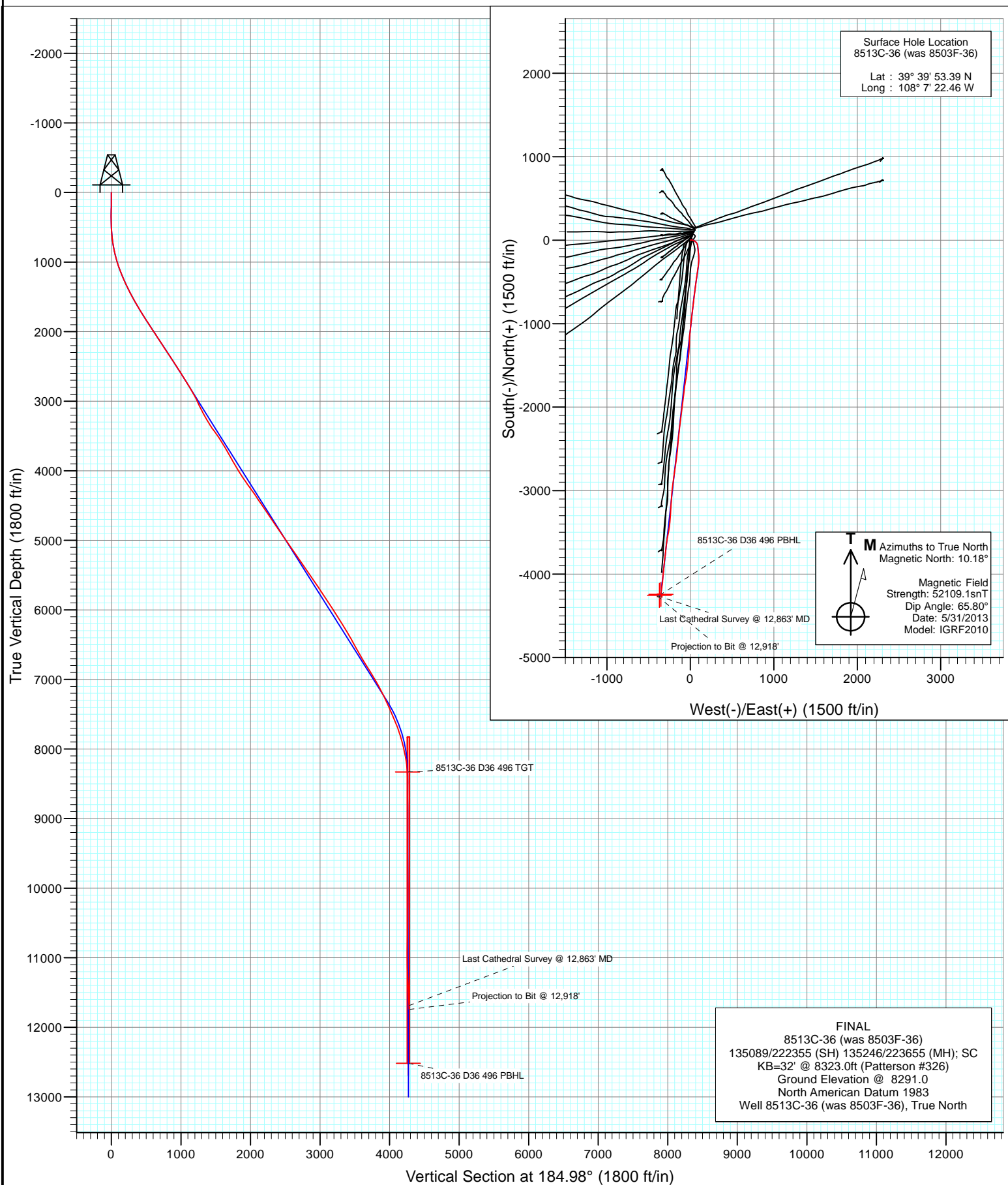


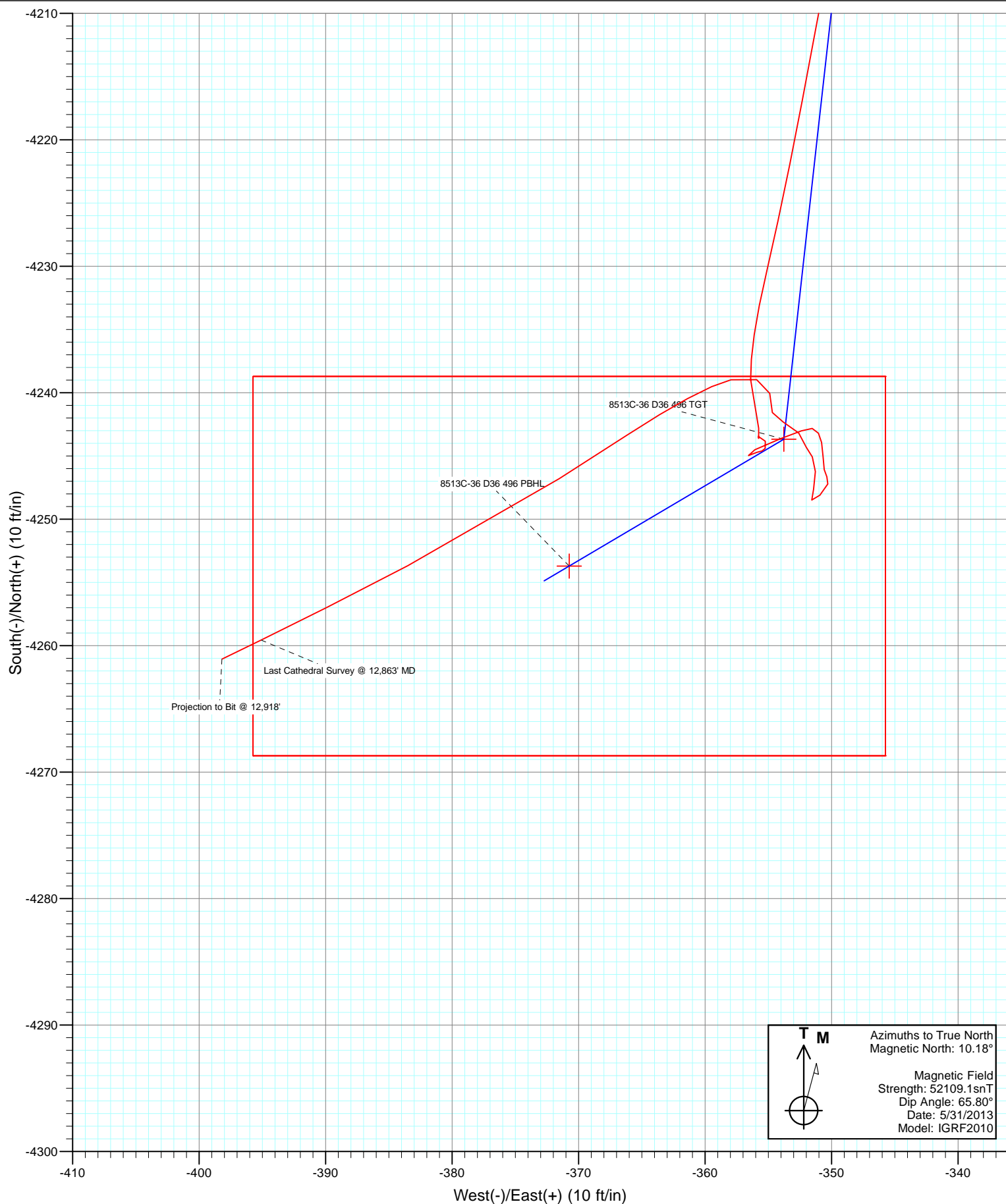


Project: Story Gulch  
Site: S36-T4S-R96W (D36 496)  
Well: 8513C-36 (was 8503F-36)  
Wellbore: DD  
Design: FINAL





