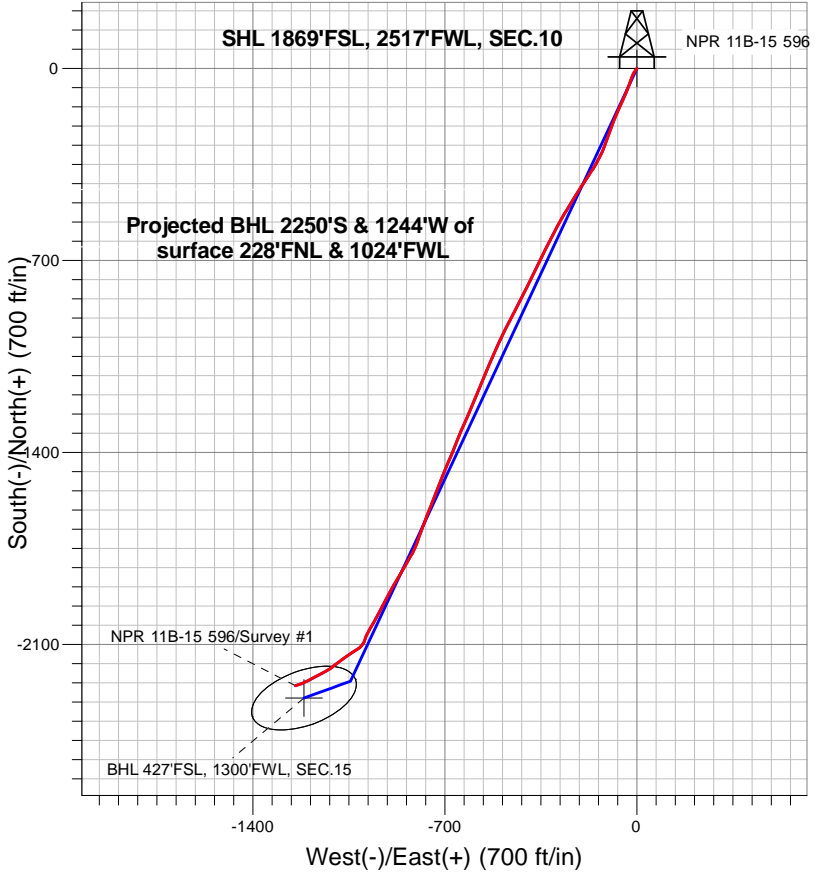
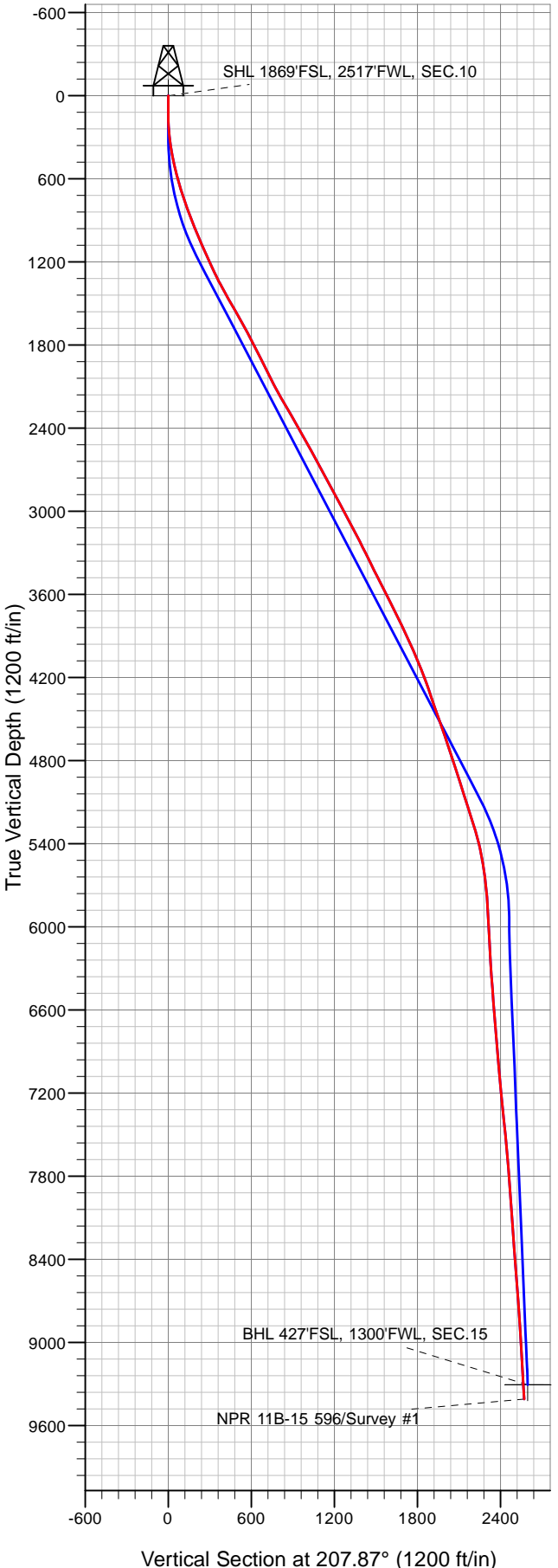


