.5	-37.6	87.7	2.00	2.00	0.00
1,520.0	15.40	336.00	1,510.8	94.0	-41.8	97.6	2.00	2.00	0.00
1,560.0	16.20	336.00	1,549.3	103.9	-46.3	107.9	2.00	2.00	0.00
1,574.5	16.49	336.00	1,563.2	107.6	-47.9	111.8	2.00	2.00	0.00
1,600.0	16.49	336.00	1,587.6	114.3	-50.9	118.6	0.00	0.00	0.00
1,640.0	16.49	336.00	1,626.0	124.6	-55.5	129.4	0.00	0.00	0.00
1,680.0	16.49	336.00	1,664.3	135.0	-60.1	140.2	0.00	0.00	0.00
1,720.0	16.49	336.00	1,702.7	145.4	-64.7	150.9	0.00	0.00	0.00
1,760.0	16.49	336.00	1,741.0	155.7	-69.3	161.7	0.00	0.00	0.00
1,800.0	16.49	336.00	1,779.4	166.1	-74.0	172.5	0.00	0.00	0.00
1,840.0	16.49	336.00	1,817.7	176.5	-78.6	183.2	0.00	0.00	0.00
1,880.0	16.49	336.00	1,856.1	186.9	-83.2	194.0	0.00	0.00	0.00
1,920.0	16.49	336.00	1,894.5	197.2	-87.8	204.8	0.00	0.00	0.00
1,960.0	16.49	336.00	1,932.8	207.6	-92.4	215.6	0.00	0.00	0.00

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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)
2,000.0	16.49	336.00	1,971.2	218.0	-97.1	226.3	0.00	0.00	0.00
2,040.0	16.49	336.00	2,009.5	228.4	-101.7	237.1	0.00	0.00	0.00
2,080.0	16.49	336.00	2,047.9	238.7	-106.3	247.9	0.00	0.00	0.00
2,120.0	16.49	336.00	2,086.2	249.1	-110.9	258.6	0.00	0.00	0.00
2,160.0	16.49	336.00	2,124.6	259.5	-115.5	269.4	0.00	0.00	0.00
2,200.0	16.49	336.00	2,162.9	269.8	-120.1	280.2	0.00	0.00	0.00
2,240.0	16.49	336.00	2,201.3	280.2	-124.8	290.9	0.00	0.00	0.00
2,280.0	16.49	336.00	2,239.6	290.6	-129.4	301.7	0.00	0.00	0.00
2,320.0	16.49	336.00	2,278.0	301.0	-134.0	312.5	0.00	0.00	0.00
2,360.0	16.49	336.00	2,316.4	311.3	-138.6	323.2	0.00	0.00	0.00
2,400.0	16.49	336.00	2,354.7	321.7	-143.2	334.0	0.00	0.00	0.00
2,440.0	16.49	336.00	2,393.1	332.1	-147.8	344.8	0.00	0.00	0.00
2,480.0	16.49	336.00	2,431.4	342.4	-152.5	355.6	0.00	0.00	0.00
2,520.0	16.49	336.00	2,469.8	352.8	-157.1	366.3	0.00	0.00	0.00
2,560.0	16.49	336.00	2,508.1	363.2	-161.7	377.1	0.00	0.00	0.00
2,600.0	16.49	336.00	2,546.5	373.6	-166.3	387.9	0.00	0.00	0.00
2,624.5	16.49	336.00	2,570.0	379.9	-169.2	394.5	0.00	0.00	0.00
2,640.0	16.42	334.94	2,584.8	383.9	-171.0	398.6	2.00	-0.47	-6.86
2,680.0	16.25	332.15	2,623.2	394.0	-176.0	409.4	2.00	-0.41	-6.96
2,720.0	16.12	329.32	2,661.6	403.7	-181.4	420.3	2.00	-0.32	-7.08
2,760.0	16.03	326.45	2,700.1	413.1	-187.3	431.2	2.00	-0.22	-7.18
2,800.0	15.98	323.55	2,738.5	422.1	-193.6	442.1	2.00	-0.13	-7.24
2,840.0	15.97	320.65	2,777.0	430.8	-200.4	453.1	2.00	-0.03	-7.27
2,880.0	16.00	317.74	2,815.4	439.1	-207.6	464.1	2.00	0.07	-7.26
