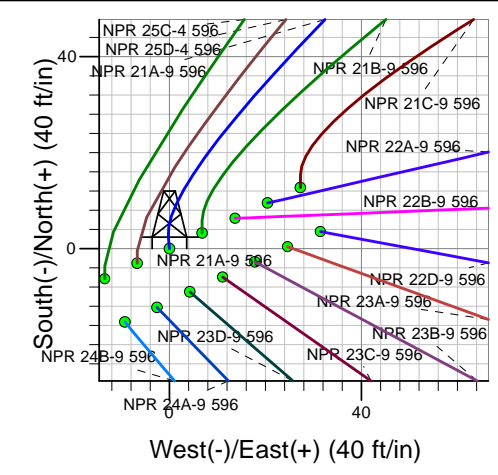
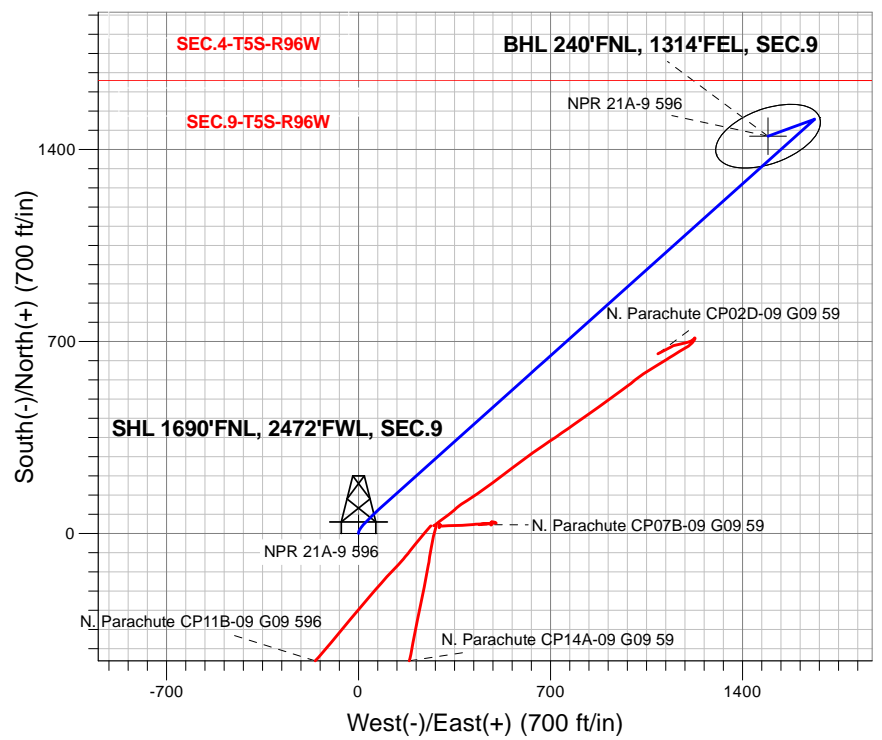
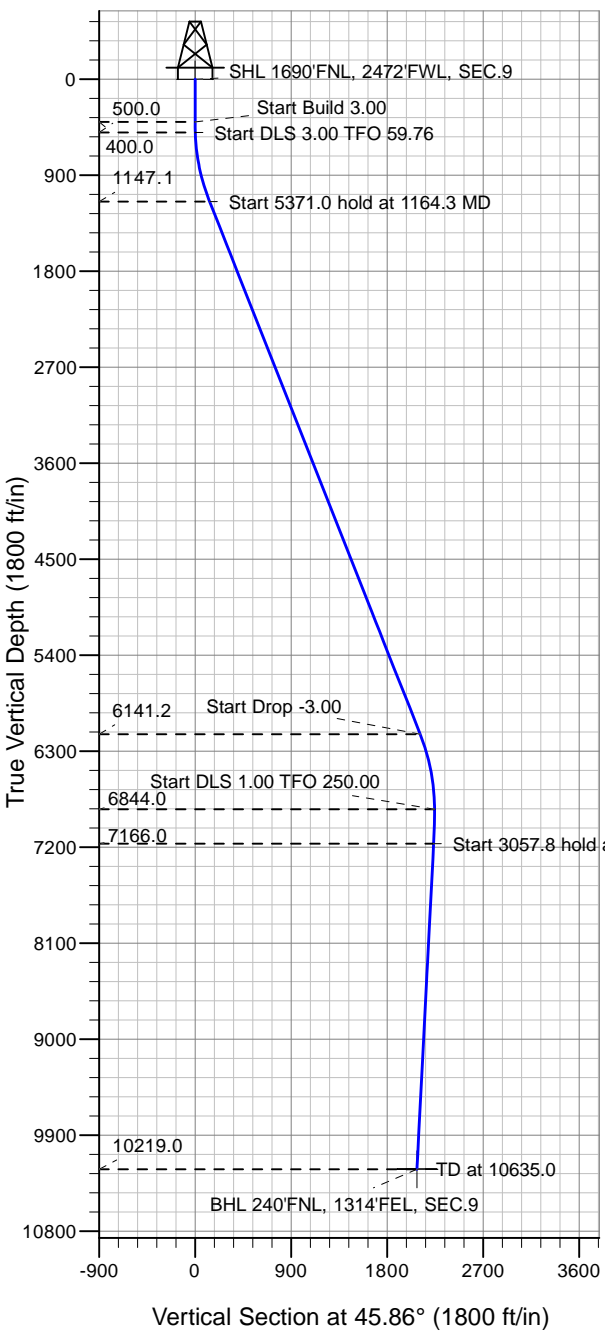