Project: Story Gulch  
Site: S36-T4S-R96W (D36 496)  
Well: 8513C-36 (was 8503F-36)  
Wellbore: DD  
Design: FINAL



# Cathedral Energy Services

## Survey Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well 8513C-36 (was 8503F-36)
<b>Project:</b>	Story Gulch	<b>TVD Reference:</b>	KB=32' @ 8323.0ft (Patterson #326)
<b>Site:</b>	S36-T4S-R96W (D36 496)	<b>MD Reference:</b>	KB=32' @ 8323.0ft (Patterson #326)
<b>Well:</b>	8513C-36 (was 8503F-36)	<b>North Reference:</b>	True
<b>Wellbore:</b>	DD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	DD	<b>Database:</b>	USA EDM 5000 Multi Users DB

<b>Project</b>	Story Gulch		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Colorado Central Zone		

Site		S36-T4S-R96W (D36 496)			
Site Position:		Northing:	1,590,537.44 ft	Latitude:	39° 25' 42.24 N
From:	Lat/Long	Easting:	2,297,786.47 ft	Longitude:	107° 59' 10.64 W
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	-1.57 °

Well	8513C-36 (was 8503F-36)					
Well Position	+N/-S	0.0 ft	Northing:	1,677,705.47 ft	Latitude:	39° 39' 53.39 N
	+E/-W	0.0 ft	Easting:	2,261,697.44 ft	Longitude:	108° 7' 22.46 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	8,291.0 ft

<b>Wellbore</b>	DD				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	5/31/2013	10.18	65.80	52,109

<b>Design</b>	DD				
<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)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>	
	0.0	0.0	0.0	184.98	

<b>Survey Program</b>	<b>Date</b>	6/14/2013			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
209.0	12,918.0	Survey #1 (DD)	MWD	Geolink MWD	

<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 (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Formations / Comments</b>	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00		
209.0	2.60	78.60	208.9	0.9	4.6	-1.3	1.24	1.24		
239.0	3.50	81.50	238.9	1.2	6.2	-1.7	3.04	3.00		
270.0	4.70	83.10	269.8	1.5	8.4	-2.2	3.89	3.87		
300.0	5.40	85.10	299.7	1.8	11.0	-2.7	2.41	2.33		
330.0	5.80	89.90	329.5	1.9	14.0	-3.1	2.05	1.33		
361.0	6.10	93.80	360.4	1.8	17.2	-3.3	1.62	0.97		
391.0	6.80	93.00	390.2	1.6	20.5	-3.4	2.35	2.33		
422.0	7.20	106.90	421.0	0.9	24.2	-3.0	5.60	1.29		
452.0	7.60	105.20	450.7	-0.1	27.9	-2.3	1.52	1.33		
483.0	7.60	107.90	481.4	-1.3	31.9	-1.5	1.15	0.00		
513.0	8.20	115.50	511.2	-2.8	35.7	-0.3	4.01	2.00		
543.0	8.80	117.90	540.8	-4.8	39.7	1.4	2.32	2.00		

# Cathedral Energy Services

## Survey Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well 8513C-36 (was 8503F-36)
<b>Project:</b>	Story Gulch	<b>TVD Reference:</b>	KB=32' @ 8323.0ft (Patterson #326)
<b>Site:</b>	S36-T4S-R96W (D36 496)	<b>MD Reference:</b>	KB=32' @ 8323.0ft (Patterson #326)
<b>Well:</b>	8513C-36 (was 8503F-36)	<b>North Reference:</b>	True
<b>Wellbore:</b>	DD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	DD	<b>Database:</b>	USA EDM 5000 Multi Users DB

