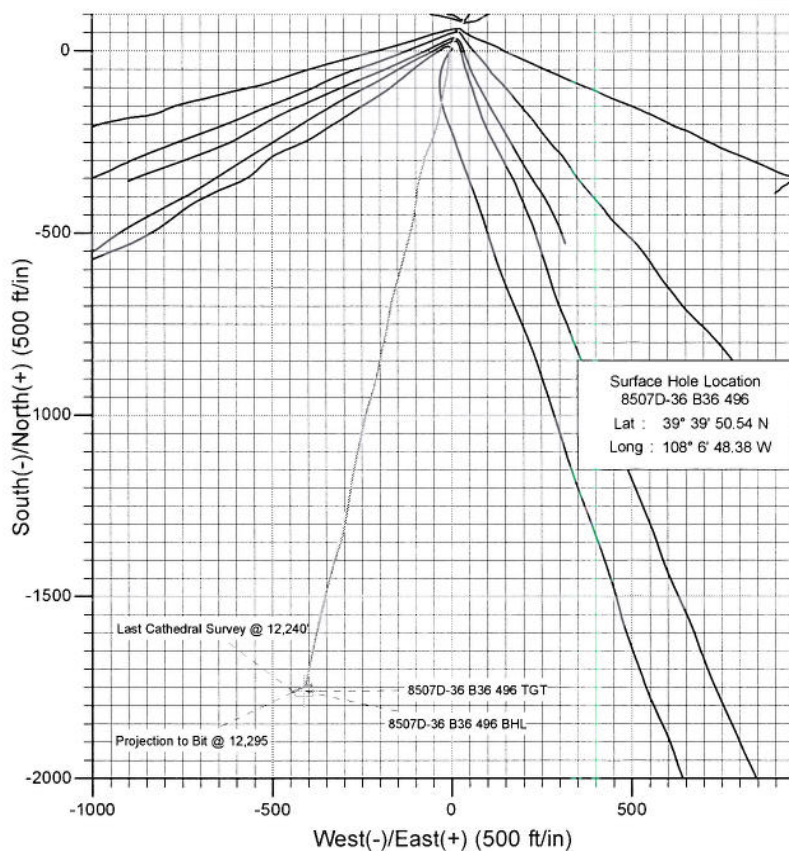
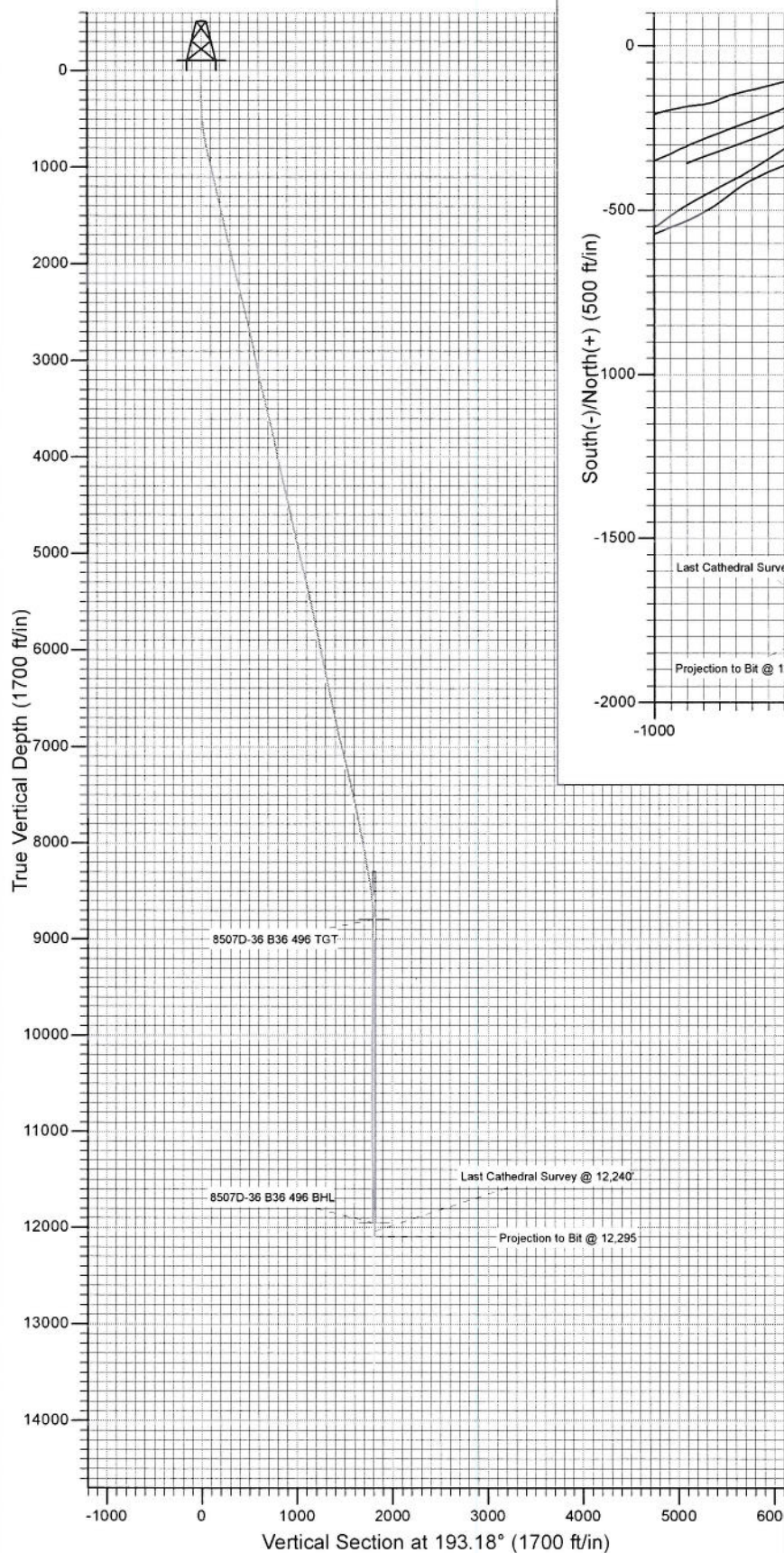