### Caerus Oil and Gas LLC



NPR 21A-9 596  
 Plan #1 (1-15-18)  
 12:46, January 18 2018

Azimuths to True North  
 Magnetic North: 9.63°

Magnetic Field  
 Strength: 51503.2snT  
 Dip Angle: 65.85°  
 Date: 1/18/2018  
 Model: HDGM

#### DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
SHL 1690'FNL, 2472'FWL, SEC.9	1.0	0.0	0.0	39.632200	-108.174121	Point
BHL 240'FNL, 1314'FEL, SEC.9	10219.0	1448.3	1492.5	39.636176	-108.168822	Ellipse (Radii: L200.0 W100.0)

#### SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.0	
3	500.0	3.00	355.00	500.0	2.6	-0.2	3.00	355.00	1.7	
4	1164.3	21.59	48.16	1147.1	102.5	90.2	3.00	59.76	136.1	
5	6535.3	21.59	48.16	6141.2	1420.8	1562.7	0.00	0.00	2110.9	
6	7255.0	0.00	0.00	6844.0	1510.2	1662.5	3.00	180.00	2244.8	
7	7577.2	3.22	250.00	7166.0	1507.1	1654.0	1.00	250.00	2236.5	
8	10635.0	3.22	250.00	10219.0	1448.3	1492.5	0.00	0.00	2079.7	BHL 240'FNL, 1314'FEL, SEC.9



## Directional

### **Caerus Oil and Gas LLC**

**SEC.9-T5S-R96W**

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

**NPR 21A-9 596**

**Wellbore #1**

**Plan: Plan #1 (1-15-18)**

### **Standard Planning Report**

**18 January, 2018**

<b>Database:</b>	US_EDM	<b>Local Co-ordinate Reference:</b>	Well NPR 21A-9 596
<b>Company:</b>	Caerus Oil and Gas LLC	<b>TVD Reference:</b>	WELL @ 7670.0ft (Original Well Elev)
<b>Project:</b>	SEC.9-T5S-R96W	<b>MD Reference:</b>	WELL @ 7670.0ft (Original Well Elev)
<b>Site:</b>	NPR G09 596 Pad Sec.9-T5S-R96W	<b>North Reference:</b>	True
<b>Well:</b>	NPR 21A-9 596	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (1-15-18)		

<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 21A-9 596					
<b>Well Position</b>	<b>+N/-S</b>	48.3 ft	<b>Northing:</b>	14,404,641.94 usft	<b>Latitude:</b>	39.632200
	<b>+E/-W</b>	104.2 ft	<b>Easting:</b>	2,436,117.72 usft	<b>Longitude:</b>	-108.174122
<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>	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	1/18/2018	9.63	65.85	51,503