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Formations / Comments
574.0	9.80	118.50	571.4	-7.2	44.1	3.4	3.24	3.23	
604.0	10.50	121.60	600.9	-9.9	48.6	5.6	2.96	2.33	
653.0	11.30	124.20	649.1	-14.9	56.4	9.9	1.92	1.63	
698.0	12.10	133.30	693.1	-20.6	63.5	15.0	4.46	1.78	
744.0	12.70	140.60	738.1	-27.8	70.2	21.6	3.65	1.30	
790.0	13.60	146.60	782.9	-36.2	76.4	29.5	3.55	1.96	
836.0	13.80	157.00	827.6	-45.8	81.5	38.6	5.37	0.43	
882.0	13.90	164.00	872.2	-56.2	85.2	48.6	3.65	0.22	
927.0	14.90	174.00	915.8	-67.1	87.3	59.3	5.95	2.22	
973.0	16.20	175.40	960.1	-79.4	88.4	71.4	2.94	2.83	
1,019.0	17.80	175.00	1,004.1	-92.8	89.5	84.7	3.49	3.48	
1,064.0	18.40	175.20	1,046.9	-106.7	90.7	98.5	1.34	1.33	
1,156.0	21.10	172.70	1,133.5	-137.6	94.1	128.9	3.07	2.93	
1,247.0	23.50	174.70	1,217.7	-172.0	97.8	162.8	2.77	2.64	
1,339.0	26.10	177.50	1,301.2	-210.4	100.4	200.9	3.10	2.83	
1,430.0	26.40	183.90	1,382.8	-250.6	99.9	241.0	3.13	0.33	
1,522.0	27.10	185.50	1,465.0	-291.9	96.5	282.4	1.09	0.76	
1,613.0	28.60	187.60	1,545.4	-334.1	91.6	324.9	1.97	1.65	
1,708.0	30.00	188.00	1,628.3	-380.2	85.3	371.3	1.49	1.47	
1,796.0	32.30	188.10	1,703.6	-425.2	78.9	416.8	2.61	2.61	
1,887.0	33.80	188.40	1,779.8	-474.4	71.8	466.3	1.66	1.65	
1,979.0	32.60	188.60	1,856.8	-524.2	64.4	516.6	1.31	-1.30	
2,070.0	32.70	187.70	1,933.4	-572.8	57.4	565.6	0.54	0.11	
2,162.0	33.80	187.40	2,010.4	-622.8	50.8	616.0	1.21	1.20	
2,253.0	32.70	187.30	2,086.5	-672.3	44.4	665.9	1.21	-1.21	
2,345.0	33.00	187.70	2,163.8	-721.7	37.9	715.7	0.40	0.33	
2,436.0	33.10	187.00	2,240.0	-771.0	31.5	765.3	0.43	0.11	
2,527.0	33.80	186.80	2,316.0	-820.8	25.5	815.5	0.78	0.77	
2,619.0	33.60	185.80	2,392.5	-871.5	19.9	866.5	0.64	-0.22	
2,710.0	33.50	185.20	2,468.4	-921.6	15.1	916.8	0.38	-0.11	
2,802.0	32.70	185.10	2,545.4	-971.6	10.6	967.0	0.87	-0.87	
2,894.0	32.10	186.90	2,623.1	-1,020.6	5.4	1,016.3	1.23	-0.65	
2,970.0	31.10	187.20	2,687.8	-1,060.1	0.5	1,056.1	1.33	-1.32	
3,082.0	31.50	185.90	2,783.5	-1,117.9	-6.1	1,114.3	0.70	0.36	
3,174.0	30.40	185.00	2,862.4	-1,165.0	-10.6	1,161.6	1.30	-1.20	
3,266.0	27.20	181.00	2,943.1	-1,209.3	-13.0	1,205.8	4.06	-3.48	
3,357.0	24.90	179.70	3,024.8	-1,249.2	-13.3	1,245.7	2.60	-2.53	
3,448.0	26.70	182.70	3,106.7	-1,288.8	-14.1	1,285.2	2.44	1.98	
3,540.0	28.00	184.50	3,188.4	-1,331.0	-16.8	1,327.4	1.67	1.41	
3,631.0	30.70	185.00	3,267.8	-1,375.4	-20.5	1,372.0	2.98	2.97	
3,723.0	32.30	186.10	3,346.2	-1,423.3	-25.1	1,420.1	1.85	1.74	
3,814.0	35.90	186.90	3,421.5	-1,474.0	-30.9	1,471.1	3.99	3.96	
3,906.0	35.70	186.80	3,496.2	-1,527.4	-37.4	1,524.9	0.23	-0.22	
3,998.0	33.10	186.70	3,572.1	-1,579.0	-43.5	1,576.8	2.83	-2.83	
4,089.0	30.10	187.00	3,649.6	-1,626.3	-49.1	1,624.5	3.30	-3.30	
4,180.0	30.80	189.80	3,728.0	-1,671.9	-55.9	1,670.5	1.74	0.77	
4,271.0	29.50	189.90	3,806.7	-1,717.0	-63.7	1,716.0	1.43	-1.43	
4,363.0	28.10	186.10	3,887.3	-1,760.8	-69.9	1,760.3	2.50	-1.52	
4,454.0	31.10	186.40	3,966.4	-1,805.5	-74.8	1,805.2	3.30	3.30	
4,546.0	32.80	187.40	4,044.5	-1,853.8	-80.7	1,853.8	1.94	1.85	
4,637.0	34.30	187.60	4,120.3	-1,903.7	-87.2	1,904.1	1.65	1.65	
4,729.0	35.90	187.10	4,195.6	-1,956.2	-94.0	1,956.9	1.77	1.74	
4,820.0	35.90	188.30	4,269.3	-2,009.0	-101.1	2,010.2	0.77	0.00	