Project: Story Gulch
 Site: S36-T4S-R96W (B36 496)
 Well: 8507D-36 B36 496
 Wellbore: DD
 Design: FINAL



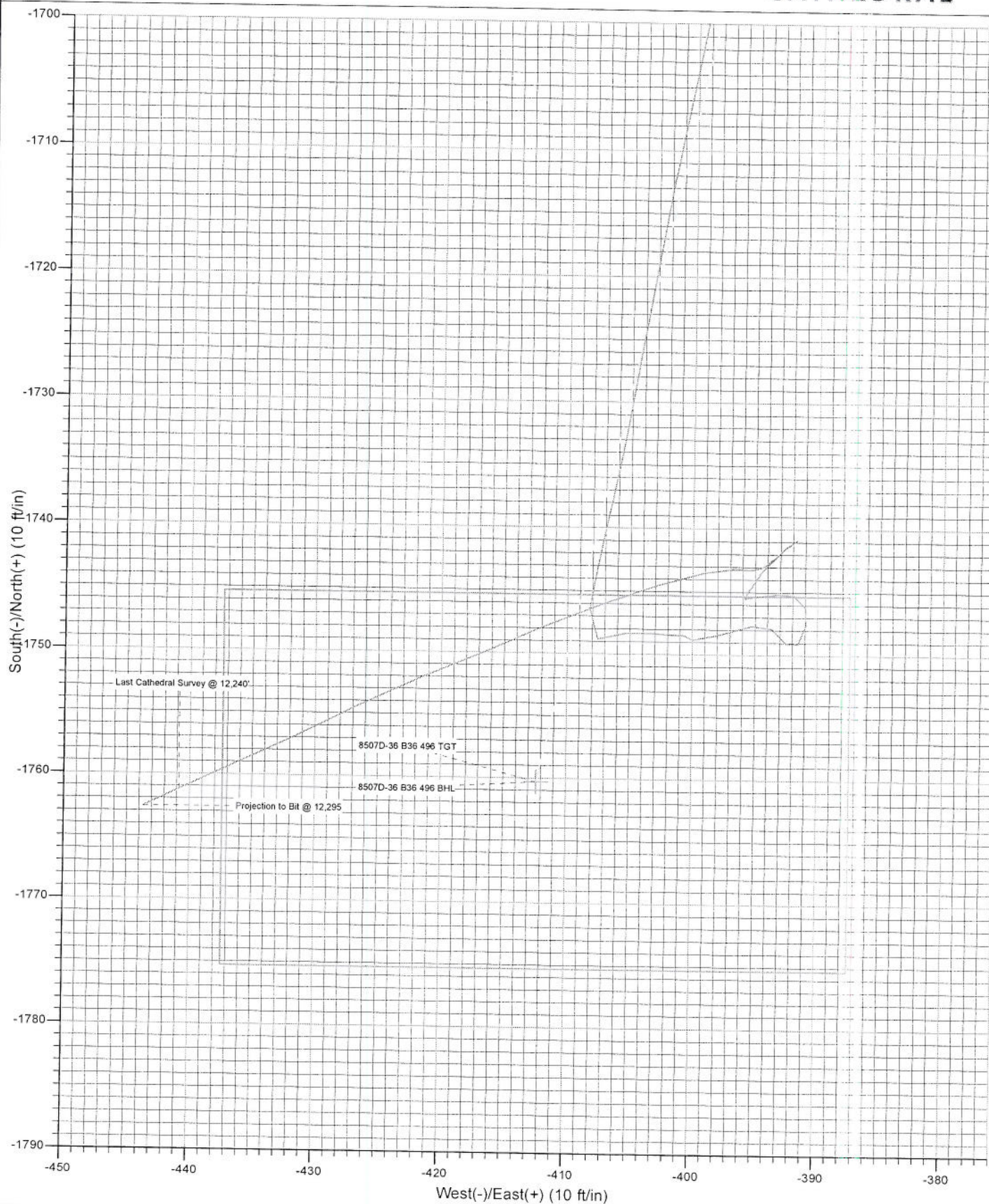
Azimuths to True North
 Magnetic North: 10.52°
 Magnetic Field
 Strength: 52432.3snT
 Dip Angle: 65.89°
 Date: 7/5/2010
 Model: IGRF200510

