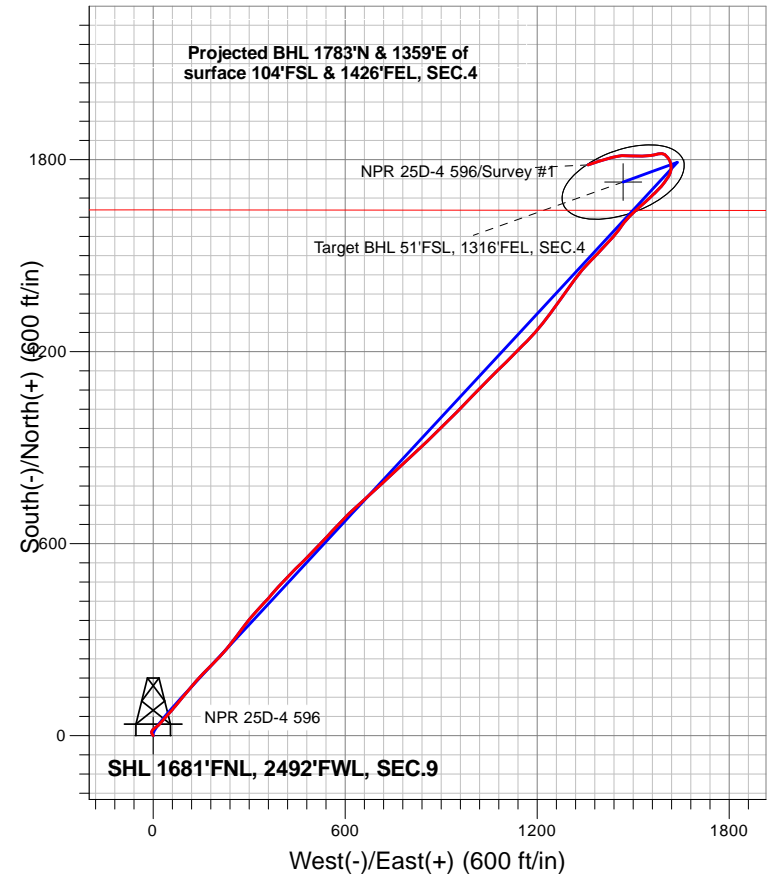
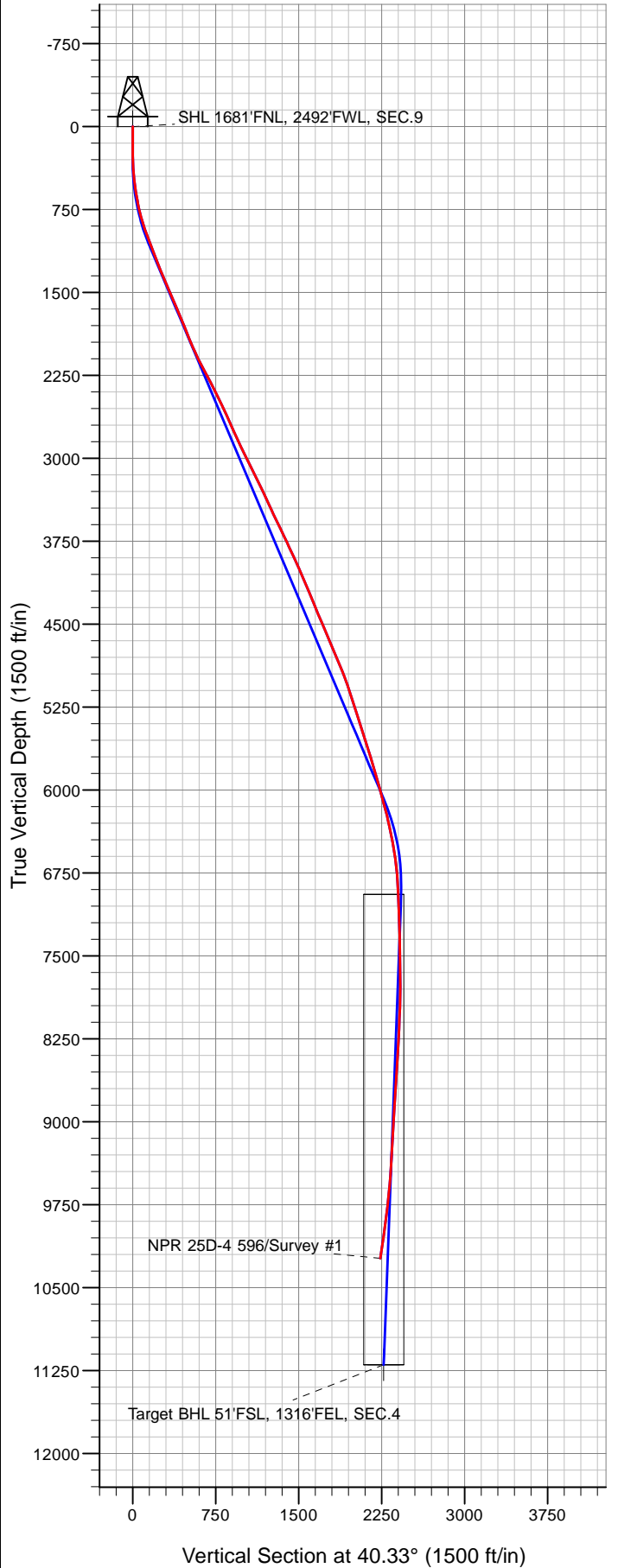