2,920.0	16.06	314.86	2,853.9	447.1	-215.2	475.1	2.00	0.16	-7.22
2,960.0	16.17	312.00	2,892.3	454.8	-223.3	486.2	2.00	0.26	-7.15
3,000.0	16.31	309.18	2,930.7	462.0	-231.8	497.3	2.00	0.35	-7.04
3,040.0	16.49	306.42	2,969.1	468.9	-240.7	508.4	2.00	0.44	-6.91
3,041.4	16.49	306.32	2,970.4	469.2	-241.0	508.8	2.00	0.49	-6.83
3,080.0	16.49	306.32	3,007.4	475.7	-249.8	519.6	0.00	0.00	0.00
3,120.0	16.49	306.32	3,045.8	482.4	-259.0	530.7	0.00	0.00	0.00
3,160.0	16.49	306.32	3,084.2	489.1	-268.1	541.9	0.00	0.00	0.00
3,200.0	16.49	306.32	3,122.5	495.8	-277.3	553.0	0.00	0.00	0.00
3,240.0	16.49	306.32	3,160.9	502.6	-286.4	564.1	0.00	0.00	0.00
3,280.0	16.49	306.32	3,199.2	509.3	-295.6	575.3	0.00	0.00	0.00
3,320.0	16.49	306.32	3,237.6	516.0	-304.7	586.4	0.00	0.00	0.00
3,360.0	16.49	306.32	3,275.9	522.8	-313.9	597.5	0.00	0.00	0.00
3,400.0	16.49	306.32	3,314.3	529.5	-323.0	608.7	0.00	0.00	0.00
3,440.0	16.49	306.32	3,352.6	536.2	-332.2	619.8	0.00	0.00	0.00
3,480.0	16.49	306.32	3,391.0	542.9	-341.3	631.0	0.00	0.00	0.00
3,520.0	16.49	306.32	3,429.3	549.7	-350.5	642.1	0.00	0.00	0.00
3,560.0	16.49	306.32	3,467.7	556.4	-359.6	653.2	0.00	0.00	0.00
3,600.0	16.49	306.32	3,506.1	563.1	-368.8	664.4	0.00	0.00	0.00
3,640.0	16.49	306.32	3,544.4	569.8	-377.9	675.5	0.00	0.00	0.00
3,680.0	16.49	306.32	3,582.8	576.6	-387.1	686.7	0.00	0.00	0.00
3,720.0	16.49	306.32	3,621.1	583.3	-396.2	697.8	0.00	0.00	0.00
3,760.0	16.49	306.32	3,659.5	590.0	-405.4	708.9	0.00	0.00	0.00
3,800.0	16.49	306.32	3,697.8	596.7	-414.5	720.1	0.00	0.00	0.00
3,840.0	16.49	306.32	3,736.2	603.5	-423.7	731.2	0.00	0.00	0.00
3,880.0	16.49	306.32	3,774.5	610.2	-432.8	742.4	0.00	0.00	0.00
3,920.0	16.49	306.32	3,812.9	616.9	-442.0	753.5	0.00	0.00	0.00
3,960.0	16.49	306.32	3,851.2	623.6	-451.1	764.6	0.00	0.00	0.00
4,000.0	16.49	306.32	3,889.6	630.4	-460.3	775.8	0.00	0.00	0.00
4,040.0	16.49	306.32	3,928.0	637.1	-469.4	786.9	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)
4,080.0	16.49	306.32	3,966.3	643.8	-478.6	798.0	0.00	0.00	0.00
4,120.0	16.49	306.32	4,004.7	650.5	-487.7	809.2	0.00	0.00	0.00
4,160.0	16.49	306.32	4,043.0	657.3	-496.9	820.3	0.00	0.00	0.00
4,200.0	16.49	306.32	4,081.4	664.0	-506.0	831.5	0.00	0.00	0.00
4,240.0	16.49	306.32	4,119.7	670.7	-515.2	842.6	0.00	0.00	0.00
4,280.0	16.49	306.32	4,158.1	677.5	-524.3	853.7	0.00	0.00	0.00
4,320.0	16.49	306.32	4,196.4	684.2	-533.5	864.9	0.00	0.00	0.00
4,360.0	16.49	306.32	4,234.8	690.9	-542.6	876.0	0.00	0.00	0.00