Vertical Section at 193.18° (1700 ft/in)

DD 8507D-36 B36 496 105259, 105324, EH					
KBE @ 8374.0ft (Patterson 308) North American Datum 1983 Well 8507D-36 B36 496, True North					
Target	Origin	Type	N/S	E/W	
8507D-36 B36 496 BHL	193.18	Spot	0.0	0.0	
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
8507D-36 B36 496 BHL	11954.0	-1760.3	-412.4	39° 39' 33.14 N	108° 6' 53.65 W



Project: Story Gulch
Site: S36-T4S-R96W (B36 496)
Wellbore: DD
Design: FINAL



Cathedral Energy

Survey Report

Company: EnCana Oil & Gas (USA) Inc
 Project: Story Gulch
 Site: S36-T4S-R96W (B36 496)
 Well: 8507D-36 B36 496
 Wellbore: DD
 Design: DD

Local Co-ordinate Reference: Well 8507D-36 B36 496
 TVD Reference: KBE @ 8374.0ft (Patterson 308)
 MD Reference: KBE @ 8374.0ft (Patterson 308)
 North Reference: True
 Survey Calculation Method: Minimum Curvature
 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
4,184.0	13.90	194.70	4,091.8	-795.9	-187.5	817.7	2.31	2.28	
4,276.0	13.30	192.90	4,181.2	-816.9	-192.6	839.3	0.80	-0.65	
4,367.0	13.30	192.30	4,269.7	-837.3	-197.2	860.3	0.15	0.00	
4,459.0	12.00	190.90	4,359.5	-857.1	-201.3	880.4	1.45	-1.41	
4,551.0	13.80	192.60	4,449.2	-877.2	-205.5	900.9	2.00	1.96	
4,642.0	12.40	194.20	4,537.8	-897.2	-210.2	921.5	1.59	-1.54	
4,734.0	11.20	193.40	4,627.9	-915.5	-214.7	940.4	1.32	-1.30	
4,826.0	13.60	196.30	4,717.7	-934.6	-219.8	960.1	2.69	2.61	
4,918.0	13.40	198.00	4,807.2	-955.1	-226.2	981.5	0.48	-0.22	
5,009.0	13.10	200.30	4,895.7	-974.8	-233.0	1,002.3	0.67	-0.33	
5,101.0	13.30	193.00	4,985.3	-994.9	-239.0	1,023.2	1.82	0.22	
5,193.0	12.60	193.50	5,075.0	-1,015.0	-243.7	1,043.8	0.77	-0.76	
5,285.0	14.20	189.90	5,164.5	-1,035.8	-248.0	1,065.1	1.96	1.74	
5,376.0	13.90	192.40	5,252.7	-1,057.5	-252.3	1,087.2	0.74	-0.33	
5,468.0	13.00	193.00	5,342.2	-1,078.4	-257.0	1,108.6	0.99	-0.98	
5,559.0	12.30	194.20	5,431.0	-1,097.8	-261.6	1,128.5	0.82	-0.77	
5,651.0	12.80	190.20	5,520.8	-1,117.3	-265.9	1,148.5	1.09	0.54	
5,742.0	12.30	191.60	5,609.6	-1,136.7	-269.6	1,168.2	0.64	-0.55	
5,834.0	11.30	191.10	5,699.7	-1,155.2	-273.3	1,187.0	1.09	-1.09	
5,926.0	10.70	193.00	5,790.0	-1,172.3	-277.0	1,204.6	0.76	-0.65	