Caerus Oil and Gas LLC



- LEGEND**
- ✖ NPR 11B-15 596, NPR 11B-15 596 Wellbore #1, Plan #2 (3-21-18)R V0
 - ▣ NPR 11B-15 596 Wellbore #1
 - Survey #1

Final Survey Plot

**Projected Final Survey -
 9,922'MD & 9,408' TVD @ 2571.07'VS
 4.7 deg Inc 253.8 deg AZ**

Project: SEC.10-T5S-R96W
 Site: K10 596 Pad Sec.10-T5S-R96W
 Well: NPR 11B-15 596
 Plan: NPR 11B-15 596 Wellbore #1



Directional

Caerus Oil and Gas LLC

SEC.10-T5S-R96W

K10 596 Pad Sec.10-T5S-R96W

NPR 11B-15 596

NPR 11B-15 596 Wellbore #1

Survey: Survey #1

Standard Survey Report

27 March, 2018

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 11B-15 596
Project:	SEC.10-T5S-R96W	TVD Reference:	WELL @ 6733.0ft (Original Well Elev)
Site:	K10 596 Pad Sec.10-T5S-R96W	MD Reference:	WELL @ 6733.0ft (Original Well Elev)
Well:	NPR 11B-15 596	North Reference:	True
Wellbore:	NPR 11B-15 596 Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	NPR 11B-15 596 Wellbore #1	Database:	US_EDM

Project	SEC.10-T5S-R96W, Garfield County, CO		
Map System:	Universal Transverse Mercator (US Survey Feet)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 - Western US		Using Well Reference Point
Map Zone:	Zone 12N (114 W to 108 W)		Using geodetic scale factor

Site	K10 596 Pad Sec.10-T5S-R96W				
Site Position:		Northing:	14,403,140.13 usft	Latitude:	39.627619
From:	Lat/Long	Easting:	2,441,439.81 usft	Longitude:	-108.155411
Position Uncertainty:	0.0 ft	Slot Radius:	13-3/16 "	Grid Convergence:	1.82 °

Well	NPR 11B-15 596					
Well Position	+N/-S	0.0 ft	Northing:	14,403,092.39 usft	Latitude:	39.627483
	+E/-W	0.0 ft	Easting:	2,441,497.71 usft	Longitude:	-108.155211
Position Uncertainty		0.0 ft	Wellhead Elevation:	0.0 ft	Ground Level:	6,709.0 ft

Wellbore	NPR 11B-15 596 Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	3/21/2018	9.56	65.63	51,614

Design	NPR 11B-15 596 Wellbore #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.0	0.0	0.0	207.87	

Survey Program	Date	3/27/2018			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
137.0	9,922.0	Survey #1 (NPR 11B-15 596 Wellbore #1)	MWD	MWD - Standard	

