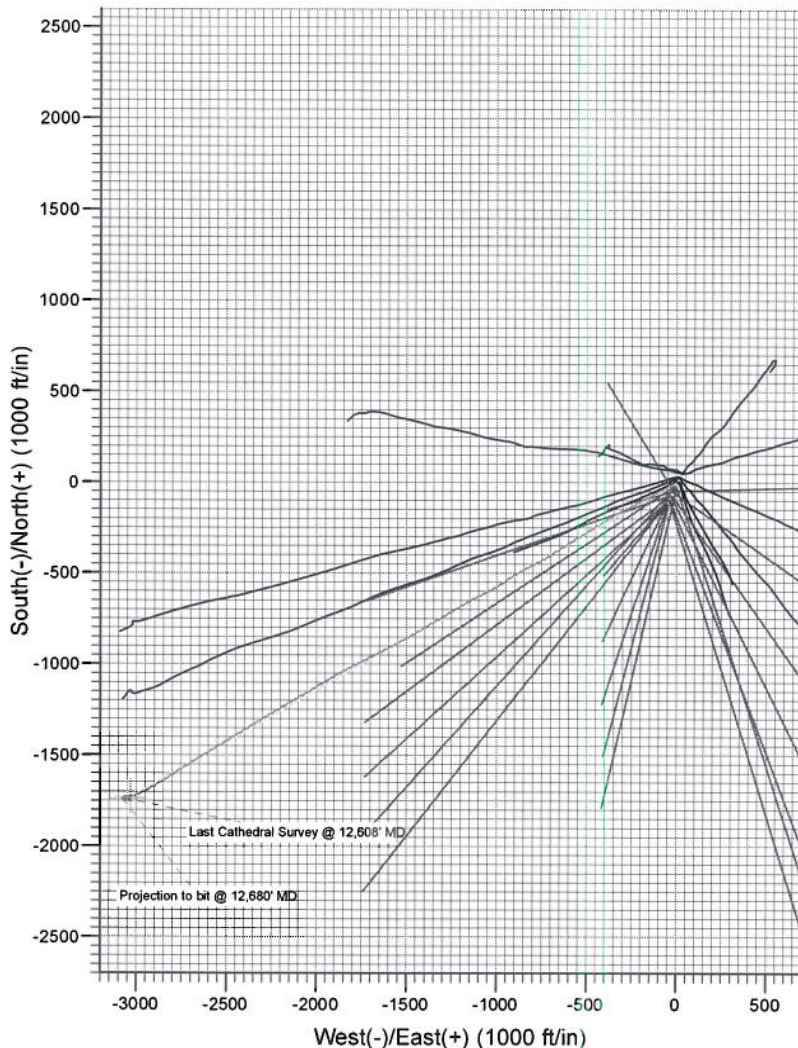
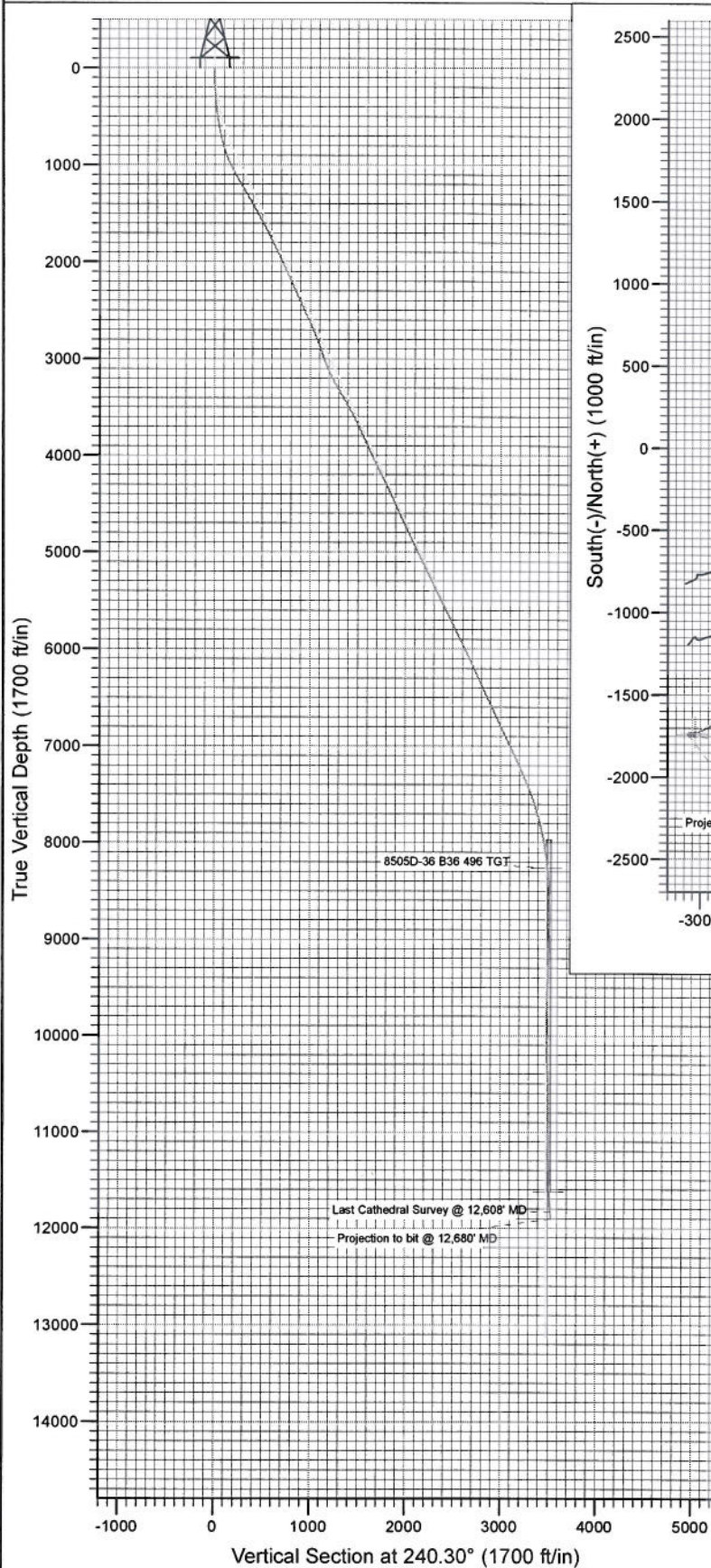