6,017.0	12.50	188.70	5,879.1	-1,190.3	-280.3	1,222.9	2.19	1.98	
6,109.0	11.60	185.70	5,969.1	-1,209.3	-282.8	1,242.0	1.19	-0.98	
6,201.0	13.30	188.80	6,059.0	-1,229.0	-285.3	1,261.7	1.98	1.85	
6,293.0	12.00	189.60	6,148.7	-1,248.9	-288.5	1,281.8	1.43	-1.41	
6,384.0	11.10	190.00	6,237.9	-1,266.8	-291.6	1,300.0	0.99	-0.99	
6,476.0	12.30	192.20	6,328.0	-1,285.1	-295.2	1,318.6	1.39	1.30	
6,568.0	13.00	191.20	6,417.7	-1,304.9	-299.3	1,338.7	0.80	0.76	
6,660.0	11.70	191.90	6,507.6	-1,324.2	-303.2	1,358.4	1.42	-1.41	
6,751.0	11.70	193.90	6,596.7	-1,342.1	-307.4	1,376.9	0.45	0.00	
6,843.0	12.00	197.20	6,686.7	-1,360.3	-312.4	1,395.7	0.81	0.33	
6,935.0	12.90	198.80	6,776.6	-1,379.2	-318.6	1,415.5	1.05	0.98	
7,027.0	12.50	200.10	6,866.3	-1,398.3	-325.3	1,435.6	0.53	-0.43	
7,118.0	14.90	195.10	6,954.7	-1,418.8	-331.7	1,457.1	2.94	2.64	
7,210.0	14.40	195.60	7,043.8	-1,441.2	-337.9	1,480.3	0.56	-0.54	
7,302.0	13.90	194.70	7,133.0	-1,463.0	-343.8	1,502.8	0.59	-0.54	
7,393.0	13.80	194.70	7,221.3	-1,484.0	-349.3	1,524.6	0.11	-0.11	
7,485.0	13.00	194.20	7,310.8	-1,504.7	-354.6	1,545.9	0.88	-0.87	
7,577.0	12.90	193.20	7,400.5	-1,524.7	-359.5	1,566.5	0.27	-0.11	
7,668.0	12.20	192.40	7,489.3	-1,544.0	-363.9	1,586.3	0.79	-0.77	
7,759.0	11.90	192.40	7,578.3	-1,562.5	-368.0	1,605.3	0.33	-0.33	
7,851.0	12.70	194.80	7,668.2	-1,581.6	-372.6	1,624.9	1.03	0.87	
7,943.0	12.10	192.60	7,758.0	-1,600.8	-377.3	1,644.6	0.83	-0.65	
8,034.0	11.10	192.20	7,847.2	-1,618.6	-381.2	1,662.9	1.10	-1.10	
8,126.0	10.20	192.60	7,937.6	-1,635.2	-384.9	1,679.9	0.98	-0.98	
8,218.0	9.10	193.00	8,028.3	-1,650.3	-388.3	1,695.3	1.20	-1.20	
8,309.0	10.90	191.60	8,117.9	-1,665.7	-391.6	1,711.1	2.00	1.98	
8,401.0	10.50	193.40	8,208.3	-1,682.4	-395.3	1,728.2	0.57	-0.43	
8,492.0	9.60	192.10	8,297.9	-1,697.9	-398.8	1,744.1	1.02	-0.99	
8,584.0	9.20	191.10	8,388.7	-1,712.6	-401.8	1,759.1	0.47	-0.43	
8,676.0	8.70	189.30	8,479.5	-1,726.7	-404.4	1,773.4	0.62	-0.54	
8,768.0	6.40	192.70	8,570.7	-1,738.6	-406.6	1,785.5	2.55	-2.50	
8,862.0	3.40	188.30	8,664.4	-1,746.4	-408.2	1,793.5	3.21	-3.19	
8,954.0	1.30	72.60	8,756.3	-1,748.8	-407.6	1,795.7	4.49	-2.28	