# Cathedral Energy Services

## Survey Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well 8513C-36 (was 8503F-36)
<b>Project:</b>	Story Gulch	<b>TVD Reference:</b>	KB=32' @ 8323.0ft (Patterson #326)
<b>Site:</b>	S36-T4S-R96W (D36 496)	<b>MD Reference:</b>	KB=32' @ 8323.0ft (Patterson #326)
<b>Well:</b>	8513C-36 (was 8503F-36)	<b>North Reference:</b>	True
<b>Wellbore:</b>	DD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	DD	<b>Database:</b>	USA EDM 5000 Multi Users DB

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Formations / Comments
4,912.0	35.00	187.00	4,344.3	-2,061.9	-108.2	2,063.5	1.28	-0.98	
5,003.0	34.10	186.20	4,419.2	-2,113.2	-114.2	2,115.1	1.11	-0.99	
5,095.0	33.50	185.30	4,495.7	-2,164.1	-119.3	2,166.3	0.85	-0.65	
5,186.0	33.70	186.70	4,571.5	-2,214.2	-124.6	2,216.6	0.88	0.22	
5,278.0	34.30	186.80	4,647.7	-2,265.3	-130.6	2,268.1	0.65	0.65	
5,369.0	34.00	187.50	4,723.0	-2,316.0	-137.0	2,319.1	0.54	-0.33	
5,461.0	34.20	186.00	4,799.2	-2,367.2	-143.0	2,370.7	0.94	0.22	
5,552.0	34.50	184.20	4,874.4	-2,418.3	-147.6	2,422.0	1.16	0.33	
5,643.0	34.40	185.60	4,949.4	-2,469.6	-152.0	2,473.5	0.88	-0.11	
5,735.0	35.20	184.90	5,024.9	-2,521.9	-156.8	2,526.0	0.97	0.87	
5,826.0	34.80	187.10	5,099.5	-2,573.8	-162.3	2,578.2	1.45	-0.44	
5,918.0	34.60	187.90	5,175.1	-2,625.7	-169.1	2,630.5	0.54	-0.22	
6,010.0	34.80	187.50	5,250.8	-2,677.6	-176.1	2,682.8	0.33	0.22	
6,101.0	35.10	187.70	5,325.4	-2,729.3	-183.0	2,734.9	0.35	0.33	
6,193.0	35.20	188.70	5,400.6	-2,781.7	-190.6	2,787.8	0.64	0.11	
6,284.0	34.80	188.30	5,475.1	-2,833.3	-198.3	2,839.9	0.51	-0.44	
6,375.0	34.50	187.50	5,550.0	-2,884.6	-205.4	2,891.5	0.60	-0.33	
6,467.0	34.40	187.30	5,625.8	-2,936.2	-212.1	2,943.5	0.16	-0.11	
6,558.0	33.80	186.50	5,701.2	-2,986.8	-218.2	2,994.5	0.82	-0.66	
6,649.0	33.10	184.60	5,777.1	-3,036.8	-223.1	3,044.7	1.38	-0.77	
6,741.0	32.60	184.40	5,854.4	-3,086.5	-227.0	3,094.6	0.56	-0.54	
6,832.0	32.60	182.10	5,931.1	-3,135.5	-229.8	3,143.6	1.36	0.00	
