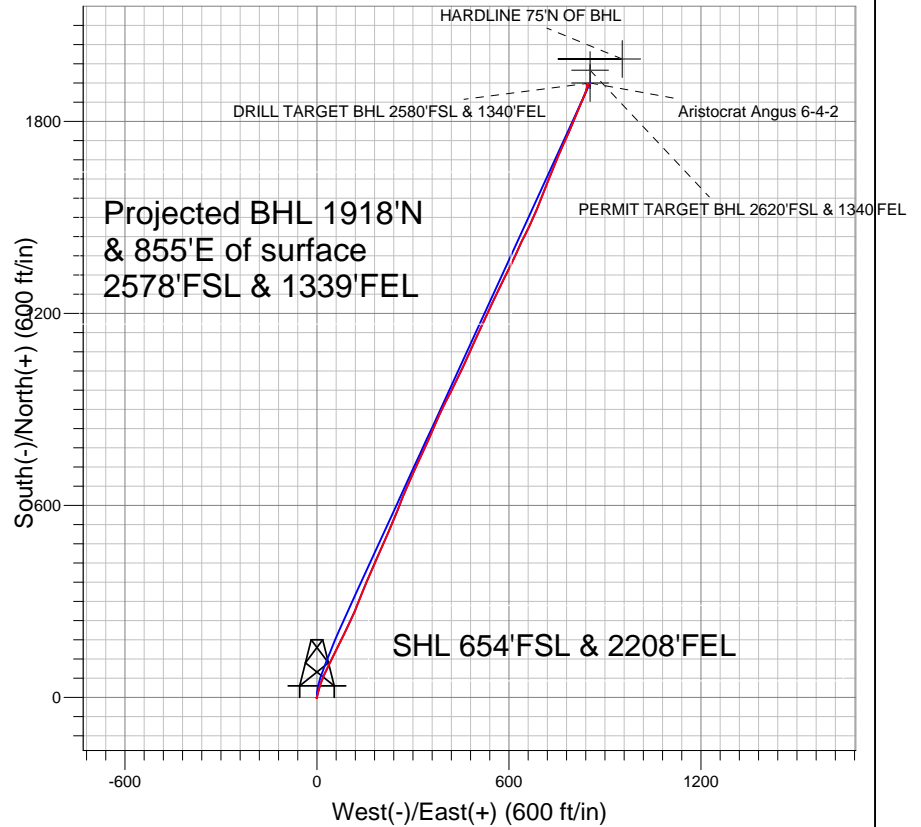


## EnCana Oil & Gas Weld County CO



### LEGEND

- △ Aristocrat Angus 6-4-2, Wellbore #1, Plan #2 (12-13-11)-R V0
- Wellbore #1
- Survey #1

## Final Survey Plot

Projected Final Survey -  
 8140'MD & 7700'TVD @ 2100'VS  
 1.4 deg Inc 82.1 deg AZ

Project: SEC.2-T3N-R65W  
 Site: Aristocrat Angus 5-6-2 Pad Sec.2-T3N-R65W  
 Well: Aristocrat Angus 6-4-2  
 Plan: Wellbore #1