Cathedral Energy

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8507D-36 B36 496
Project:	Story Gulch	TVD Reference:	KBE @ 8374.0ft (Patterson 308)
Site:	S36-T4S-R96W (B36 496)	MD Reference:	KBE @ 8374.0ft (Patterson 308)
Well:	8507D-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
From:	Lat/Long	Easting:	2,264,394.80 ft
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in
		Latitude:	39° 39' 51.36 N
		Longitude:	108° 6' 47.88 W
		Grid Convergence:	-1.65 °

Well	8507D-36 B36 496					
Well Position	+N/-S	0.0 ft	Northing:	1,677,340.19 ft	Latitude:	39° 39' 50.54 N
	+E/-W	0.0 ft	Easting:	2,264,353.34 ft	Longitude:	108° 6' 48.38 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)
	IGRF200510	7/5/2010	10.52	65.89	52,432

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	193.18

Survey Program	Date	9/24/2010		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
203.0	3,010.0	Survey #1 (DD)	MWD	Geolink MWD
3,175.0	12,295.0	Survey #2 (DD)	MWD	Geolink MWD

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
3,010.0	11.60	196.10	2,946.6	-546.5	-127.7	561.2	0.00	0.00	
3,175.0	10.10	190.30	3,108.7	-576.6	-134.9	592.2	1.12	-0.91	
3,267.0	12.10	199.10	3,198.9	-593.7	-139.4	609.8	2.84	2.17	
3,358.0	14.80	196.70	3,287.4	-613.8	-145.9	630.9	3.03	2.97	
3,450.0	14.60	196.20	3,376.4	-636.2	-152.5	654.2	0.26	-0.22	
3,542.0	14.00	196.00	3,465.6	-658.1	-158.8	676.9	0.65	-0.65	
3,633.0	13.80	196.70	3,553.9	-679.0	-165.0	698.8	0.29	-0.22	
3,725.0	14.20	189.20	3,643.2	-700.7	-169.9	721.0	2.02	0.43	
3,817.0	12.90	187.90	3,732.6	-722.0	-173.2	742.5	1.45	-1.41	
3,909.0	11.80	190.60	3,822.5	-741.4	-176.3	762.1	1.35	-1.20	
4,000.0	10.40	188.20	3,911.8	-758.7	-179.2	779.6	1.62	-1.54	
4,092.0	11.80	193.20	4,002.1	-776.1	-182.5	797.2	1.85	1.52	

Cathedral Energy

Survey Report

Company: EnCana Oil & Gas (USA) Inc
Project: Story Gulch
Site: S36-T4S-R96W (B36 496)
Well: 8507D-36 B36 496
Wellbore: DD
Design: DD