<b>Design</b>	Plan #1 (1-15-18)			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<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	45.86

<b>Plan Sections</b>										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.00	0.00	
500.0	3.00	355.00	500.0	2.6	-0.2	3.00	3.00	0.00	355.00	
1,164.3	21.59	48.16	1,147.1	102.5	90.2	3.00	2.80	8.00	59.76	
6,535.3	21.59	48.16	6,141.2	1,420.8	1,562.7	0.00	0.00	0.00	0.00	
7,255.0	0.00	0.00	6,844.0	1,510.2	1,662.5	3.00	-3.00	0.00	180.00	
7,577.2	3.22	250.00	7,166.0	1,507.1	1,654.0	1.00	1.00	-34.14	250.00	
10,635.0	3.22	250.00	10,219.0	1,448.3	1,492.5	0.00	0.00	0.00	0.00	BHL 240°FNL, 1314°F

<b>Database:</b>	US_EDM	<b>Local Co-ordinate Reference:</b>	Well NPR 21A-9 596
<b>Company:</b>	Caerus Oil and Gas LLC	<b>TVD Reference:</b>	WELL @ 7670.0ft (Original Well Elev)
<b>Project:</b>	SEC.9-T5S-R96W	<b>MD Reference:</b>	WELL @ 7670.0ft (Original Well Elev)
<b>Site:</b>	NPR G09 596 Pad Sec.9-T5S-R96W	<b>North Reference:</b>	True
<b>Well:</b>	NPR 21A-9 596	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (1-15-18)		

