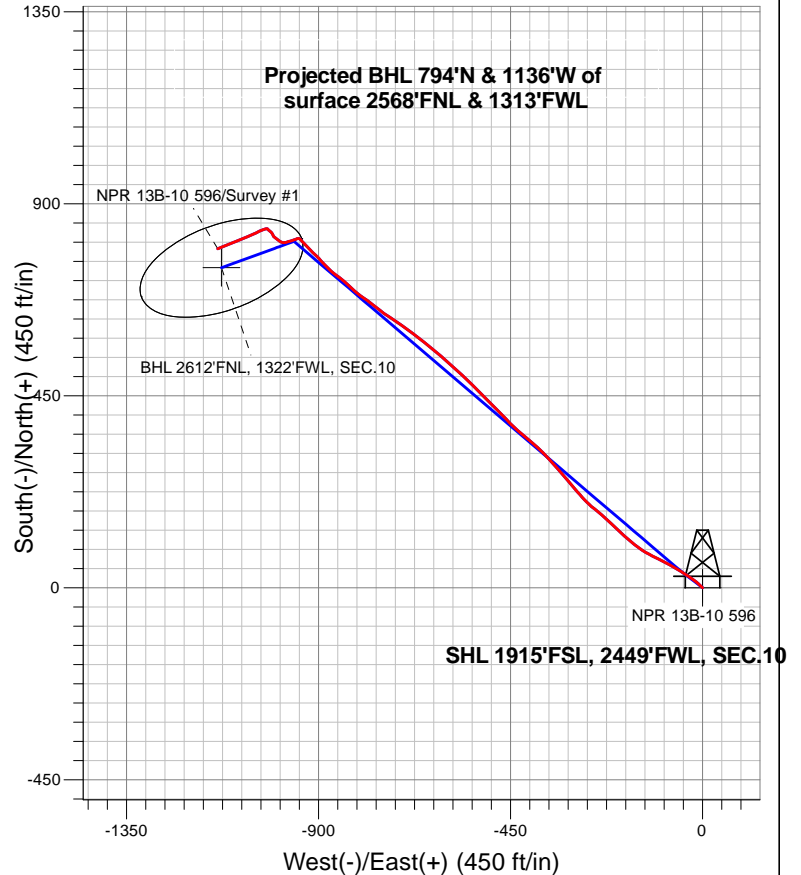


Caerus Oil and Gas LLC



LEGEND

- ◆ NPR 13B-10 596, NPR 13B-10 596 Wellbore #1, Plan #1 (7-19-18) V0
- NPR 13B-10 596 Wellbore #1
- Survey #1

Final Survey Plot

Projected Final Survey -
9,578'MD & 9386' TVD @ 1339.46'VS
4.7 deg Inc 247.8 deg AZ

Project: SEC.10-T5S-R96W
Site: K10 596 Pad Sec.10-T5S-R96W
Well: NPR 13B-10 596
Plan: NPR 13B-10 596 Wellbore #1



Caerus Oil and Gas LLC

SEC.10-T5S-R96W

K10 596 Pad Sec.10-T5S-R96W

NPR 13B-10 596

NPR 13B-10 596 Wellbore #1

Survey: Survey #1

Standard Survey Report

24 July, 2018

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 13B-10 596
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 13B-10 596	North Reference:	True
Wellbore:	NPR 13B-10 596 Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	NPR 13B-10 596 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 13B-10 596					
Well Position	+N/-S	0.0 ft	Northing:	14,403,135.75 usft	Latitude:	39.627608
	+E/-W	0.0 ft	Easting:	2,441,428.11 usft	Longitude:	-108.155453
Position Uncertainty		0.0 ft	Wellhead Elevation:	0.0 ft	Ground Level:	6,709.0 ft

Wellbore	NPR 13B-10 596 Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/19/2018	9.52	65.62	51,581

Design	NPR 13B-10 596 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	303.63	