4,400.0	16.49	306.32	4,273.1	697.6	-551.8	887.2	0.00	0.00	0.00
4,440.0	16.49	306.32	4,311.5	704.4	-560.9	898.3	0.00	0.00	0.00
4,480.0	16.49	306.32	4,349.8	711.1	-570.1	909.4	0.00	0.00	0.00
4,520.0	16.49	306.32	4,388.2	717.8	-579.2	920.6	0.00	0.00	0.00
4,560.0	16.49	306.32	4,426.6	724.5	-588.4	931.7	0.00	0.00	0.00
4,600.0	16.49	306.32	4,464.9	731.3	-597.5	942.8	0.00	0.00	0.00
4,640.0	16.49	306.32	4,503.3	738.0	-606.7	954.0	0.00	0.00	0.00
4,680.0	16.49	306.32	4,541.6	744.7	-615.8	965.1	0.00	0.00	0.00
4,720.0	16.49	306.32	4,580.0	751.4	-625.0	976.3	0.00	0.00	0.00
4,760.0	16.49	306.32	4,618.3	758.2	-634.1	987.4	0.00	0.00	0.00
4,800.0	16.49	306.32	4,656.7	764.9	-643.3	998.5	0.00	0.00	0.00
4,840.0	16.49	306.32	4,695.0	771.6	-652.4	1,009.7	0.00	0.00	0.00
4,880.0	16.49	306.32	4,733.4	778.3	-661.6	1,020.8	0.00	0.00	0.00
4,920.0	16.49	306.32	4,771.7	785.1	-670.7	1,032.0	0.00	0.00	0.00
4,960.0	16.49	306.32	4,810.1	791.8	-679.9	1,043.1	0.00	0.00	0.00
5,000.0	16.49	306.32	4,848.5	798.5	-689.0	1,054.2	0.00	0.00	0.00
5,040.0	16.49	306.32	4,886.8	805.2	-698.2	1,065.4	0.00	0.00	0.00
5,080.0	16.49	306.32	4,925.2	812.0	-707.3	1,076.5	0.00	0.00	0.00
5,120.0	16.49	306.32	4,963.5	818.7	-716.5	1,087.7	0.00	0.00	0.00
5,144.2	16.49	306.32	4,986.7	822.8	-722.0	1,094.4	0.00	0.00	0.00
5,160.0	16.18	306.32	5,001.9	825.4	-725.6	1,098.7	2.00	-2.00	0.00
5,200.0	15.38	306.32	5,040.4	831.8	-734.3	1,109.4	2.00	-2.00	0.00
5,240.0	14.58	306.32	5,079.0	838.0	-742.7	1,119.6	2.00	-2.00	0.00
5,280.0	13.78	306.32	5,117.8	843.8	-750.6	1,129.2	2.00	-2.00	0.00
5,320.0	12.98	306.32	5,156.7	849.2	-758.0	1,138.2	2.00	-2.00	0.00
5,360.0	12.18	306.32	5,195.8	854.4	-765.0	1,146.8	2.00	-2.00	0.00
5,400.0	11.38	306.32	5,234.9	859.2	-771.6	1,154.8	2.00	-2.00	0.00
5,440.0	10.58	306.32	5,274.2	863.8	-777.7	1,162.3	2.00	-2.00	0.00
5,480.0	9.78	306.32	5,313.5	867.9	-783.4	1,169.2	2.00	-2.00	0.00
5,520.0	8.98	306.32	5,353.0	871.8	-788.7	1,175.6	2.00	-2.00	0.00
5,560.0	8.18	306.32	5,392.6	875.3	-793.5	1,181.4	2.00	-2.00	0.00
5,600.0	7.38	306.32	5,432.2	878.5	-797.9	1,186.8	2.00	-2.00	0.00
5,640.0	6.58	306.32	5,471.9	881.4	-801.8	1,191.5	2.00	-2.00	0.00
5,680.0	5.78	306.32	5,511.7	884.0	-805.2	1,195.7	2.00	-2.00	0.00
5,720.0	4.98	306.32	5,551.5	886.2	-808.3	1,199.4	2.00	-2.00	0.00
5,760.0	4.18	306.32	5,591.4	888.1	-810.8	1,202.5	2.00	-2.00	0.00
5,800.0	3.38	306.32	5,631.3	889.6	-812.9	1,205.1	2.00	-2.00	0.00
5,840.0	2.58	306.32	5,671.2	890.9	-814.6	1,207.2	2.00	-2.00	0.00