Planned 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)	
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 1690'FNL, 2472'FWL, SEC.9</b>										
100.0	0.00	0.00	100.0	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	
300.0	0.00	0.00	300.0	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	
500.0	3.00	355.00	500.0	2.6	-0.2	1.7	3.00	3.00	0.00	
600.0	5.20	24.91	599.7	9.3	1.5	7.5	3.00	2.20	29.91	
700.0	7.94	35.80	699.0	19.0	7.4	18.6	3.00	2.74	10.89	
800.0	10.82	41.03	797.7	31.7	17.6	34.7	3.00	2.88	5.23	
900.0	13.75	44.07	895.4	47.4	32.1	56.0	3.00	2.93	3.04	
1,000.0	16.71	46.06	991.9	65.9	50.7	82.2	3.00	2.95	1.98	
1,100.0	19.68	47.46	1,086.9	87.2	73.4	113.5	3.00	2.97	1.40	
1,164.3	21.59	48.16	1,147.1	102.5	90.2	136.1	3.00	2.98	1.09	
1,200.0	21.59	48.16	1,180.2	111.2	100.0	149.2	0.00	0.00	0.00	
1,300.0	21.59	48.16	1,273.2	135.8	127.4	186.0	0.00	0.00	0.00	
1,400.0	21.59	48.16	1,366.2	160.3	154.8	222.8	0.00	0.00	0.00	
1,500.0	21.59	48.16	1,459.2	184.9	182.3	259.5	0.00	0.00	0.00	
1,600.0	21.59	48.16	1,552.2	209.4	209.7	296.3	0.00	0.00	0.00	
1,700.0	21.59	48.16	1,645.1	233.9	237.1	333.1	0.00	0.00	0.00	
1,800.0	21.59	48.16	1,738.1	258.5	264.5	369.8	0.00	0.00	0.00	
1,900.0	21.59	48.16	1,831.1	283.0	291.9	406.6	0.00	0.00	0.00	
2,000.0	21.59	48.16	1,924.1	307.6	319.3	443.4	0.00	0.00	0.00	
2,100.0	21.59	48.16	2,017.1	332.1	346.7	480.1	0.00	0.00	0.00	
2,200.0	21.59	48.16	2,110.1	356.7	374.2	516.9	0.00	0.00	0.00	
2,300.0	21.59	48.16	2,203.0	381.2	401.6	553.7	0.00	0.00	0.00	
2,400.0	21.59	48.16	2,296.0	405.8	429.0	590.4	0.00	0.00	0.00	
2,500.0	21.59	48.16	2,389.0	430.3	456.4	627.2	0.00	0.00	0.00	
2,600.0	21.59	48.16	2,482.0	454.9	483.8	664.0	0.00	0.00	0.00	
2,700.0	21.59	48.16	2,575.0	479.4	511.2	700.7	0.00	0.00	0.00	
2,800.0	21.59	48.16	2,668.0	504.0	538.6	737.5	0.00	0.00	0.00	
2,900.0	21.59	48.16	2,761.0	528.5	566.1	774.3	0.00	0.00	0.00	
3,000.0	21.59	48.16	2,853.9	553.0	593.5	811.0	0.00	0.00	0.00	
3,100.0	21.59	48.16	2,946.9	577.6	620.9	847.8	0.00	0.00	0.00	
3,200.0	21.59	48.16	3,039.9	602.1	648.3	884.6	0.00	0.00	0.00	
3,300.0	21.59	48.16	3,132.9	626.7	675.7	921.3	0.00	0.00	0.00	
3,400.0	21.59	48.16	3,225.9	651.2	703.1	958.1	0.00	0.00	0.00	
3,500.0	21.59	48.16	3,318.9	675.8	730.5	994.9	0.00	0.00	0.00	
3,600.0	21.59	48.16	3,411.8	700.3	758.0	1,031.7	0.00	0.00	0.00	
3,700.0	21.59	48.16	3,504.8	724.9	785.4	1,068.4	0.00	0.00	0.00	
3,800.0	21.59	48.16	3,597.8	749.4	812.8	1,105.2	0.00	0.00	0.00	
3,900.0	21.59	48.16	3,690.8	774.0	840.2	1,142.0	0.00	0.00	0.00	
4,000.0	21.59	48.16	3,783.8	798.5	867.6	1,178.7	0.00	0.00	0.00	
4,100.0	21.59	48.16	3,876.8	823.0	895.0	1,215.5	0.00	0.00	0.00	
4,200.0	21.59	48.16	3,969.7	847.6	922.4	1,252.3	0.00	0.00	0.00	
4,300.0	21.59	48.16	4,062.7	872.1	949.9	1,289.0	0.00	0.00	0.00	
4,400.0	21.59	48.16	4,155.7	896.7	977.3	1,325.8	0.00	0.00	0.00	
4,500.0	21.59	48.16	4,248.7	921.2	1,004.7	1,362.6	0.00	0.00	0.00	
4,600.0	21.59	48.16	4,341.7	945.8	1,032.1	1,399.3	0.00	0.00	0.00	
4,700.0	21.59	48.16	4,434.7	970.3	1,059.5	1,436.1	0.00	0.00	0.00	
4,800.0	21.59	48.16	4,527.6	994.9	1,086.9	1,472.9	0.00	0.00	0.00	
4,900.0	21.59	48.16	4,620.6	1,019.4	1,114.3	1,509.6	0.00	0.00	0.00	
5,000.0	21.59	48.16	4,713.6	1,044.0	1,141.8	1,546.4	0.00	0.00	0.00	

<b>Database:</b>	US_EDM	<b>Local Co-ordinate Reference:</b>	Well NPR 21A-9 596
<b>Company:</b>	Caerus Oil and Gas LLC	<b>TVD Reference:</b>	WELL @ 7670.0ft (Original Well Elev)
<b>Project:</b>	SEC.9-T5S-R96W	<b>MD Reference:</b>	WELL @ 7670.0ft (Original Well Elev)
<b>Site:</b>	NPR G09 596 Pad Sec.9-T5S-R96W	<b>North Reference:</b>	True
<b>Well:</b>	NPR 21A-9 596	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (1-15-18)		