Survey Program	Date	7/24/2018			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
120.0	9,578.0	Survey #1 (NPR 13B-10 596 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 1915'FSL, 2449'FWL, SEC.10										
120.0	0.00	0.00	120.0	0.0	0.0	0.0	0.00	0.00	0.00	
300.0	8.00	313.10	299.4	8.6	-9.2	12.4	4.44	4.44	0.00	
392.0	14.20	306.00	389.7	19.6	-23.0	30.0	6.89	6.74	-7.72	
485.0	17.80	303.00	479.0	34.0	-44.1	55.6	3.97	3.87	-3.23	
577.0	17.70	299.60	566.7	48.6	-68.1	83.6	1.13	-0.11	-3.70	
670.0	17.20	296.40	655.4	61.7	-92.7	111.4	1.16	-0.54	-3.44	
762.0	17.60	296.70	743.2	74.0	-117.3	138.7	0.45	0.43	0.33	
855.0	18.80	304.00	831.5	88.7	-142.3	167.6	2.77	1.29	7.85	

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Site:	K10 596 Pad Sec.10-T5S-R96W	MD Reference:	WELL @ 6733.0ft (Original Well Elev)
Well:	NPR 13B-10 596	North Reference:	True
Wellbore:	NPR 13B-10 596 Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	NPR 13B-10 596 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)
947.0	19.00	308.90	918.6	106.4	-166.2	197.3	1.74	0.22	5.33
1,041.0	19.20	313.50	1,007.4	126.6	-189.4	227.8	1.61	0.21	4.89
1,135.0	18.40	314.20	1,096.4	147.6	-211.2	257.6	0.88	-0.85	0.74
1,229.0	15.40	310.10	1,186.3	166.0	-231.4	284.6	3.43	-3.19	-4.36
1,324.0	15.30	309.20	1,277.9	182.1	-250.8	309.6	0.27	-0.11	-0.95
1,419.0	18.70	314.50	1,368.8	200.7	-271.3	337.1	3.93	3.58	5.58
1,513.0	21.40	320.00	1,457.1	224.4	-293.1	368.3	3.50	2.87	5.85
1,608.0	22.00	319.20	1,545.3	251.1	-315.9	402.1	0.70	0.63	-0.84
1,702.0	21.80	319.50	1,632.6	277.7	-338.7	435.8	0.24	-0.21	0.32
1,797.0	21.80	317.00	1,720.8	304.0	-362.2	470.0	0.98	0.00	-2.63
1,891.0	21.10	312.70	1,808.3	328.3	-386.6	503.7	1.83	-0.74	-4.57
1,985.0	20.30	309.40	1,896.2	350.1	-411.6	536.6	1.50	-0.85	-3.51
2,080.0	20.30	312.10	1,985.3	371.6	-436.6	569.3	0.99	0.00	2.84
2,174.0	20.40	316.10	2,073.4	394.3	-460.0	601.4	1.48	0.11	4.26