Project: Story Gulch
 Site: S36-T4S-R96W (B36 496)
 Well: 8505D-36 B36 496
 Wellbore: Final
 Design: DD



Azimuths to True North
 Magnetic North: 10.53°

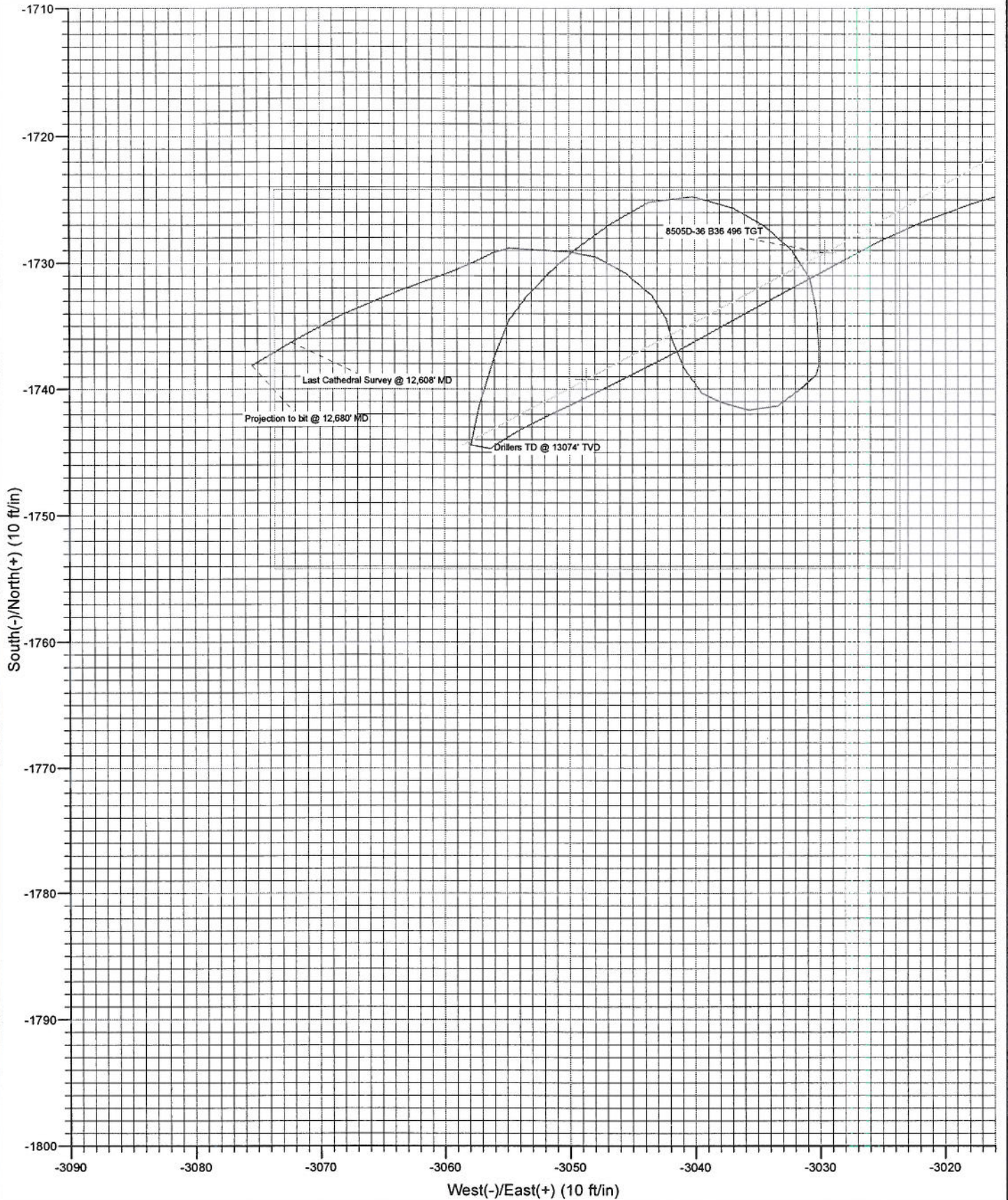
Magnetic Field
 Strength: 52385.8nT
 Dip Angle: 65.88°
 Date: 9/3/2010
 Model: IGRF2010

DD
 8505D-36 B36 496
 105209 (SH), 105379 (MH), KR
 KB @ 8374.0ft (Patterson 308)
 North American Datum 1983
 Well 8505D-36 B36 496, True North

Type	Target	Azimuth	Origin Type	N/S	E/W	From TVD
Target	8505D-36 B36 496 BHL	240.30	Slot	0.0	0.0	0.0
Name	TV	+N/-S	+E/-W	Latitude	Longitude	
8505D-36 B36 496 BHL	8264.0	-1729.2	-3029.6	39° 39' 33.73 N	108° 7' 27.06 W	
	11624.0					



Project: Story Gulch
Site: S36-T4S-R96W (B36 496)
Well: 8505D-36 B36 496
Wellbore: DD
Design: DD



Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8505D-36 B36 496
Project:	Story Gulch	TVD Reference:	KB @ 8374.0ft (Patterson 308)
Site:	S36-T4S-R96W (B36 496)	MD Reference:	KB @ 8374.0ft (Patterson 308)
Well:	8505D-36 B36 496	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	EDM 5000.1 US Multi Users DB

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

Site	S36-T4S-R96W (B36 496)				
Site Position:		Northing:	1,677,422.27 ft	Latitude:	39° 39' 51.36 N
From:	Lat/Long	Easting:	2,264,394.80 ft	Longitude:	108° 6' 47.88 W
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	-1.65 °