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	
SHL 1869'FSL, 2517'FWL, SEC.10										
137.0	0.00	0.00	137.0	0.0	0.0	0.0	0.00	0.00	0.00	
324.0	7.10	215.40	323.5	-9.4	-6.7	11.5	3.80	3.80	0.00	
417.0	10.50	204.70	415.4	-21.8	-13.6	25.6	4.04	3.66	-11.51	
508.0	13.30	199.90	504.5	-39.2	-20.6	44.3	3.26	3.08	-5.27	
601.0	15.60	200.00	594.5	-61.0	-28.5	67.3	2.47	2.47	0.11	
696.0	17.10	202.40	685.7	-85.9	-38.2	93.8	1.73	1.58	2.53	
791.0	19.00	204.00	776.0	-113.0	-49.8	123.2	2.07	2.00	1.68	
885.0	21.20	205.50	864.3	-142.3	-63.4	155.4	2.40	2.34	1.60	

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 11B-15 596
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Site:	K10 596 Pad Sec.10-T5S-R96W	MD Reference:	WELL @ 6733.0ft (Original Well Elev)
Well:	NPR 11B-15 596	North Reference:	True
Wellbore:	NPR 11B-15 596 Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	NPR 11B-15 596 Wellbore #1	Database:	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)
980.0	22.10	202.60	952.6	-174.3	-77.6	190.4	1.47	0.95	-3.05
1,075.0	23.60	199.40	1,040.1	-208.7	-90.8	227.0	2.05	1.58	-3.37
1,169.0	24.50	200.10	1,125.9	-244.8	-103.8	264.9	1.00	0.96	0.74
1,264.0	24.30	199.90	1,212.5	-281.7	-117.2	303.8	0.23	-0.21	-0.21
1,358.0	26.10	206.90	1,297.5	-318.3	-133.1	343.6	3.70	1.91	7.45
1,452.0	28.70	210.60	1,381.0	-356.2	-154.0	386.9	3.31	2.77	3.94
1,547.0	29.80	213.80	1,463.9	-395.4	-178.7	433.1	2.01	1.16	3.37
1,642.0	29.70	212.60	1,546.4	-434.9	-204.5	480.1	0.64	-0.11	-1.26
1,736.0	29.10	212.50	1,628.2	-473.8	-229.4	526.0	0.64	-0.64	-0.11
1,830.0	28.50	211.30	1,710.6	-512.2	-253.3	571.2	0.89	-0.64	-1.28
1,925.0	27.20	208.60	1,794.6	-550.7	-275.5	615.6	1.91	-1.37	-2.84
2,123.0	26.30	208.40	1,971.4	-629.0	-318.0	704.7	0.46	-0.45	-0.10
2,218.0	26.80	204.70	2,056.4	-666.9	-337.0	747.1	1.82	0.53	-3.89
2,312.0	29.20	205.80	2,139.4	-706.8	-355.8	791.2	2.61	2.55	1.17
2,407.0	30.80	207.40	2,221.7	-749.3	-377.1	838.7	1.88	1.68	1.68