## **Directional**

### **EnCana Oil & Gas Weld County CO**

**SEC.2-T3N-R65W**

**Aristocrat Angus 5-6-2 Pad Sec.2-T3N-R65W**

**Aristocrat Angus 6-4-2**

**Wellbore #1**

**Survey: Survey #1**

### **Standard Survey Report**

**21 December, 2011**

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
95.0	0.70	214.50	95.0	-0.5	-0.3	-0.6	0.74	0.74	0.00
187.0	0.60	181.50	187.0	-1.4	-0.7	-1.6	0.41	-0.11	-35.87
278.0	0.10	358.50	278.0	-1.8	-0.7	-1.9	0.77	-0.55	194.51
368.0	0.40	26.60	368.0	-1.5	-0.5	-1.6	0.35	0.33	31.22
460.0	0.40	14.60	460.0	-0.9	-0.3	-0.9	0.09	0.00	-13.04
552.0	0.80	4.80	552.0	0.1	-0.2	0.0	0.45	0.43	-10.65
644.0	0.70	34.70	644.0	1.2	0.2	1.2	0.43	-0.11	32.50
722.0	1.00	15.00	722.0	2.2	0.6	2.3	0.53	0.38	-25.26
802.0	1.10	4.80	802.0	3.7	0.9	3.7	0.26	0.13	-12.75
895.0	2.90	14.10	894.9	6.9	1.5	6.9	1.96	1.94	10.00
989.0	4.20	14.30	988.7	12.5	3.0	12.6	1.38	1.38	0.21
1,083.0	6.10	14.60	1,082.3	20.7	5.1	20.9	2.02	2.02	0.32

<b>Company:</b>	EnCana Oil & Gas Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Aristocrat Angus 6-4-2
<b>Project:</b>	SEC.2-T3N-R65W	<b>TVD Reference:</b>	WELL @ 4794.0ft (Original Well Elev)
<b>Site:</b>	Aristocrat Angus 5-6-2 Pad Sec.2-T3N-R65W	<b>MD Reference:</b>	WELL @ 4794.0ft (Original Well Elev)
<b>Well:</b>	Aristocrat Angus 6-4-2	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	Landmark