## Caerus Oil and Gas LLC



### LEGEND

- NPR 25D-4 596, NPR 25D-4 596 Wellbore #1, Plan #3 (2-06-19) V0
- NPR 25D-4 596 Wellbore #1
- Survey #1

# Final Survey Plot

**Projected Final Survey -  
 10,717'MD & 10234' TVD @ 2241.54'VS  
 10.0 deg Inc 250.4 deg AZ**

Project: SEC.9-T5S-R96W  
 Site: NPR G09 596 Pad Sec.9-T5S-R96W  
 Well: NPR 25D-4 596  
 Plan: NPR 25D-4 596 Wellbore #1



## **Caerus Oil and Gas LLC**

**SEC.9-T5S-R96W**

**NPR G09 596 Pad Sec.9-T5S-R96W**

**NPR 25D-4 596**

**NPR 25D-4 596 Wellbore #1**

**Survey: Survey #1**

## **Standard Survey Report**

**15 February, 2019**

<b>Company:</b>	Caerus Oil and Gas LLC	<b>Local Co-ordinate Reference:</b>	Well NPR 25D-4 596
<b>Project:</b>	SEC.9-T5S-R96W	<b>TVD Reference:</b>	WELL @ 7670.0ft (Original Well Elev)
<b>Site:</b>	NPR G09 596 Pad Sec.9-T5S-R96W	<b>MD Reference:</b>	WELL @ 7670.0ft (Original Well Elev)
<b>Well:</b>	NPR 25D-4 596	<b>North Reference:</b>	True
<b>Wellbore:</b>	NPR 25D-4 596 Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	NPR 25D-4 596 Wellbore #1	<b>Database:</b>	US_EDM

<b>Project</b>	SEC.9-T5S-R96W, Garfield County, CO		
<b>Map System:</b>	Universal Transverse Mercator (US Survey Feet)	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	NAD 1927 - Western US		Using Well Reference Point
<b>Map Zone:</b>	Zone 12N (114 W to 108 W)		Using geodetic scale factor

<b>Site</b>	NPR G09 596 Pad Sec.9-T5S-R96W				
<b>Site Position:</b>		<b>Northing:</b>	14,404,590.33 usft	<b>Latitude:</b>	39.632067
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,436,015.01 usft	<b>Longitude:</b>	-108.174492
<b>Position Uncertainty:</b>	0.0 ft	<b>Slot Radius:</b>	13-3/16 "	<b>Grid Convergence:</b>	1.80 °