2,501.0	29.80	205.70	2,302.8	-791.7	-398.3	886.1	1.40	-1.06	-1.81
2,596.0	29.50	206.90	2,385.4	-833.8	-419.1	933.1	0.70	-0.32	1.26
2,691.0	28.90	207.00	2,468.3	-875.2	-440.1	979.4	0.63	-0.63	0.11
2,785.0	29.00	208.30	2,550.6	-915.5	-461.2	1,024.9	0.68	0.11	1.38
2,879.0	28.70	205.00	2,632.9	-956.0	-481.6	1,070.2	1.72	-0.32	-3.51
2,974.0	28.30	206.70	2,716.4	-996.8	-501.3	1,115.5	0.95	-0.42	1.79
3,069.0	28.30	203.10	2,800.1	-1,037.6	-520.3	1,160.5	1.80	0.00	-3.79
3,163.0	28.90	202.00	2,882.6	-1,079.2	-537.5	1,205.3	0.85	0.64	-1.17
3,258.0	28.50	202.90	2,965.9	-1,121.3	-554.9	1,250.7	0.62	-0.42	0.95
3,352.0	27.80	202.60	3,048.8	-1,162.2	-572.1	1,294.9	0.76	-0.74	-0.32
3,447.0	27.70	203.30	3,132.9	-1,203.0	-589.3	1,338.9	0.36	-0.11	0.74
3,542.0	27.30	203.20	3,217.1	-1,243.3	-606.7	1,382.7	0.42	-0.42	-0.11
3,636.0	26.20	204.50	3,301.1	-1,282.0	-623.8	1,424.9	1.33	-1.17	1.38
3,731.0	26.10	201.90	3,386.4	-1,320.4	-640.3	1,466.6	1.21	-0.11	-2.74
3,825.0	27.60	201.70	3,470.2	-1,359.9	-656.0	1,508.8	1.60	1.60	-0.21
3,920.0	27.20	203.00	3,554.6	-1,400.3	-672.6	1,552.3	0.76	-0.42	1.37
4,014.0	26.70	202.90	3,638.4	-1,439.5	-689.3	1,594.8	0.53	-0.53	-0.11
4,109.0	26.30	201.60	3,723.4	-1,478.7	-705.3	1,636.9	0.74	-0.42	-1.37
4,203.0	26.20	201.50	3,807.7	-1,517.4	-720.6	1,678.3	0.12	-0.11	-0.11
4,298.0	25.30	201.70	3,893.2	-1,555.8	-735.8	1,719.3	0.95	-0.95	0.21
4,392.0	24.10	201.20	3,978.6	-1,592.3	-750.1	1,758.3	1.30	-1.28	-0.53
4,487.0	22.80	201.20	4,065.8	-1,627.6	-763.8	1,795.9	1.37	-1.37	0.00
4,582.0	21.40	200.40	4,153.8	-1,661.0	-776.5	1,831.3	1.51	-1.47	-0.84
4,676.0	20.40	201.20	4,241.6	-1,692.3	-788.4	1,864.6	1.11	-1.06	0.85
4,771.0	19.10	198.00	4,331.0	-1,722.6	-799.2	1,896.4	1.78	-1.37	-3.37
4,865.0	18.80	204.90	4,420.0	-1,750.9	-810.3	1,926.7	2.40	-0.32	7.34
4,960.0	19.70	210.50	4,509.7	-1,778.6	-824.9	1,957.9	2.16	0.95	5.89
5,054.0	19.20	208.90	4,598.3	-1,805.8	-840.4	1,989.2	0.78	-0.53	-1.70