Well	8505D-36 B36 496					
Well Position	+N/-S	0.0 ft	Northing:	1,677,368.69 ft	Latitude:	39° 39' 50.82 N
	+E/-W	0.0 ft	Easting:	2,264,358.76 ft	Longitude:	108° 6' 48.32 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	8,352.0 ft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	9/3/2010	10.53	65.88	52,386

Design	DD				
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	240.30	

Survey Program	Date 9/18/2010			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
169.0	3,023.0	Survey #1 (DD)	MWD	Geolink MWD
3,177.0	12,680.0	Survey #2 (DD)	MWD	Geolink MWD

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
3,023.0	21.50	235.50	2,784.0	-528.4	-929.7	1,069.3	0.00	0.00	
3,177.0	18.90	232.80	2,928.6	-559.4	-972.8	1,122.2	1.79	-1.69	
3,268.0	21.10	239.70	3,014.1	-576.6	-998.7	1,153.2	3.54	2.42	
3,360.0	22.90	242.30	3,099.4	-593.3	-1,028.9	1,187.6	2.22	1.96	
3,452.0	26.10	244.60	3,183.1	-610.3	-1,063.0	1,225.7	3.63	3.48	
3,544.0	29.70	244.20	3,264.4	-628.9	-1,101.8	1,268.7	3.92	3.91	
3,635.0	31.20	240.90	3,342.8	-650.2	-1,142.7	1,314.7	2.47	1.65	
3,727.0	30.40	240.80	3,421.8	-673.1	-1,183.8	1,361.8	0.87	-0.87	
3,819.0	29.50	240.00	3,501.6	-695.8	-1,223.8	1,407.8	1.07	-0.98	
3,911.0	28.00	239.20	3,582.2	-718.2	-1,261.9	1,452.0	1.68	-1.63	
4,002.0	25.20	237.80	3,663.6	-739.5	-1,296.7	1,492.7	3.15	-3.08	
4,094.0	26.10	240.30	3,746.5	-759.9	-1,330.9	1,532.5	1.53	0.98	