<b>Well</b>	NPR 25D-4 596					
<b>Well Position</b>	<b>+N/-S</b>	0.0 ft	<b>Northing:</b>	14,404,652.09 usft	<b>Latitude:</b>	39.632226
	<b>+E/-W</b>	0.0 ft	<b>Easting:</b>	2,436,137.86 usft	<b>Longitude:</b>	-108.174049
<b>Position Uncertainty</b>		0.0 ft	<b>Wellhead Elevation:</b>	0.0 ft	<b>Ground Level:</b>	7,640.0 ft

<b>Wellbore</b>	NPR 25D-4 596 Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	HDGM	2/6/2019	9.53	65.80	51,383

<b>Design</b>	NPR 25D-4 596 Wellbore #1				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>	
	0.0	0.0	0.0	40.33	

<b>Survey Program</b>	<b>Date</b>	2/15/2019			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
120.0	10,717.0	Survey #1 (NPR 25D-4 596 Wellbore #1)	MWD	MWD - Standard	

<b>Survey</b>										
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Vertical Section (ft)</b>	<b>Dogleg Rate (°/100usft)</b>	<b>Build Rate (°/100usft)</b>	<b>Turn Rate (°/100usft)</b>	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00	
1.0	0.00	0.00	1.0	0.0	0.0	0.0	0.00	0.00	0.00	
<b>SHL 1681'FNL, 2492'FWL, SEC.9</b>										
120.0	0.00	0.00	120.0	0.0	0.0	0.0	0.00	0.00	0.00	
211.0	2.50	326.90	211.0	1.7	-1.1	0.6	2.75	2.75	0.00	
303.0	3.50	332.40	302.8	5.8	-3.5	2.2	1.13	1.09	5.98	
394.0	4.50	3.50	393.6	11.9	-4.5	6.1	2.58	1.10	34.18	
486.0	6.70	47.70	485.2	19.1	-0.4	14.3	5.08	2.39	48.04	
578.0	9.00	53.90	576.4	26.9	9.4	26.6	2.66	2.50	6.74	
673.0	10.70	43.10	670.0	37.7	21.5	42.7	2.64	1.79	-11.37	
768.0	12.90	41.30	763.0	52.2	34.5	62.1	2.35	2.32	-1.89	

<b>Company:</b>	Caerus Oil and Gas LLC	<b>Local Co-ordinate Reference:</b>	Well NPR 25D-4 596
<b>Project:</b>	SEC.9-T5S-R96W	<b>TVD Reference:</b>	WELL @ 7670.0ft (Original Well Elev)
<b>Site:</b>	NPR G09 596 Pad Sec.9-T5S-R96W	<b>MD Reference:</b>	WELL @ 7670.0ft (Original Well Elev)
<b>Well:</b>	NPR 25D-4 596	<b>North Reference:</b>	True
<b>Wellbore:</b>	NPR 25D-4 596 Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	NPR 25D-4 596 Wellbore #1	<b>Database:</b>	US_EDM