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)	
1,176.0	7.70	15.70	1,174.6	31.4	8.0	32.0	1.73	1.72	1.18	
1,270.0	10.10	19.90	1,267.5	45.3	12.5	46.4	2.64	2.55	4.47	
1,364.0	11.90	22.20	1,359.8	62.0	19.0	64.3	1.97	1.91	2.45	
1,457.0	14.70	25.90	1,450.3	81.5	27.8	85.7	3.15	3.01	3.98	
1,551.0	16.70	26.10	1,540.8	104.3	38.9	111.1	2.13	2.13	0.21	
1,645.0	17.80	25.80	1,630.5	129.4	51.1	139.0	1.17	1.17	-0.32	
1,738.0	19.60	25.80	1,718.6	156.2	64.1	168.8	1.94	1.94	0.00	
1,832.0	20.40	26.90	1,807.0	185.1	78.4	200.9	0.94	0.85	1.17	
1,926.0	22.00	25.40	1,894.6	215.6	93.3	234.9	1.80	1.70	-1.60	
2,019.0	23.60	25.70	1,980.3	248.1	108.9	270.9	1.72	1.72	0.32	
2,113.0	25.00	21.40	2,066.0	283.5	124.3	309.6	2.40	1.49	-4.57	
2,207.0	26.50	21.60	2,150.7	321.5	139.3	350.4	1.60	1.60	0.21	
2,300.0	26.50	22.80	2,233.9	359.9	154.9	391.8	0.58	0.00	1.29	
2,394.0	25.80	23.00	2,318.3	398.1	171.1	433.3	0.75	-0.74	0.21	
2,488.0	25.80	24.50	2,402.9	435.6	187.5	474.2	0.69	0.00	1.60	
2,581.0	24.00	24.70	2,487.3	471.2	203.8	513.3	1.94	-1.94	0.22	
2,675.0	24.10	23.30	2,573.1	506.2	219.4	551.6	0.62	0.11	-1.49	
2,769.0	24.20	22.00	2,658.9	541.6	234.2	590.1	0.58	0.11	-1.38	
2,862.0	24.90	22.00	2,743.5	577.5	248.7	628.7	0.75	0.75	0.00	
2,956.0	24.80	21.60	2,828.8	614.1	263.4	668.2	0.21	-0.11	-0.43	
3,050.0	27.00	22.80	2,913.3	652.1	278.9	709.2	2.41	2.34	1.28	
3,143.0	26.60	25.00	2,996.3	690.5	295.9	751.1	1.15	-0.43	2.37	
3,237.0	26.30	25.20	3,080.5	728.4	313.6	793.0	0.33	-0.32	0.21	
3,331.0	28.10	24.00	3,164.1	767.5	331.5	836.0	2.00	1.91	-1.28	
3,424.0	25.30	24.20	3,247.2	805.6	348.6	877.7	3.01	-3.01	0.22	
3,518.0	26.40	23.10	3,331.8	843.2	365.0	918.7	1.28	1.17	-1.17	
3,612.0	27.20	24.80	3,415.7	881.9	382.2	961.1	1.18	0.85	1.81	
3,705.0	27.40	27.20	3,498.3	920.2	400.9	1,003.7	1.20	0.22	2.58	
3,799.0	27.00	26.60	3,581.9	958.5	420.3	1,046.6	0.52	-0.43	-0.64	
3,893.0	26.00	25.90	3,666.0	996.1	438.9	1,088.5	1.11	-1.06	-0.74	
3,986.0	26.40	25.00	3,749.5	1,033.2	456.5	1,129.6	0.61	0.43	-0.97	
4,080.0	28.00	24.50	3,833.1	1,072.2	474.5	1,172.5	1.72	1.70	-0.53	
4,173.0	28.40	24.00	3,915.0	1,112.3	492.6	1,216.5	0.50	0.43	-0.54	
4,267.0	27.40	24.40	3,998.1	1,152.4	510.6	1,260.5	1.08	-1.06	0.43	
4,361.0	27.10	25.70	4,081.7	1,191.4	528.8	1,303.5	0.71	-0.32	1.38	
4,454.0	27.40	25.40	4,164.4	1,229.8	547.2	1,346.1	0.35	0.32	-0.32	
4,548.0	28.30	25.20	4,247.5	1,269.5	565.9	1,390.0	0.96	0.96	-0.21	
4,642.0	27.40	27.10	4,330.6	1,309.0	585.3	1,433.8	1.34	-0.96	2.02	
4,735.0	27.60	25.90	4,413.1	1,347.4	604.4	1,476.7	0.63	0.22	-1.29	
4,829.0	27.10	24.20	4,496.6	1,386.5	622.7	1,519.9	0.99	-0.53	-1.81	
4,923.0	27.20	24.70	4,580.2	1,425.5	640.5	1,562.8	0.27	0.11	0.53	
5,016.0	26.70	26.60	4,663.1	1,463.5	658.7	1,604.9	1.07	-0.54	2.04	
5,110.0	26.70	25.20	4,747.1	1,501.5	677.2	1,647.1	0.67	0.00	-1.49	
5,204.0	28.10	21.60	4,830.5	1,541.2	694.3	1,690.4	2.31	1.49	-3.83	
5,297.0	26.30	21.10	4,913.3	1,580.8	709.8	1,732.8	1.95	-1.94	-0.54	
5,391.0	26.80	21.50	4,997.3	1,620.0	725.1	1,774.8	0.56	0.53	0.43	
5,485.0	25.20	22.10	5,081.8	1,658.2	740.4	1,816.0	1.72	-1.70	0.64	
5,578.0	22.50	22.90	5,166.9	1,693.0	754.7	1,853.6	2.92	-2.90	0.86	
5,672.0	19.50	23.80	5,254.6	1,723.9	768.1	1,887.3	3.21	-3.19	0.96	
5,766.0	18.30	24.90	5,343.6	1,751.6	780.6	1,917.7	1.33	-1.28	1.17	
5,859.0	16.50	22.80	5,432.3	1,777.1	791.9	1,945.5	2.05	-1.94	-2.26	
5,953.0	14.80	22.20	5,522.8	1,800.5	801.6	1,970.9	1.82	-1.81	-0.64	
6,047.0	11.90	23.30	5,614.3	1,820.5	810.0	1,992.6	3.10	-3.09	1.17	
6,140.0	11.60	23.00	5,705.3	1,837.9	817.4	2,011.5	0.33	-0.32	-0.32	