6,924.0	32.30	184.40	6,008.7	-3,184.7	-232.6	3,192.9	1.38	-0.33	
7,015.0	33.30	184.20	6,085.2	-3,233.9	-236.3	3,242.2	1.11	1.10	
7,106.0	31.90	182.90	6,161.9	-3,282.8	-239.3	3,291.2	1.72	-1.54	
7,198.0	31.80	184.40	6,240.0	-3,331.3	-242.4	3,339.7	0.87	-0.11	
7,289.0	31.00	184.70	6,317.7	-3,378.5	-246.2	3,387.1	0.90	-0.88	
7,381.0	31.00	187.30	6,396.6	-3,425.6	-251.1	3,434.5	1.46	0.00	
7,473.0	28.40	189.60	6,476.5	-3,470.7	-257.8	3,480.0	3.09	-2.83	
7,564.0	28.20	191.90	6,556.6	-3,513.1	-265.8	3,522.9	1.22	-0.22	
7,657.0	30.30	191.40	6,637.7	-3,557.6	-275.0	3,568.0	2.27	2.26	
7,748.0	31.60	188.00	6,715.8	-3,603.7	-282.8	3,614.7	2.39	1.43	
7,840.0	32.30	186.10	6,793.8	-3,652.0	-288.8	3,663.3	1.33	0.76	
7,931.0	31.50	186.10	6,871.1	-3,699.8	-293.9	3,711.4	0.88	-0.88	
8,022.0	30.80	187.10	6,949.0	-3,746.6	-299.3	3,758.4	0.96	-0.77	
8,114.0	30.20	186.00	7,028.3	-3,793.0	-304.6	3,805.1	0.89	-0.65	
8,205.0	27.30	186.10	7,108.0	-3,836.5	-309.3	3,848.9	3.19	-3.19	
8,297.0	26.50	186.00	7,190.1	-3,877.9	-313.6	3,890.5	0.87	-0.87	
8,388.0	25.60	186.10	7,271.8	-3,917.6	-317.9	3,930.4	0.99	-0.99	
8,480.0	25.00	185.80	7,355.0	-3,956.7	-321.9	3,969.8	0.67	-0.65	
8,572.0	24.10	185.00	7,438.7	-3,994.8	-325.5	4,008.0	1.04	-0.98	
8,663.0	23.50	184.90	7,521.9	-4,031.4	-328.7	4,044.7	0.66	-0.66	
8,755.0	22.10	185.10	7,606.8	-4,066.9	-331.8	4,080.4	1.52	-1.52	
8,846.0	20.50	185.30	7,691.5	-4,099.8	-334.8	4,113.4	1.76	-1.76	
8,938.0	18.20	187.30	7,778.3	-4,130.1	-338.1	4,143.9	2.60	-2.50	
9,029.0	15.70	189.50	7,865.4	-4,156.4	-342.0	4,170.4	2.84	-2.75	
9,121.0	13.80	188.80	7,954.3	-4,179.5	-345.7	4,193.7	2.07	-2.07	
9,212.0	12.10	190.40	8,043.0	-4,199.6	-349.1	4,214.0	1.91	-1.87	
9,304.0	10.00	190.80	8,133.3	-4,216.9	-352.3	4,231.6	2.28	-2.28	
9,396.0	7.30	193.10	8,224.3	-4,230.5	-355.1	4,245.3	2.96	-2.93	
9,487.0	3.60	179.00	8,314.8	-4,239.0	-356.4	4,253.9	4.29	-4.07	
9,577.0	1.50	150.00	8,404.7	-4,242.8	-355.8	4,257.7	2.67	-2.33	
9,669.0	0.80	291.40	8,496.7	-4,243.6	-355.8	4,258.5	2.37	-0.76	