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Site:	K10 596 Pad Sec.10-T5S-R96W	MD Reference:	WELL @ 6733.0ft (Original Well Elev)
Well:	NPR 11B-15 596	North Reference:	True
Wellbore:	NPR 11B-15 596 Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	NPR 11B-15 596 Wellbore #1	Database:	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)	
5,149.0	18.60	210.50	4,688.2	-1,832.5	-855.7	2,020.0	0.83	-0.63	1.68	
5,243.0	18.00	210.80	4,777.4	-1,857.9	-870.7	2,049.5	0.65	-0.64	0.32	
5,338.0	17.80	210.90	4,867.8	-1,883.0	-885.7	2,078.6	0.21	-0.21	0.11	
5,432.0	17.90	207.20	4,957.3	-1,908.2	-899.7	2,107.4	1.21	0.11	-3.94	
5,527.0	17.80	209.10	5,047.7	-1,933.8	-913.4	2,136.5	0.62	-0.11	2.00	
5,621.0	17.60	208.80	5,137.3	-1,958.9	-927.2	2,165.1	0.23	-0.21	-0.32	
5,716.0	17.60	207.00	5,227.8	-1,984.2	-940.7	2,193.8	0.57	0.00	-1.89	
5,810.0	16.40	207.40	5,317.7	-2,008.7	-953.2	2,221.3	1.28	-1.28	0.43	
5,905.0	13.20	211.00	5,409.6	-2,029.9	-965.0	2,245.6	3.50	-3.37	3.79	
6,000.0	10.80	209.60	5,502.5	-2,046.9	-975.0	2,265.3	2.54	-2.53	-1.47	
6,094.0	8.20	205.50	5,595.2	-2,060.6	-982.2	2,280.8	2.86	-2.77	-4.36	
6,189.0	6.50	204.00	5,689.4	-2,071.7	-987.3	2,292.9	1.80	-1.79	-1.58	
6,284.0	5.10	199.60	5,783.9	-2,080.6	-990.9	2,302.5	1.55	-1.47	-4.63	
6,378.0	3.10	193.80	5,877.7	-2,087.0	-992.9	2,309.1	2.17	-2.13	-6.17	
6,473.0	2.50	203.00	5,972.5	-2,091.4	-994.3	2,313.6	0.79	-0.63	9.68	
6,568.0	2.90	212.40	6,067.4	-2,095.3	-996.4	2,318.1	0.63	0.42	9.89	
6,662.0	3.30	214.20	6,161.3	-2,099.5	-999.2	2,323.1	0.44	0.43	1.91	
6,757.0	3.90	225.30	6,256.1	-2,104.1	-1,003.1	2,328.9	0.97	0.63	11.68	
6,851.0	3.90	226.00	6,349.9	-2,108.6	-1,007.6	2,335.0	0.05	0.00	0.74	
6,946.0	4.40	232.90	6,444.6	-2,113.0	-1,012.9	2,341.4	0.74	0.53	7.26	
7,040.0	5.10	234.90	6,538.3	-2,117.6	-1,019.2	2,348.4	0.77	0.74	2.13	
7,135.0	5.50	238.20	6,632.9	-2,122.4	-1,026.5	2,356.1	0.53	0.42	3.47	
7,230.0	5.70	240.60	6,727.5	-2,127.1	-1,034.5	2,364.0	0.32	0.21	2.53	
7,324.0	5.40	236.60	6,821.0	-2,131.8	-1,042.2	2,371.8	0.52	-0.32	-4.26	
7,419.0	5.20	235.20	6,915.6	-2,136.8	-1,049.5	2,379.5	0.25	-0.21	-1.47	
7,513.0	5.20	231.20	7,009.2	-2,141.9	-1,056.3	2,387.2	0.39	0.00	-4.26	
7,702.0	6.10	234.70	7,197.3	-2,153.0	-1,071.2	2,404.0	0.51	0.48	1.85	
Last Survey - 7702' MD										
7,891.0	6.90	233.80	7,385.1	-2,165.5	-1,088.5	2,423.2	0.43	0.42	-0.48	
8,081.0	6.00	230.20	7,573.9	-2,178.6	-1,105.4	2,442.7	0.52	-0.47	-1.89	
8,269.0	5.20	237.40	7,761.0	-2,189.5	-1,120.1	2,459.2	0.57	-0.43	3.83	
8,459.0	4.30	241.50	7,950.3	-2,197.6	-1,133.6	2,472.6	0.51	-0.47	2.16	
8,648.0	4.90	240.90	8,138.7	-2,204.9	-1,146.9	2,485.3	0.32	0.32	-0.32	
8,837.0	5.20	241.60	8,327.0	-2,212.9	-1,161.5	2,499.1	0.16	0.16	0.37	
9,215.0	5.40	243.40	8,703.4	-2,229.0	-1,192.5	2,527.9	0.07	0.05	0.48	
9,405.0	4.40	246.70	8,892.7	-2,235.9	-1,207.1	2,540.8	0.55	-0.53	1.74	
9,594.0	4.20	243.70	9,081.2	-2,241.8	-1,220.0	2,552.1	0.16	-0.11	-1.59	
9,819.2	4.65	252.97	9,305.7	-2,248.1	-1,236.1	2,565.2	0.37	0.20	4.11	
BHL 427'FSL, 1300'FWL, SEC.15										
9,842.0	4.70	253.80	9,328.4	-2,248.6	-1,237.9	2,566.5	0.37	0.23	3.66	
9,922.0	4.70	253.80	9,408.1	-2,250.5	-1,244.2	2,571.1	0.00	0.00	0.00	

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Wellbore:	NPR 11B-15 596 Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	NPR 11B-15 596 Wellbore #1	Database:	US_EDM

Design Targets										
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude	
SHL 1869'FSL, 2517'FW - hit/miss target - Shape - Point	0.00	0.00	1.0	0.0	0.0	14,403,092.39	2,441,497.71	39.627483	-108.155211	
BHL 427'FSL, 1300'FWL - survey misses target center by 52.5ft at 9819.2ft MD (9305.7 TVD, -2248.1 N, -1236.1 E) - Ellipse (radii L200.0 W100.0 on 250.00 azi)	0.00	0.00	9,306.0	-2,295.5	-1,213.6	14,400,758.81	2,440,357.03	39.621181	-108.159519	

Survey Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
7,702.0	7,197.3	-2,153.0	-1,071.2	Last Survey - 7702' MD	

Checked By: _____ Approved By: _____ Date: _____