2,269.0	21.10	315.60	2,162.3	418.5	-483.5	634.3	0.76	0.74	-0.53
2,325.0	21.20	316.20	2,214.5	433.0	-497.5	654.1	0.43	0.18	1.07
2,487.0	21.70	314.20	2,365.3	475.0	-539.3	712.1	0.55	0.31	-1.23
2,582.0	21.10	313.60	2,453.7	499.1	-564.2	746.2	0.67	-0.63	-0.63
2,676.0	20.50	310.80	2,541.6	521.5	-589.0	779.2	1.24	-0.64	-2.98
2,770.0	19.40	310.10	2,630.0	542.3	-613.4	811.0	1.20	-1.17	-0.74
2,865.0	18.30	309.80	2,719.9	562.0	-636.9	841.6	1.16	-1.16	-0.32
2,959.0	17.40	309.30	2,809.3	580.4	-659.1	870.2	0.97	-0.96	-0.53
3,054.0	16.20	307.00	2,900.3	597.3	-680.7	897.6	1.44	-1.26	-2.42
3,148.0	14.60	305.10	2,990.9	612.0	-700.8	922.5	1.78	-1.70	-2.02
3,242.0	13.70	303.40	3,082.1	625.0	-719.8	945.5	1.05	-0.96	-1.81
3,337.0	12.90	302.90	3,174.5	636.9	-738.1	967.3	0.85	-0.84	-0.53
3,431.0	12.70	308.60	3,266.2	649.1	-755.0	988.1	1.36	-0.21	6.06
3,526.0	12.10	308.00	3,359.0	661.7	-771.0	1,008.5	0.65	-0.63	-0.63
3,620.0	11.90	306.60	3,450.9	673.6	-786.6	1,028.0	0.38	-0.21	-1.49
3,714.0	10.90	304.80	3,543.1	684.4	-801.6	1,046.5	1.13	-1.06	-1.91
3,809.0	10.80	311.20	3,636.4	695.4	-815.7	1,064.3	1.27	-0.11	6.74
3,903.0	10.20	315.20	3,728.8	707.1	-828.2	1,081.2	1.00	-0.64	4.26
3,997.0	9.70	310.60	3,821.4	718.2	-840.1	1,097.2	1.00	-0.53	-4.89
4,092.0	9.20	304.10	3,915.1	727.6	-852.5	1,112.8	1.24	-0.53	-6.84
4,186.0	9.90	309.40	4,007.8	737.0	-864.9	1,128.3	1.19	0.74	5.64
4,281.0	9.40	315.00	4,101.4	747.7	-876.7	1,144.1	1.12	-0.53	5.89
4,376.0	8.30	317.40	4,195.3	758.2	-886.8	1,158.3	1.22	-1.16	2.53
4,470.0	7.30	318.90	4,288.4	767.7	-895.4	1,170.7	1.09	-1.06	1.60
4,565.0	8.00	312.90	4,382.6	776.7	-904.2	1,183.0	1.12	0.74	-6.32
4,660.0	7.30	313.60	4,476.7	785.4	-913.4	1,195.5	0.74	-0.74	0.74
4,754.0	6.90	315.60	4,570.0	793.5	-921.7	1,206.9	0.50	-0.43	2.13
4,849.0	6.50	317.70	4,664.4	801.6	-929.3	1,217.7	0.49	-0.42	2.21
4,943.0	6.40	318.30	4,757.8	809.4	-936.3	1,227.9	0.13	-0.11	0.64