<b>Company:</b>	EnCana Oil & Gas Weld County CO	<b>Local Co-ordinate Reference:</b>	Well Aristocrat Angus 6-4-2
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<b>Site:</b>	Aristocrat Angus 5-6-2 Pad Sec.2-T3N-R65W	<b>MD Reference:</b>	WELL @ 4794.0ft (Original Well Elev)
<b>Well:</b>	Aristocrat Angus 6-4-2	<b>North Reference:</b>	True
<b>Wellbore:</b>	Wellbore #1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	Wellbore #1	<b>Database:</b>	Landmark

## 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)
6,234.0	10.80	21.70	5,797.5	1,854.8	824.4	2,029.7	0.89	-0.85	-1.38
6,328.0	8.60	26.20	5,890.2	1,869.3	830.7	2,045.6	2.47	-2.34	4.79
6,422.0	6.90	21.20	5,983.3	1,880.9	835.9	2,058.2	1.94	-1.81	-5.32
6,447.1	6.48	21.16	6,008.3	1,883.6	836.9	2,061.2	1.68	-1.68	-0.17
<b>PERMIT TARGET BHL 2620'FSL &amp; 1340'FEL</b>									
6,517.0	5.30	21.00	6,077.8	1,890.3	839.5	2,068.3	1.68	-1.68	-0.22
6,611.0	3.60	14.60	6,171.5	1,897.2	841.8	2,075.6	1.88	-1.81	-6.81
6,705.0	2.90	17.80	6,265.3	1,902.3	843.3	2,080.8	0.77	-0.74	3.40
6,800.0	1.30	352.30	6,360.3	1,905.7	843.9	2,084.1	1.91	-1.68	-26.84
6,840.0	1.01	2.02	6,400.2	1,906.5	843.8	2,084.9	0.88	-0.74	24.32
<b>DRILL TARGET BHL 2580'FSL &amp; 1340'FEL</b>									
6,894.0	0.70	27.10	6,454.3	1,907.2	844.0	2,085.6	0.88	-0.57	46.42
6,988.0	0.70	64.30	6,548.3	1,908.0	844.8	2,086.6	0.48	0.00	39.57
7,082.0	2.00	77.80	6,642.2	1,908.6	846.9	2,088.0	1.41	1.38	14.36
7,177.0	1.10	4.20	6,737.2	1,909.8	848.6	2,089.9	2.10	-0.95	-77.47
7,271.0	2.00	294.80	6,831.2	1,911.4	847.1	2,090.7	2.04	0.96	-73.83
7,365.0	1.50	296.50	6,925.1	1,912.7	844.5	2,090.8	0.53	-0.53	1.81
7,460.0	1.00	337.20	7,020.1	1,914.0	843.1	2,091.4	1.04	-0.53	42.84
7,554.0	0.60	22.90	7,114.1	1,915.2	843.0	2,092.5	0.77	-0.43	48.62
7,648.0	0.90	37.50	7,208.1	1,916.2	843.6	2,093.7	0.38	0.32	15.53
7,742.0	1.30	71.10	7,302.1	1,917.2	845.1	2,095.2	0.79	0.43	35.74
7,837.0	1.20	87.70	7,397.0	1,917.6	847.1	2,096.3	0.39	-0.11	17.47
7,931.0	1.50	82.50	7,491.0	1,917.8	849.3	2,097.4	0.34	0.32	-5.53
8,025.0	1.50	86.80	7,585.0	1,918.0	851.8	2,098.6	0.12	0.00	4.57
8,095.0	1.40	82.10	7,655.0	1,918.2	853.5	2,099.5	0.22	-0.14	-6.71
8,124.7	1.40	82.10	7,684.7	1,918.3	854.2	2,099.9	0.00	0.00	0.00
<b>HARDLINE 75'N OF BHL</b>									
8,140.0	1.40	82.10	7,700.0	1,918.3	854.6	2,100.1	0.00	0.00	0.00

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