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8505D-36 B36 496
Project:	Story Gulch	TVD Reference:	KB @ 8374.0ft (Patterson 308)
Site:	S36-T4S-R96W (B36 496)	MD Reference:	KB @ 8374.0ft (Patterson 308)
Well:	8505D-36 B36 496	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	EDM 5000.1 US 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
4,186.0	25.00	239.70	3,829.5	-779.8	-1,365.2	1,572.2	1.23	-1.20	
4,277.0	25.20	239.40	3,911.9	-799.3	-1,398.5	1,610.8	0.26	0.22	
4,369.0	23.20	237.60	3,995.8	-819.0	-1,430.7	1,648.5	2.32	-2.17	
4,461.0	25.90	242.60	4,079.5	-838.0	-1,463.8	1,686.7	3.70	2.93	
4,553.0	28.30	243.00	4,161.4	-857.1	-1,501.1	1,728.6	2.62	2.61	
4,644.0	27.20	242.10	4,241.9	-876.6	-1,538.7	1,770.9	1.29	-1.21	
4,736.0	25.40	240.60	4,324.4	-896.2	-1,574.5	1,811.6	2.09	-1.96	
4,828.0	24.00	241.20	4,408.0	-914.9	-1,608.0	1,850.1	1.55	-1.52	
4,919.0	25.60	244.10	4,490.6	-932.4	-1,642.0	1,888.2	2.21	1.76	
5,011.0	24.50	243.40	4,574.0	-949.6	-1,676.9	1,927.1	1.24	-1.20	
5,103.0	26.70	244.20	4,656.9	-967.1	-1,712.6	1,966.8	2.42	2.39	
5,195.0	25.60	243.10	4,739.5	-985.1	-1,748.9	2,007.2	1.31	-1.20	
5,286.0	24.00	243.40	4,822.1	-1,002.3	-1,783.0	2,045.4	1.76	-1.76	
5,378.0	26.60	241.90	4,905.3	-1,020.4	-1,817.9	2,084.6	2.91	2.83	
5,470.0	26.10	241.20	4,987.7	-1,039.8	-1,853.8	2,125.5	0.64	-0.54	
5,561.0	25.80	239.60	5,069.6	-1,059.5	-1,888.4	2,165.3	0.84	-0.33	
5,653.0	24.90	238.60	5,152.7	-1,079.7	-1,922.2	2,204.7	1.08	-0.98	
5,744.0	27.80	239.70	5,234.2	-1,100.4	-1,956.9	2,245.0	3.23	3.19	
5,836.0	26.60	239.50	5,316.1	-1,121.7	-1,993.2	2,287.1	1.31	-1.30	
5,928.0	25.40	239.10	5,398.7	-1,142.3	-2,027.8	2,327.4	1.32	-1.30	
6,019.0	26.90	239.70	5,480.4	-1,162.7	-2,062.4	2,367.5	1.67	1.65	
6,111.0	25.90	240.40	5,562.8	-1,183.1	-2,097.8	2,408.4	1.14	-1.09	
6,202.0	26.40	241.20	5,644.5	-1,202.7	-2,132.8	2,448.5	0.67	0.55	
6,294.0	27.20	240.90	5,726.6	-1,222.8	-2,169.1	2,490.0	0.88	0.87	