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Well:	NPR 13B-10 596	North Reference:	True
Wellbore:	NPR 13B-10 596 Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	NPR 13B-10 596 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)
5,038.0	3.90	315.00	4,852.4	815.7	-942.1	1,236.2	2.65	-2.63	-3.47
5,132.0	2.50	278.40	4,946.3	818.2	-946.4	1,241.2	2.56	-1.49	-38.94
5,227.0	2.40	248.30	5,041.2	817.8	-950.3	1,244.2	1.34	-0.11	-31.68
5,321.0	2.10	247.20	5,135.1	816.4	-953.7	1,246.3	0.32	-0.32	-1.17
5,415.0	2.10	250.50	5,229.0	815.2	-957.0	1,248.3	0.13	0.00	3.51
5,510.0	2.00	258.20	5,324.0	814.3	-960.2	1,250.5	0.31	-0.11	8.11
5,604.0	2.30	249.50	5,417.9	813.3	-963.6	1,252.7	0.47	0.32	-9.26
5,699.0	1.80	256.70	5,512.8	812.2	-966.8	1,254.9	0.59	-0.53	7.58
5,793.0	1.60	253.00	5,606.8	811.5	-969.5	1,256.7	0.24	-0.21	-3.94
5,888.0	1.90	254.60	5,701.8	810.7	-972.3	1,258.6	0.32	0.32	1.68
5,982.0	1.70	246.60	5,795.7	809.8	-975.1	1,260.4	0.34	-0.21	-8.51
6,077.0	1.30	255.90	5,890.7	808.9	-977.4	1,261.9	0.49	-0.42	9.79
6,172.0	1.10	262.30	5,985.7	808.5	-979.4	1,263.3	0.25	-0.21	6.74
6,266.0	1.10	267.50	6,079.6	808.4	-981.2	1,264.7	0.11	0.00	5.53
6,360.0	1.20	279.60	6,173.6	808.5	-983.0	1,266.3	0.28	0.11	12.87
6,455.0	1.50	294.00	6,268.6	809.2	-985.2	1,268.4	0.47	0.32	15.16
6,549.0	1.80	293.20	6,362.6	810.3	-987.6	1,271.1	0.32	0.32	-0.85
6,644.0	2.00	304.70	6,457.5	811.8	-990.4	1,274.2	0.45	0.21	12.11
6,738.0	2.40	303.70	6,551.4	813.8	-993.4	1,277.8	0.43	0.43	-1.06
6,833.0	2.50	306.20	6,646.4	816.1	-996.7	1,281.9	0.15	0.11	2.63
6,927.0	2.50	306.60	6,740.3	818.6	-1,000.0	1,286.0	0.02	0.00	0.43
7,022.0	2.20	311.80	6,835.2	821.0	-1,003.0	1,289.9	0.39	-0.32	5.47
7,116.0	2.20	322.10	6,929.1	823.7	-1,005.5	1,293.4	0.42	0.00	10.96
7,211.0	2.10	338.10	7,024.0	826.7	-1,007.2	1,296.5	0.64	-0.11	16.84
7,305.0	2.40	326.80	7,118.0	830.0	-1,009.0	1,299.7	0.57	0.32	-12.02
7,400.0	2.70	314.00	7,212.9	833.2	-1,011.7	1,303.8	0.68	0.32	-13.47
7,495.0	2.90	316.20	7,307.8	836.5	-1,014.9	1,308.3	0.24	0.21	2.32
Last Survey - 7495' MD									
7,589.0	2.60	313.70	7,401.7	839.7	-1,018.1	1,312.7	0.34	-0.32	-2.66
7,684.0	0.80	285.80	7,496.6	841.3	-1,020.3	1,315.5	2.03	-1.89	-29.37
7,778.0	0.70	265.80	7,590.6	841.5	-1,021.5	1,316.6	0.30	-0.11	-21.28
7,873.0	1.30	257.80	7,685.6	841.2	-1,023.2	1,317.8	0.65	0.63	-8.42
7,968.0	1.60	248.20	7,780.6	840.5	-1,025.4	1,319.3	0.41	0.32	-10.11
8,062.0	2.20	259.10	7,874.5	839.6	-1,028.4	1,321.3	0.74	0.64	11.60
8,157.0	2.30	248.10	7,969.4	838.6	-1,032.0	1,323.7	0.47	0.11	-11.58
8,345.0	3.50	244.00	8,157.2	834.7	-1,040.6	1,328.7	0.65	0.64	-2.18
8,440.0	3.60	240.80	8,252.0	831.9	-1,045.9	1,331.6	0.23	0.11	-3.37
8,724.0	5.80	249.30	8,535.0	822.5	-1,067.1	1,344.0	0.81	0.77	2.99
9,008.0	4.90	245.80	8,817.8	812.5	-1,091.6	1,358.8	0.34	-0.32	-1.23
9,102.0	5.10	248.80	8,911.4	809.3	-1,099.1	1,363.4	0.35	0.21	3.19
9,386.0	4.70	247.80	9,194.4	800.3	-1,121.6	1,377.2	0.14	-0.14	-0.35
9,578.0	4.70	247.80	9,385.8	794.4	-1,136.2	1,386.0	0.00	0.00	0.00
BHL 2612'FNL, 1322'FWL, SEC.10									

Company:	Caerus Oil and Gas LLC	Local Co-ordinate Reference:	Well NPR 13B-10 596
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Wellbore:	NPR 13B-10 596 Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	NPR 13B-10 596 Wellbore #1	Database:	US_EDM

Survey Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
7,495.0	7,307.8	836.5	-1,014.9	Last Survey - 7495' MD

Checked By: _____	Approved By: _____	Date: _____
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