5,880.0	1.78	306.32	5,711.2	891.8	-815.8	1,208.7	2.00	-2.00	0.00
5,920.0	0.98	306.32	5,751.2	892.3	-816.6	1,209.6	2.00	-2.00	0.00
5,960.0	0.18	306.32	5,791.2	892.6	-816.9	1,210.0	2.00	-2.00	0.00
5,968.8	0.00	0.00	5,800.0	892.6	-817.0	1,210.0	2.00	-2.00	0.00
TARGET BHL 2560'FSL & 75'FWL									
6,000.0	0.00	0.00	5,831.2	892.6	-817.0	1,210.0	0.00	0.00	0.00
6,040.0	0.00	0.00	5,871.2	892.6	-817.0	1,210.0	0.00	0.00	0.00
6,080.0	0.00	0.00	5,911.2	892.6	-817.0	1,210.0	0.00	0.00	0.00

Database: Landmark
Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.7-T4N-R65W
Site: Stewart G07-20D Pad Sec.7-T4N-R65W
Well: Stewart Federal G07-32D
Wellbore: Wellbore #1
Design: Noble Stewart Federal G07-32D Plan #1 (9-16-

Local Co-ordinate Reference: Well Stewart Federal G07-32D
TVD Reference: WELL @ 4710.0ft (Original Well Elev)
MD Reference: WELL @ 4710.0ft (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)
6,120.0	0.00	0.00	5,951.2	892.6	-817.0	1,210.0	0.00	0.00	0.00
6,160.0	0.00	0.00	5,991.2	892.6	-817.0	1,210.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,031.2	892.6	-817.0	1,210.0	0.00	0.00	0.00
6,240.0	0.00	0.00	6,071.2	892.6	-817.0	1,210.0	0.00	0.00	0.00
6,280.0	0.00	0.00	6,111.2	892.6	-817.0	1,210.0	0.00	0.00	0.00
6,320.0	0.00	0.00	6,151.2	892.6	-817.0	1,210.0	0.00	0.00	0.00
6,360.0	0.00	0.00	6,191.2	892.6	-817.0	1,210.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,231.2	892.6	-817.0	1,210.0	0.00	0.00	0.00
6,440.0	0.00	0.00	6,271.2	892.6	-817.0	1,210.0	0.00	0.00	0.00
6,480.0	0.00	0.00	6,311.2	892.6	-817.0	1,210.0	0.00	0.00	0.00
6,520.0	0.00	0.00	6,351.2	892.6	-817.0	1,210.0	0.00	0.00	0.00
6,560.0	0.00	0.00	6,391.2	892.6	-817.0	1,210.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,431.2	892.6	-817.0	1,210.0	0.00	0.00	0.00
6,640.0	0.00	0.00	6,471.2	892.6	-817.0	1,210.0	0.00	0.00	0.00
6,680.0	0.00	0.00	6,511.2	892.6	-817.0	1,210.0	0.00	0.00	0.00
6,720.0	0.00	0.00	6,551.2	892.6	-817.0	1,210.0	0.00	0.00	0.00
6,760.0	0.00	0.00	6,591.2	892.6	-817.0	1,210.0	0.00	0.00	0.00
6,800.0	0.00	0.00	6,631.2	892.6	-817.0	1,210.0	0.00	0.00	0.00
6,840.0	0.00	0.00	6,671.2	892.6	-817.0	1,210.0	0.00	0.00	0.00
6,880.0	0.00	0.00	6,711.2	892.6	-817.0	1,210.0	0.00	0.00	0.00
6,920.0	0.00	0.00	6,751.2	892.6	-817.0	1,210.0	0.00	0.00	0.00
6,960.0	0.00	0.00	6,791.2	892.6	-817.0	1,210.0	0.00	0.00	0.00
7,000.0	0.00	0.00	6,831.2	892.6	-817.0	1,210.0	0.00	0.00	0.00
7,008.8	0.00	0.00	6,840.0	892.6	-817.0	1,210.0	0.00	0.00	0.00