6,386.0	25.90	238.90	5,808.9	-1,243.4	-2,204.7	2,531.1	1.71	-1.41	
6,477.0	26.50	238.30	5,890.6	-1,264.3	-2,239.0	2,571.3	0.72	0.66	
6,569.0	25.00	239.00	5,973.4	-1,285.1	-2,273.1	2,611.2	1.66	-1.63	
6,661.0	27.00	239.10	6,056.1	-1,305.8	-2,307.7	2,651.5	2.17	2.17	
6,752.0	25.50	239.00	6,137.7	-1,326.5	-2,342.2	2,691.8	1.65	-1.65	
6,844.0	24.90	240.50	6,221.0	-1,346.3	-2,376.0	2,730.9	0.95	-0.65	
6,935.0	24.10	239.80	6,303.8	-1,365.1	-2,408.8	2,768.7	0.94	-0.88	
7,027.0	26.30	237.70	6,387.0	-1,385.4	-2,442.2	2,807.8	2.58	2.39	
7,118.0	23.80	236.40	6,469.5	-1,406.3	-2,474.6	2,846.3	2.81	-2.75	
7,210.0	24.80	240.20	6,553.3	-1,426.2	-2,506.8	2,884.1	2.02	1.09	
7,302.0	27.00	239.30	6,636.1	-1,446.5	-2,541.5	2,924.3	2.43	2.39	
7,393.0	26.50	238.50	6,717.3	-1,467.6	-2,576.6	2,965.2	0.68	-0.55	
7,485.0	25.50	237.40	6,800.0	-1,489.0	-2,610.8	3,005.5	1.21	-1.09	
7,576.0	24.70	239.20	6,882.4	-1,509.3	-2,643.6	3,044.1	1.22	-0.88	
7,668.0	26.80	238.90	6,965.3	-1,529.9	-2,677.9	3,084.1	2.29	2.28	
7,760.0	25.90	237.60	7,047.7	-1,551.3	-2,712.6	3,124.9	1.16	-0.98	
7,851.0	25.00	238.30	7,129.9	-1,572.1	-2,745.7	3,163.9	1.04	-0.99	
7,943.0	23.90	236.80	7,213.7	-1,592.5	-2,777.9	3,202.0	1.37	-1.20	
8,034.0	23.50	235.10	7,297.0	-1,613.0	-2,808.2	3,238.4	0.87	-0.44	
8,126.0	21.80	240.60	7,381.9	-1,631.9	-2,838.1	3,273.8	2.95	-1.85	
8,218.0	21.20	239.70	7,467.5	-1,648.6	-2,867.3	3,307.5	0.74	-0.65	
8,309.0	20.00	239.40	7,552.7	-1,664.9	-2,895.0	3,339.5	1.32	-1.32	
8,401.0	18.20	238.30	7,639.6	-1,680.4	-2,920.7	3,369.6	2.00	-1.96	
8,492.0	16.70	245.30	7,726.4	-1,693.4	-2,944.7	3,396.8	2.83	-1.65	
8,584.0	13.30	244.60	7,815.3	-1,703.4	-2,966.3	3,420.6	3.70	-3.70	
8,675.0	10.70	246.10	7,904.3	-1,711.3	-2,983.5	3,439.4	2.88	-2.86	
8,767.0	10.90	244.70	7,994.6	-1,718.5	-2,999.1	3,456.6	0.36	0.22	
8,858.0	8.90	254.70	8,084.3	-1,724.1	-3,013.7	3,472.0	2.89	-2.20	
8,950.0	6.60	243.60	8,175.5	-1,728.3	-3,025.3	3,484.2	2.97	-2.50	