# Cathedral Energy Services

## Survey Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well 8513C-36 (was 8503F-36)
<b>Project:</b>	Story Gulch	<b>TVD Reference:</b>	KB=32' @ 8323.0ft (Patterson #326)
<b>Site:</b>	S36-T4S-R96W (D36 496)	<b>MD Reference:</b>	KB=32' @ 8323.0ft (Patterson #326)
<b>Well:</b>	8513C-36 (was 8503F-36)	<b>North Reference:</b>	True
<b>Wellbore:</b>	DD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	DD	<b>Database:</b>	USA EDM 5000 Multi Users DB

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Formations / Comments
9,760.0	0.70	97.20	8,587.7	-4,243.4	-355.8	4,258.3	1.64	-0.11	
9,852.0	0.40	179.40	8,679.7	-4,243.8	-355.2	4,258.7	0.82	-0.33	
9,943.0	0.30	182.80	8,770.7	-4,244.4	-355.2	4,259.2	0.11	-0.11	
10,034.0	0.30	279.60	8,861.7	-4,244.6	-355.5	4,259.4	0.49	0.00	
10,126.0	0.30	228.20	8,953.7	-4,244.7	-355.9	4,259.6	0.28	0.00	
10,218.0	0.60	258.90	9,045.7	-4,245.0	-356.6	4,259.9	0.41	0.33	
10,309.0	1.40	60.30	9,136.7	-4,244.5	-356.1	4,259.4	2.17	0.88	
10,400.0	1.40	73.10	9,227.7	-4,243.6	-354.0	4,258.3	0.34	0.00	
10,492.0	0.80	62.60	9,319.7	-4,243.0	-352.4	4,257.6	0.69	-0.65	
10,583.0	0.40	109.70	9,410.7	-4,242.8	-351.5	4,257.3	0.66	-0.44	
10,675.0	0.40	145.30	9,502.7	-4,243.2	-351.0	4,257.7	0.27	0.00	
10,766.0	0.60	171.60	9,593.7	-4,243.9	-350.8	4,258.4	0.33	0.22	
10,858.0	0.80	175.60	9,685.7	-4,245.0	-350.7	4,259.5	0.22	0.22	
10,949.0	0.50	173.70	9,776.6	-4,246.1	-350.6	4,260.5	0.33	-0.33	
11,041.0	0.30	136.20	9,868.6	-4,246.6	-350.4	4,261.0	0.35	-0.22	
11,133.0	0.50	194.70	9,960.6	-4,247.2	-350.3	4,261.6	0.47	0.22	
11,224.0	0.90	226.00	10,051.6	-4,248.1	-350.9	4,262.5	0.59	0.44	
11,315.0	0.20	308.20	10,142.6	-4,248.5	-351.6	4,263.0	0.98	-0.77	
11,407.0	1.00	18.80	10,234.6	-4,247.6	-351.4	4,262.1	1.04	0.87	
11,499.0	0.80	349.70	10,326.6	-4,246.2	-351.3	4,260.7	0.53	-0.22	
11,590.0	0.70	346.30	10,417.6	-4,245.1	-351.5	4,259.6	0.12	-0.11	
11,682.0	0.50	302.70	10,509.6	-4,244.3	-352.0	4,258.8	0.52	-0.22	
11,773.0	1.20	343.70	10,600.6	-4,243.2	-352.6	4,257.8	0.97	0.77	
11,864.0	1.20	267.10	10,691.6	-4,242.3	-353.8	4,257.0	1.63	0.00	