Planned 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)	
5,100.0	21.59	48.16	4,806.6	1,068.5	1,169.2	1,583.2	0.00	0.00	0.00	
5,200.0	21.59	48.16	4,899.6	1,093.0	1,196.6	1,619.9	0.00	0.00	0.00	
5,300.0	21.59	48.16	4,992.6	1,117.6	1,224.0	1,656.7	0.00	0.00	0.00	
5,400.0	21.59	48.16	5,085.5	1,142.1	1,251.4	1,693.5	0.00	0.00	0.00	
5,500.0	21.59	48.16	5,178.5	1,166.7	1,278.8	1,730.2	0.00	0.00	0.00	
5,600.0	21.59	48.16	5,271.5	1,191.2	1,306.2	1,767.0	0.00	0.00	0.00	
5,700.0	21.59	48.16	5,364.5	1,215.8	1,333.7	1,803.8	0.00	0.00	0.00	
5,800.0	21.59	48.16	5,457.5	1,240.3	1,361.1	1,840.5	0.00	0.00	0.00	
5,900.0	21.59	48.16	5,550.5	1,264.9	1,388.5	1,877.3	0.00	0.00	0.00	
6,000.0	21.59	48.16	5,643.4	1,289.4	1,415.9	1,914.1	0.00	0.00	0.00	
6,100.0	21.59	48.16	5,736.4	1,314.0	1,443.3	1,950.8	0.00	0.00	0.00	
6,200.0	21.59	48.16	5,829.4	1,338.5	1,470.7	1,987.6	0.00	0.00	0.00	
6,300.0	21.59	48.16	5,922.4	1,363.0	1,498.1	2,024.4	0.00	0.00	0.00	
6,400.0	21.59	48.16	6,015.4	1,387.6	1,525.6	2,061.1	0.00	0.00	0.00	
6,500.0	21.59	48.16	6,108.4	1,412.1	1,553.0	2,097.9	0.00	0.00	0.00	
6,535.3	21.59	48.16	6,141.2	1,420.8	1,562.7	2,110.9	0.00	0.00	0.00	
6,600.0	19.65	48.16	6,201.7	1,436.0	1,579.6	2,133.7	3.00	-3.00	0.00	
6,700.0	16.65	48.16	6,296.7	1,456.8	1,602.8	2,164.8	3.00	-3.00	0.00	
6,800.0	13.65	48.16	6,393.3	1,474.2	1,622.3	2,190.9	3.00	-3.00	0.00	
6,900.0	10.65	48.16	6,491.0	1,488.3	1,638.0	2,211.9	3.00	-3.00	0.00	
7,000.0	7.65	48.16	6,589.7	1,498.9	1,649.8	2,227.8	3.00	-3.00	0.00	
7,100.0	4.65	48.16	6,689.1	1,506.0	1,657.8	2,238.5	3.00	-3.00	0.00	
7,200.0	1.65	48.16	6,789.0	1,509.7	1,661.9	2,244.0	3.00	-3.00	0.00	
7,255.0	0.00	0.00	6,844.0	1,510.2	1,662.5	2,244.8	3.00	-3.00	0.00	
7,300.0	0.45	250.00	6,889.0	1,510.1	1,662.3	2,244.6	1.00	1.00	0.00	
7,400.0	1.45	250.00	6,989.0	1,509.6	1,660.8	2,243.1	1.00	1.00	0.00	
7,500.0	2.45	250.00	7,088.9	1,508.4	1,657.6	2,240.0	1.00	1.00	0.00	
7,577.2	3.22	250.00	7,166.0	1,507.1	1,654.0	2,236.5	1.00	1.00	0.00	
7,600.0	3.22	250.00	7,188.8	1,506.7	1,652.8	2,235.4	0.00	0.00	0.00	
7,700.0	3.22	250.00	7,288.6	1,504.7	1,647.5	2,230.2	0.00	0.00	0.00	
7,800.0	3.22	250.00	7,388.4	1,502.8	1,642.2	2,225.1	0.00	0.00	0.00	
7,900.0	3.22	250.00	7,488.3	1,500.9	1,636.9	2,220.0	0.00	0.00	0.00	
8,000.0	3.22	250.00	7,588.1	1,499.0	1,631.7	2,214.9	0.00	0.00	0.00	
8,100.0	3.22	250.00	7,688.0	1,497.1	1,626.4	2,209.7	0.00	0.00	0.00	
8,200.0	3.22	250.00	7,787.8	1,495.1	1,621.1	2,204.6	0.00	0.00	0.00	
8,300.0	3.22	250.00	7,887.7	1,493.2	1,615.8	2,199.5	0.00	0.00	0.00	
8,400.0	3.22	250.00	7,987.5	1,491.3	1,610.5	2,194.3	0.00	0.00	0.00	
8,500.0	3.22	250.00	8,087.3	1,489.4	1,605.2	2,189.2	0.00	0.00	0.00	
8,600.0	3.22	250.00	8,187.2	1,487.4	1,600.0	2,184.1	0.00	0.00	0.00	
8,700.0	3.22	250.00	8,287.0	1,485.5	1,594.7	2,178.9	0.00	0.00	0.00	
8,800.0	3.22	250.00	8,386.9	1,483.6	1,589.4	2,173.8	0.00	0.00	0.00	
8,900.0	3.22	250.00	8,486.7	1,481.7	1,584.1	2,168.7	0.00	0.00	0.00	
9,000.0	3.22	250.00	8,586.6	1,479.8	1,578.8	2,163.6	0.00	0.00	0.00	
9,100.0	3.22	250.00	8,686.4	1,477.8	1,573.6	2,158.4	0.00	0.00	0.00	
9,200.0	3.22	250.00	8,786.2	1,475.9	1,568.3	2,153.3	0.00	0.00	0.00	
9,300.0	3.22	250.00	8,886.1	1,474.0	1,563.0	2,148.2	0.00	0.00	0.00	
9,400.0	3.22	250.00	8,985.9	1,472.1	1,557.7	2,143.0	0.00	0.00	0.00	
9,500.0	3.22	250.00	9,085.8	1,470.1	1,552.4	2,137.9	0.00	0.00	0.00	
9,600.0	3.22	250.00	9,185.6	1,468.2	1,547.1	2,132.8	0.00	0.00	0.00	
9,700.0	3.22	250.00	9,285.4	1,466.3	1,541.9	2,127.7	0.00	0.00	0.00	
9,800.0	3.22	250.00	9,385.3	1,464.4	1,536.6	2,122.5	0.00	0.00	0.00	
9,900.0	3.22	250.00	9,485.1	1,462.5	1,531.3	2,117.4	0.00	0.00	0.00	
10,000.0	3.22	250.00	9,585.0	1,460.5	1,526.0	2,112.3	0.00	0.00	0.00	
10,100.0	3.22	250.00	9,684.8	1,458.6	1,520.7	2,107.1	0.00	0.00	0.00	