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
861.0	16.60	41.20	852.9	70.0	50.1	85.7	3.98	3.98	-0.11
955.0	19.60	39.80	942.2	92.2	69.0	114.9	3.22	3.19	-1.49
1,050.0	20.40	39.60	1,031.5	117.2	89.8	147.4	0.85	0.84	-0.21
1,144.0	20.80	39.80	1,119.5	142.6	110.9	180.5	0.43	0.43	0.21
1,239.0	21.40	41.00	1,208.1	168.7	133.1	214.7	0.78	0.63	1.26
1,333.0	22.60	44.30	1,295.3	194.5	156.9	249.9	1.83	1.28	3.51
1,428.0	23.10	45.00	1,382.8	220.8	182.9	286.7	0.60	0.53	0.74
1,522.0	23.60	42.80	1,469.1	247.6	208.7	323.8	1.07	0.53	-2.34
1,616.0	23.20	39.60	1,555.4	275.7	233.3	361.2	1.42	-0.43	-3.40
1,711.0	22.60	36.50	1,642.9	304.8	256.1	398.1	1.42	-0.63	-3.26
1,805.0	22.60	37.30	1,729.7	333.7	277.8	434.1	0.33	0.00	0.85
1,899.0	21.90	39.20	1,816.7	361.6	299.8	469.7	1.07	-0.74	2.02
1,993.0	22.30	42.10	1,903.8	388.4	322.8	505.1	1.24	0.43	3.09
2,088.0	23.60	42.60	1,991.3	415.8	347.8	542.1	1.38	1.37	0.53
2,182.0	25.00	40.50	2,076.9	444.8	373.4	580.7	1.75	1.49	-2.23
2,277.0	27.80	43.40	2,162.0	476.1	401.7	622.9	3.24	2.95	3.05
2,371.0	28.50	44.40	2,244.9	508.1	432.4	667.2	0.90	0.74	1.06
2,449.0	27.50	45.60	2,313.8	534.0	458.3	703.7	1.47	-1.28	1.54
2,590.0	26.40	43.30	2,439.4	579.6	503.1	767.4	1.07	-0.78	-1.63
2,684.0	25.50	43.90	2,524.0	609.4	531.4	808.5	1.00	-0.96	0.64
2,778.0	24.70	42.40	2,609.1	638.5	558.7	848.3	1.09	-0.85	-1.60
2,873.0	24.00	44.10	2,695.6	667.0	585.6	887.4	1.04	-0.74	1.79
2,967.0	24.00	45.80	2,781.5	694.0	612.6	925.5	0.74	0.00	1.81
3,062.0	25.10	48.00	2,867.9	721.0	641.4	964.7	1.51	1.16	2.32
3,156.0	27.10	48.10	2,952.3	748.6	672.1	1,005.7	2.13	2.13	0.11
3,251.0	26.60	47.20	3,037.1	777.5	703.9	1,048.3	0.68	-0.53	-0.95
3,345.0	26.40	47.40	3,121.2	806.0	734.7	1,089.9	0.23	-0.21	0.21
3,439.0	26.20	48.20	3,205.5	834.0	765.5	1,131.2	0.43	-0.21	0.85
3,534.0	26.00	47.10	3,290.8	862.1	796.4	1,172.7	0.55	-0.21	-1.16
3,628.0	25.30	45.70	3,375.5	890.2	825.9	1,213.1	0.98	-0.74	-1.49
3,722.0	24.00	45.70	3,461.0	917.6	853.9	1,252.1	1.38	-1.38	0.00
3,817.0	25.40	45.30	3,547.3	945.4	882.3	1,291.7	1.48	1.47	-0.42
3,911.0	26.10	45.60	3,631.9	974.0	911.4	1,332.4	0.76	0.74	0.32
4,005.0	26.20	45.20	3,716.3	1,003.1	940.9	1,373.6	0.22	0.11	-0.43
4,100.0	24.90	44.10	3,802.0	1,032.3	969.7	1,414.5	1.46	-1.37	-1.16
4,195.0	24.50	44.70	3,888.3	1,060.6	997.4	1,454.1	0.50	-0.42	0.63
4,289.0	24.00	43.50	3,974.0	1,088.3	1,024.3	1,492.6	0.75	-0.53	-1.28
4,383.0	23.30	45.10	4,060.2	1,115.3	1,050.6	1,530.2	1.01	-0.74	1.70
4,478.0	23.20	45.40	4,147.4	1,141.7	1,077.3	1,567.6	0.16	-0.11	0.32
4,572.0	22.90	44.80	4,233.9	1,167.7	1,103.3	1,604.2	0.41	-0.32	-0.64
4,667.0	22.30	45.00	4,321.6	1,193.6	1,129.1	1,640.6	0.64	-0.63	0.21
4,761.0	23.20	44.10	4,408.3	1,219.5	1,154.6	1,676.9	1.03	0.96	-0.96
4,855.0	22.60	44.80	4,494.9	1,245.6	1,180.2	1,713.4	0.70	-0.64	0.74