11,956.0	1.00	6.80	10,783.6	-4,241.6	-354.7	4,256.3	1.83	-0.22	
12,047.0	1.00	337.90	10,874.6	-4,240.0	-354.9	4,254.8	0.55	0.00	
12,139.0	1.00	294.70	10,966.5	-4,239.0	-355.9	4,253.9	0.80	0.00	
12,230.0	1.70	255.30	11,057.5	-4,239.0	-357.9	4,254.0	1.23	0.77	
12,322.0	3.00	241.70	11,149.4	-4,240.5	-361.4	4,255.8	1.53	1.41	
12,413.0	4.00	236.70	11,240.3	-4,243.3	-366.1	4,259.1	1.15	1.10	
12,505.0	4.00	237.90	11,332.0	-4,246.8	-371.5	4,263.0	0.09	0.00	
12,687.0	4.70	242.00	11,513.5	-4,253.7	-383.5	4,270.9	0.42	0.38	
12,779.0	4.30	243.40	11,605.2	-4,257.0	-389.9	4,274.8	0.45	-0.43	
12,863.0	3.60	244.00	11,689.0	-4,259.6	-395.1	4,277.8	0.83	-0.83	Last Cathedral Survey @ 12,863' MD
12,918.0	3.60	244.00	11,743.9	-4,261.1	-398.2	4,279.5	0.00	0.00	Projection to Bit @ 12,918'

# Cathedral Energy Services

## Survey Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well 8513C-36 (was 8503F-36)
<b>Project:</b>	Story Gulch	<b>TVD Reference:</b>	KB=32' @ 8323.0ft (Patterson #326)
<b>Site:</b>	S36-T4S-R96W (D36 496)	<b>MD Reference:</b>	KB=32' @ 8323.0ft (Patterson #326)
<b>Well:</b>	8513C-36 (was 8503F-36)	<b>North Reference:</b>	True
<b>Wellbore:</b>	DD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	DD	<b>Database:</b>	USA EDM 5000 Multi Users DB

Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
- Shape									
8513C-36 D36 496 PBH	0.00	0.00	12,518.0	-4,253.7	-370.7	1,673,464.24	2,261,204.07	39° 39' 11.35 N	108° 7' 27.20 W
- actual wellpath misses target center by 774.6ft at 12918.0ft MD (11743.9 TVD, -4261.1 N, -398.2 E)									
- Rectangle (sides W30.0 H50.0 D0.0)									
8513C-36 D36 496 TGT	0.00	0.00	8,330.0	-4,243.7	-353.8	1,673,473.77	2,261,221.32	39° 39' 11.45 N	108° 7' 26.98 W
- actual wellpath misses target center by 4.6ft at 9502.4ft MD (8330.2 TVD, -4239.9 N, -356.4 E)									
- Point									

Design Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	
12,863.0	11,689.0	-4,259.6	-395.1	Last Cathedral Survey @ 12,863' MD
12,918.0	11,743.9	-4,261.1	-398.2	Projection to Bit @ 12,918'

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