NIOBRARA - TARGET CIRCLE 2560'FSL & 75'FWL									
7,040.0	0.00	0.00	6,871.2	892.6	-817.0	1,210.0	0.00	0.00	0.00
7,080.0	0.00	0.00	6,911.2	892.6	-817.0	1,210.0	0.00	0.00	0.00
7,120.0	0.00	0.00	6,951.2	892.6	-817.0	1,210.0	0.00	0.00	0.00
7,160.0	0.00	0.00	6,991.2	892.6	-817.0	1,210.0	0.00	0.00	0.00
7,200.0	0.00	0.00	7,031.2	892.6	-817.0	1,210.0	0.00	0.00	0.00
7,240.0	0.00	0.00	7,071.2	892.6	-817.0	1,210.0	0.00	0.00	0.00
7,280.0	0.00	0.00	7,111.2	892.6	-817.0	1,210.0	0.00	0.00	0.00
7,320.0	0.00	0.00	7,151.2	892.6	-817.0	1,210.0	0.00	0.00	0.00
7,348.8	0.00	0.00	7,180.0	892.6	-817.0	1,210.0	0.00	0.00	0.00
CODELL									
7,360.0	0.00	0.00	7,191.2	892.6	-817.0	1,210.0	0.00	0.00	0.00
7,400.0	0.00	0.00	7,231.2	892.6	-817.0	1,210.0	0.00	0.00	0.00
7,440.0	0.00	0.00	7,271.2	892.6	-817.0	1,210.0	0.00	0.00	0.00
7,480.0	0.00	0.00	7,311.2	892.6	-817.0	1,210.0	0.00	0.00	0.00
7,498.8	0.00	0.00	7,330.0	892.6	-817.0	1,210.0	0.00	0.00	0.00
HARDLINES 81'N & 75'W OF BHL									

Database: Landmark
Company: NOBLE ENERGY INC WELD COUNTY CO
Project: SEC.7-T4N-R65W
Site: Stewart G07-20D Pad Sec.7-T4N-R65W
Well: Stewart Federal G07-32D
Wellbore: Wellbore #1
Design: Noble Stewart Federal G07-32D Plan #1 (9-16-

Local Co-ordinate Reference: Well Stewart Federal G07-32D
TVD Reference: WELL @ 4710.0ft (Original Well Elev)
MD Reference: WELL @ 4710.0ft (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
HARDLINES 81°N & 7	0.00	0.00	7,330.0	973.6	-892.0	1,362,964.49	3,218,726.55	40.327082	-104.715489
- plan misses target center by 110.4ft at 7498.8ft MD (7330.0 TVD, 892.6 N, -817.0 E)									
- Polygon									
Point 1			7,330.0	0.0	0.0	1,362,964.49	3,218,726.55		
Point 2			7,330.0	0.0	200.0	1,362,966.27	3,218,926.53		
Point 3			7,330.0	0.0	0.0	1,362,964.49	3,218,726.55		
Point 4			7,330.0	-200.0	0.0	1,362,764.51	3,218,728.32		
Point 5			7,330.0	0.0	0.0	1,362,964.49	3,218,726.55		
TARGET BHL 2560'F.	0.00	0.00	5,800.0	892.6	-817.0	1,362,884.14	3,218,802.31	40.326860	-104.715220
- plan hits target center									
- Point									
TARGET CIRCLE 256	0.00	0.00	6,840.0	892.6	-817.0	1,362,884.14	3,218,802.31	40.326860	-104.715220
- plan hits target center									
- Circle (radius 75.0)									

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (")	Hole Diameter (")
550.0	550.0	8 5/8"	8-5/8	12-1/4

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
7,008.8	6,840.0	NIOBRARA		0.00	
7,348.8	7,180.0	CODELL		0.00	