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<b>Site:</b>	NPR G09 596 Pad Sec.9-T5S-R96W	<b>MD Reference:</b>	WELL @ 7670.0ft (Original Well Elev)
<b>Well:</b>	NPR 25D-4 596	<b>North Reference:</b>	True
<b>Wellbore:</b>	NPR 25D-4 596 Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	NPR 25D-4 596 Wellbore #1	<b>Database:</b>	US_EDM

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
4,950.0	23.20	38.50	4,582.4	1,273.2	1,204.7	1,750.3	2.66	0.63	-6.63	
5,044.0	22.90	37.70	4,668.9	1,302.2	1,227.4	1,787.1	0.46	-0.32	-0.85	
5,139.0	22.90	37.20	4,756.5	1,331.5	1,249.9	1,824.0	0.20	0.00	-0.53	
5,233.0	22.80	36.40	4,843.1	1,360.7	1,271.8	1,860.4	0.35	-0.11	-0.85	
5,328.0	21.80	34.90	4,931.0	1,390.0	1,292.8	1,896.3	1.21	-1.05	-1.58	
5,422.0	20.10	34.20	5,018.8	1,417.7	1,311.9	1,929.8	1.83	-1.81	-0.74	
5,517.0	18.10	39.20	5,108.5	1,442.6	1,330.4	1,960.8	2.72	-2.11	5.26	
5,611.0	17.30	42.20	5,198.1	1,464.3	1,349.0	1,989.3	1.29	-0.85	3.19	
5,706.0	17.50	43.60	5,288.7	1,485.1	1,368.3	2,017.7	0.49	0.21	1.47	
5,800.0	18.70	43.60	5,378.1	1,506.3	1,388.5	2,046.9	1.28	1.28	0.00	
5,894.0	17.80	43.30	5,467.3	1,527.6	1,408.7	2,076.3	0.96	-0.96	-0.32	
5,989.0	17.40	42.70	5,557.9	1,548.6	1,428.3	2,104.9	0.46	-0.42	-0.63	
6,083.0	17.40	38.40	5,647.6	1,570.0	1,446.6	2,133.0	1.37	0.00	-4.57	
6,177.0	17.30	36.50	5,737.3	1,592.2	1,463.6	2,161.0	0.61	-0.11	-2.02	
6,272.0	16.30	41.10	5,828.3	1,613.6	1,480.8	2,188.5	1.75	-1.05	4.84	
6,366.0	15.50	46.50	5,918.7	1,632.2	1,498.6	2,214.1	1.79	-0.85	5.74	
6,461.0	14.90	48.50	6,010.4	1,649.0	1,516.9	2,238.8	0.84	-0.63	2.11	
6,555.0	15.20	48.00	6,101.1	1,665.3	1,535.1	2,263.0	0.35	0.32	-0.53	
6,650.0	15.30	47.00	6,192.8	1,682.2	1,553.5	2,287.8	0.30	0.11	-1.05	
6,744.0	12.10	45.30	6,284.1	1,697.6	1,569.6	2,310.0	3.43	-3.40	-1.81	
6,838.0	12.30	44.10	6,376.0	1,711.7	1,583.6	2,329.8	0.34	0.21	-1.28	
6,928.0	10.90	35.60	6,464.1	1,725.5	1,595.2	2,347.8	2.45	-1.56	-9.44	
7,023.0	9.20	36.60	6,557.7	1,738.9	1,605.0	2,364.3	1.80	-1.79	1.05	
7,117.0	7.70	27.50	6,650.7	1,750.5	1,612.4	2,378.0	2.13	-1.60	-9.68	
7,211.0	5.10	15.40	6,744.1	1,760.1	1,616.4	2,387.9	3.10	-2.77	-12.87	
7,306.0	4.10	11.20	6,838.8	1,767.5	1,618.2	2,394.7	1.11	-1.05	-4.42	
7,400.0	3.20	0.40	6,932.6	1,773.5	1,618.8	2,399.7	1.20	-0.96	-11.49	
7,589.0	2.70	355.30	7,121.3	1,783.2	1,618.5	2,406.8	0.30	-0.26	-2.70	
7,778.0	3.30	338.60	7,310.1	1,792.7	1,616.2	2,412.6	0.56	0.32	-8.84	
7,873.0	3.00	337.40	7,404.9	1,797.5	1,614.2	2,415.0	0.32	-0.32	-1.26	
8,062.0	2.90	314.40	7,593.7	1,805.4	1,608.9	2,417.6	0.62	-0.05	-12.17	
8,251.0	3.60	316.60	7,782.4	1,813.1	1,601.4	2,418.6	0.38	0.37	1.16	
8,346.0	3.80	297.70	7,877.2	1,816.7	1,596.6	2,418.2	1.29	0.21	-19.89	
8,440.0	3.90	275.40	7,971.0	1,818.5	1,590.6	2,415.7	1.59	0.11	-23.72	
8,535.0	3.60	270.00	8,065.8	1,818.8	1,584.4	2,411.9	0.49	-0.32	-5.68	
8,629.0	3.20	254.00	8,159.6	1,818.0	1,578.9	2,407.8	1.09	-0.43	-17.02	
8,818.0	4.30	259.80	8,348.2	1,815.3	1,566.9	2,398.0	0.61	0.58	3.07	
9,101.0	4.90	265.00	8,630.3	1,812.4	1,544.4	2,381.2	0.26	0.21	1.84	
9,384.0	5.30	268.20	8,912.2	1,810.9	1,519.3	2,363.8	0.17	0.14	1.13	
9,667.0	5.70	273.00	9,193.9	1,811.3	1,492.2	2,346.5	0.22	0.14	1.70	
9,762.0	5.40	276.60	9,288.4	1,812.0	1,483.1	2,341.2	0.48	-0.32	3.79	
9,857.0	5.70	272.90	9,383.0	1,812.8	1,473.9	2,335.8	0.49	0.32	-3.89	
9,951.0	5.70	262.90	9,476.5	1,812.4	1,464.6	2,329.6	1.06	0.00	-10.64	