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8505D-36 B36 496
Project:	Story Gulch	TVD Reference:	KB @ 8374.0ft (Patterson 308)
Site:	S36-T4S-R96W (B36 496)	MD Reference:	KB @ 8374.0ft (Patterson 308)
Well:	8505D-36 B36 496	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	EDM 5000.1 US 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
9,042.0	6.20	240.00	8,266.9	-1,733.1	-3,034.3	3,494.4	0.62	-0.43	
9,134.0	5.60	243.00	8,358.4	-1,737.6	-3,042.6	3,503.9	0.73	-0.65	
9,225.0	4.20	244.50	8,449.1	-1,741.1	-3,049.6	3,511.6	1.54	-1.54	
9,317.0	1.80	242.40	8,540.9	-1,743.2	-3,053.9	3,516.4	2.61	-2.61	
9,373.0	1.80	235.20	8,596.9	-1,744.1	-3,055.4	3,518.2	0.40	0.00	
9,407.0	1.80	240.50	8,630.9	-1,744.7	-3,056.3	3,519.2	0.49	0.00	
9,498.0	1.30	341.60	8,721.9	-1,744.4	-3,057.9	3,520.5	2.65	-0.55	
9,590.0	3.00	25.30	8,813.8	-1,741.2	-3,057.2	3,518.3	2.44	1.85	
9,681.0	2.20	6.60	8,904.7	-1,737.4	-3,056.0	3,515.3	1.27	-0.88	
9,773.0	1.80	41.50	8,996.7	-1,734.5	-3,054.8	3,512.9	1.37	-0.43	
9,865.0	1.10	29.70	9,088.6	-1,732.7	-3,053.4	3,510.8	0.82	-0.76	
9,956.0	2.20	50.10	9,179.6	-1,730.8	-3,051.7	3,508.3	1.35	1.21	
10,048.0	1.60	47.40	9,271.5	-1,728.8	-3,049.4	3,505.3	0.66	-0.65	
10,139.0	2.30	59.00	9,362.5	-1,727.0	-3,046.9	3,502.2	0.88	0.77	
10,231.0	2.20	61.80	9,454.4	-1,725.2	-3,043.7	3,498.6	0.16	-0.11	
10,323.0	2.50	100.50	9,546.3	-1,724.7	-3,040.2	3,495.3	1.72	0.33	
10,414.0	1.80	113.40	9,637.3	-1,725.7	-3,036.9	3,493.0	0.93	-0.77	
10,506.0	1.80	125.10	9,729.2	-1,727.1	-3,034.4	3,491.5	0.40	0.00	
10,597.0	1.80	137.70	9,820.2	-1,729.0	-3,032.3	3,490.6	0.43	0.00	
10,689.0	1.60	157.60	9,912.1	-1,731.2	-3,030.8	3,490.4	0.67	-0.22	
10,780.0	1.80	177.60	10,003.1	-1,733.8	-3,030.3	3,491.2	0.68	0.22	
10,872.0	2.00	176.20	10,095.1	-1,736.9	-3,030.1	3,492.6	0.22	0.22	
10,964.0	0.60	219.80	10,187.0	-1,738.8	-3,030.3	3,493.7	1.76	-1.52	
11,055.0	1.30	229.70	10,278.0	-1,739.9	-3,031.4	3,495.2	0.79	0.77	
11,147.0	1.80	236.70	10,370.0	-1,741.3	-3,033.4	3,497.7	0.58	0.54	
11,238.0	1.50	292.10	10,461.0	-1,741.7	-3,035.7	3,499.8	1.71	-0.33	
11,330.0	1.40	278.80	10,552.9	-1,741.0	-3,037.9	3,501.5	0.38	-0.11	
11,416.0	1.00	318.10	10,638.9	-1,740.3	-3,039.5	3,502.4	1.04	-0.47	
11,508.0	2.00	327.20	10,730.9	-1,738.4	-3,040.9	3,502.7	1.11	1.09	
11,600.0	1.20	354.00	10,822.8	-1,736.1	-3,041.8	3,502.4	1.17	-0.87	
11,691.0	1.00	332.20	10,913.8	-1,734.4	-3,042.3	3,502.0	0.51	-0.22	
11,783.0	1.70	327.20	11,005.8	-1,732.6	-3,043.4	3,502.0	0.77	0.76	
11,875.0	1.90	294.80	11,097.7	-1,730.8	-3,045.6	3,503.0	1.11	0.22	
11,967.0	1.40	304.40	11,189.7	-1,729.5	-3,047.9	3,504.4	0.62	-0.54	
12,058.0	1.70	260.90	11,280.7	-1,729.1	-3,050.1	3,506.1	1.30	0.33	
12,150.0	2.20	282.50	11,372.6	-1,728.9	-3,053.2	3,508.7	0.96	0.54	
12,242.0	1.70	241.60	11,464.6	-1,729.2	-3,056.1	3,511.4	1.57	-0.54	
12,333.0	2.90	248.50	11,555.5	-1,730.7	-3,059.4	3,515.0	1.35	1.32	
12,425.0	2.70	252.00	11,647.4	-1,732.2	-3,063.7	3,519.4	0.29	-0.22	
12,517.0	3.40	243.50	11,739.2	-1,734.1	-3,068.2	3,524.3	0.90	0.76	
12,608.0	2.50	239.50	11,830.1	-1,736.3	-3,072.3	3,529.0	1.01	-0.99	
12,680.0	3.30	239.80	11,902.0	-1,738.1	-3,075.4	3,532.6	1.11	1.11	