<b>Database:</b>	US_EDM	<b>Local Co-ordinate Reference:</b>	Well NPR 21A-9 596
<b>Company:</b>	Caerus Oil and Gas LLC	<b>TVD Reference:</b>	WELL @ 7670.0ft (Original Well Elev)
<b>Project:</b>	SEC.9-T5S-R96W	<b>MD Reference:</b>	WELL @ 7670.0ft (Original Well Elev)
<b>Site:</b>	NPR G09 596 Pad Sec.9-T5S-R96W	<b>North Reference:</b>	True
<b>Well:</b>	NPR 21A-9 596	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Plan #1 (1-15-18)		

Planned 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)	
10,200.0	3.22	250.00	9,784.7	1,456.7	1,515.5	2,102.0	0.00	0.00	0.00	
10,300.0	3.22	250.00	9,884.5	1,454.8	1,510.2	2,096.9	0.00	0.00	0.00	
10,400.0	3.22	250.00	9,984.3	1,452.8	1,504.9	2,091.8	0.00	0.00	0.00	
10,500.0	3.22	250.00	10,084.2	1,450.9	1,499.6	2,086.6	0.00	0.00	0.00	
10,600.0	3.22	250.00	10,184.0	1,449.0	1,494.3	2,081.5	0.00	0.00	0.00	
10,635.0	3.22	250.00	10,219.0	1,448.3	1,492.5	2,079.7	0.00	0.00	0.00	
<b>BHL 240'FNL, 1314'FEL, SEC.9</b>										

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
SHL 1690'FNL, 2472'FW - hit/miss target - Shape - Point	0.00	0.00	1.0	0.0	0.0	14,404,641.94	2,436,117.72	39.632200	-108.174122	
BHL 240'FNL, 1314'FEL - plan hits target center - Ellipse (radii L200.0 W100.0 on 250.00 azi)	0.00	0.00	10,219.0	1,448.3	1,492.5	14,406,137.01	2,437,564.34	39.636176	-108.168823	