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<b>Site:</b>	NPR G09 596 Pad Sec.9-T5S-R96W	<b>MD Reference:</b>	WELL @ 7670.0ft (Original Well Elev)
<b>Well:</b>	NPR 25D-4 596	<b>North Reference:</b>	True
<b>Wellbore:</b>	NPR 25D-4 596 Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	NPR 25D-4 596 Wellbore #1	<b>Database:</b>	US_EDM

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
10,045.0	6.00	259.90	9,570.0	1,811.0	1,455.1	2,322.3	0.46	0.32	-3.19
10,140.0	6.80	259.30	9,664.4	1,809.1	1,444.7	2,314.1	0.85	0.84	-0.63
10,234.0	7.60	258.20	9,757.7	1,806.8	1,433.2	2,304.9	0.86	0.85	-1.17
10,517.0	10.00	250.40	10,037.4	1,794.7	1,391.7	2,268.8	0.95	0.85	-2.76
10,717.0	10.00	250.40	10,234.3	1,783.1	1,359.0	2,238.8	0.00	0.00	0.00
<b>Target BHL 51'FSL, 1316'FEL, SEC.4</b>									

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
SHL 1681'FNL, 2492'FM - hit/miss target - Shape - Point	0.00	0.00	1.0	0.0	0.0	14,404,652.09	2,436,137.86	39.632226	-108.174049
Target BHL 51'FSL, 1316' - survey misses target center by 971.4ft at 10717.0ft MD (10234.3 TVD, 1783.1 N, 1359.0 E) - Ellipse (radii L200.0 W100.0 on 250.00 azi)	0.00	0.00	11,198.0	1,730.0	1,468.8	14,406,428.01	2,437,551.94	39.636975	-108.168834

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_