Local Co-ordinate Reference: Well 8507D-36 B36 496
TVD Reference: KBE @ 8374.0ft (Patterson 308)
MD Reference: KBE @ 8374.0ft (Patterson 308)
North Reference: True
Survey Calculation Method: Minimum Curvature
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
9,046.0	1.50	83.00	8,848.3	-1,748.4	-405.4	1,794.7	0.35	0.22	
9,137.0	1.20	98.20	8,939.3	-1,748.3	-403.3	1,794.2	0.51	-0.33	
9,229.0	0.70	86.70	9,031.3	-1,748.4	-401.8	1,794.0	0.58	-0.54	
9,321.0	0.60	96.80	9,123.3	-1,748.5	-400.7	1,793.8	0.16	-0.11	
9,412.0	0.50	134.90	9,214.3	-1,748.8	-400.0	1,793.9	0.41	-0.11	
9,504.0	2.20	68.30	9,306.2	-1,748.4	-398.0	1,793.1	2.23	1.85	
9,596.0	1.40	84.50	9,398.2	-1,747.7	-395.3	1,791.8	1.02	-0.87	
9,688.0	0.80	120.80	9,490.2	-1,747.9	-393.6	1,791.6	0.97	-0.65	
9,779.0	1.20	148.20	9,581.2	-1,749.0	-392.6	1,792.5	0.67	0.44	
9,871.0	1.10	31.60	9,673.1	-1,749.1	-391.6	1,792.3	2.13	-0.11	
9,963.0	1.00	15.00	9,765.1	-1,747.6	-390.9	1,790.7	0.35	-0.11	
10,049.0	1.00	339.20	9,851.1	-1,746.1	-391.0	1,789.3	0.71	0.00	
10,147.0	0.70	280.50	9,949.1	-1,745.2	-391.9	1,788.6	0.89	-0.31	
10,237.0	1.00	269.20	10,039.1	-1,745.2	-393.2	1,788.8	0.38	0.33	
10,329.0	1.30	259.40	10,131.1	-1,745.4	-395.0	1,789.5	0.39	0.33	
10,421.0	0.30	74.00	10,223.1	-1,745.5	-395.8	1,789.8	1.74	-1.09	
10,512.0	0.30	230.40	10,314.1	-1,745.6	-395.8	1,789.8	0.65	0.00	
10,604.0	0.80	26.20	10,406.1	-1,745.1	-395.7	1,789.4	1.17	0.54	
10,696.0	1.90	37.30	10,498.0	-1,743.4	-394.5	1,787.4	1.22	1.20	
10,787.0	1.10	58.50	10,589.0	-1,741.7	-392.8	1,785.4	1.06	-0.88	
10,879.0	0.30	36.90	10,681.0	-1,741.0	-391.9	1,784.5	0.90	-0.87	
10,971.0	0.10	100.50	10,773.0	-1,740.9	-391.7	1,784.3	0.29	-0.22	
11,062.0	0.60	243.40	10,864.0	-1,741.1	-392.0	1,784.6	0.75	0.55	
11,154.0	1.70	224.60	10,956.0	-1,742.3	-393.4	1,786.1	1.25	1.20	
11,246.0	1.00	271.50	11,048.0	-1,743.2	-395.2	1,787.4	1.36	-0.76	
11,337.0	1.10	270.10	11,138.9	-1,743.2	-396.9	1,787.8	0.11	0.11	
11,520.0	2.60	252.50	11,321.8	-1,744.5	-402.6	1,790.3	0.87	0.82	
11,612.0	3.60	250.00	11,413.7	-1,746.1	-407.3	1,792.9	1.10	1.09	
11,703.0	2.80	246.40	11,504.6	-1,747.9	-412.0	1,795.8	0.91	-0.88	
11,795.0	3.30	245.60	11,596.4	-1,749.9	-416.5	1,798.8	0.55	0.54	
11,887.0	3.40	248.40	11,688.3	-1,752.0	-421.4	1,802.0	0.21	0.11	
11,979.0	3.70	242.30	11,780.1	-1,754.4	-426.6	1,805.5	0.52	0.33	
12,070.0	3.50	244.60	11,870.9	-1,757.0	-431.7	1,809.1	0.27	-0.22	
12,162.0	3.40	245.40	11,962.8	-1,759.3	-436.7	1,812.5	0.12	-0.11	
12,240.0	3.30	244.20	12,040.6	-1,761.2	-440.8	1,815.4	0.16	-0.13	Last Cathedral Survey @ 12,240'
12,295.0	3.30	244.20	12,095.5	-1,762.6	-443.7	1,817.4	0.00	0.00	Projection to Bit @ 12,295'

Cathedral Energy

Survey Report

Company: EnCana Oil & Gas (USA) Inc
 Project: Story Gulch
 Site: S36-T4S-R96W (B36 496)
 Well: 8507D-36 B36 496
 Wellbore: DD
 Design: DD

Local Co-ordinate Reference: Well 8507D-36 B36 496
 TVD Reference: KBE @ 8374.0ft (Patterson 308)
 MD Reference: KBE @ 8374.0ft (Patterson 308)
 North Reference: True
 Survey Calculation Method: Minimum Curvature
 Database: EDM 5000.1 US Multi Users DB

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
8507D-36 B36 496 BHL - survey misses target center by 23.9ft at 12152.0ft MD (11952.7 TVD, -1759.1 N, -436.2 E) - Rectangle (sides W30.0 H50.0 D0.0)	0.00	0.00	11,954.0	-1,760.3	-412.4	1,675,592.45	2,263,890.51	39° 39' 33.14 N	108° 6' 53.65 W
8507D-36 B36 496 TGT - survey misses target center by 13.0ft at 8991.5ft MD (8793.8 TVD, -1748.6 N, -406.7 E) - Point	0.00	0.00	8,794.0	-1,760.3	-412.4	1,675,592.45	2,263,890.51	39° 39' 33.14 N	108° 6' 53.65 W

Survey Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	+E/-W (ft)	Comment
12,240.0	12,040.6	-1,761.2	-440.8	Last Cathedral Survey @ 12,240'
12,295.0	12,095.5	-1,762.6	-443.7	Projection to Bit @ 12,295

Checked By: _____ Approved By: _____ Date: _____