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8505D-36 B36 496
Project:	Story Gulch	TVD Reference:	KB @ 8374.0ft (Patterson 308)
Site:	S36-T4S-R96W (B36 496)	MD Reference:	KB @ 8374.0ft (Patterson 308)
Well:	8505D-36 B36 496	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	EDM 5000.1 US 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									
8505D-36 B36 496 BHL	0.00	0.00	11,624.0	-1,739.2	-3,048.6	1,675,717.88	2,261,261.36	39° 39' 33.63 N	108° 7' 27.30 W
- survey misses target center by 15.8ft at 12401.1ft MD (11623.5 TVD, -1731.8 N, -3062.6 E)									
- Rectangle (sides W30.0 H50.0 D0.0)									
8505D-36 B36 496 TGT	0.00	0.00	8,264.0	-1,729.2	-3,029.6	1,675,727.35	2,261,280.67	39° 39' 33.73 N	108° 7' 27.06 W
- survey misses target center by 5.8ft at 9038.5ft MD (8263.4 TVD, -1732.9 N, -3034.0 E)									
- Point									

Survey Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	
12,608.0	11,830.1	-1,736.3	-3,072.3	Last Cathedral Survey @ 12,608' MD
12,680.0	11,902.0	-1,738.1	-3,075.4	Projection to bit @ 12,680' MD

Checked By: _____	Approved By: _____	Date: _____
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