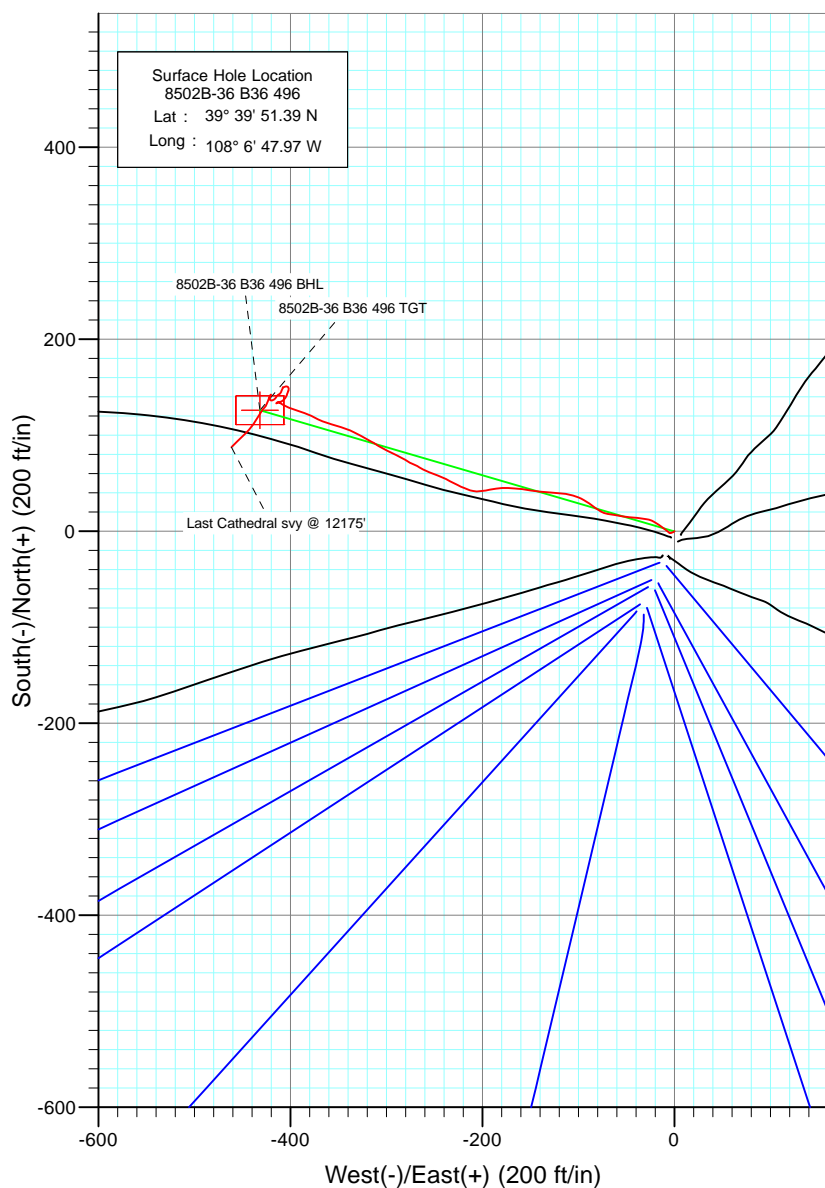
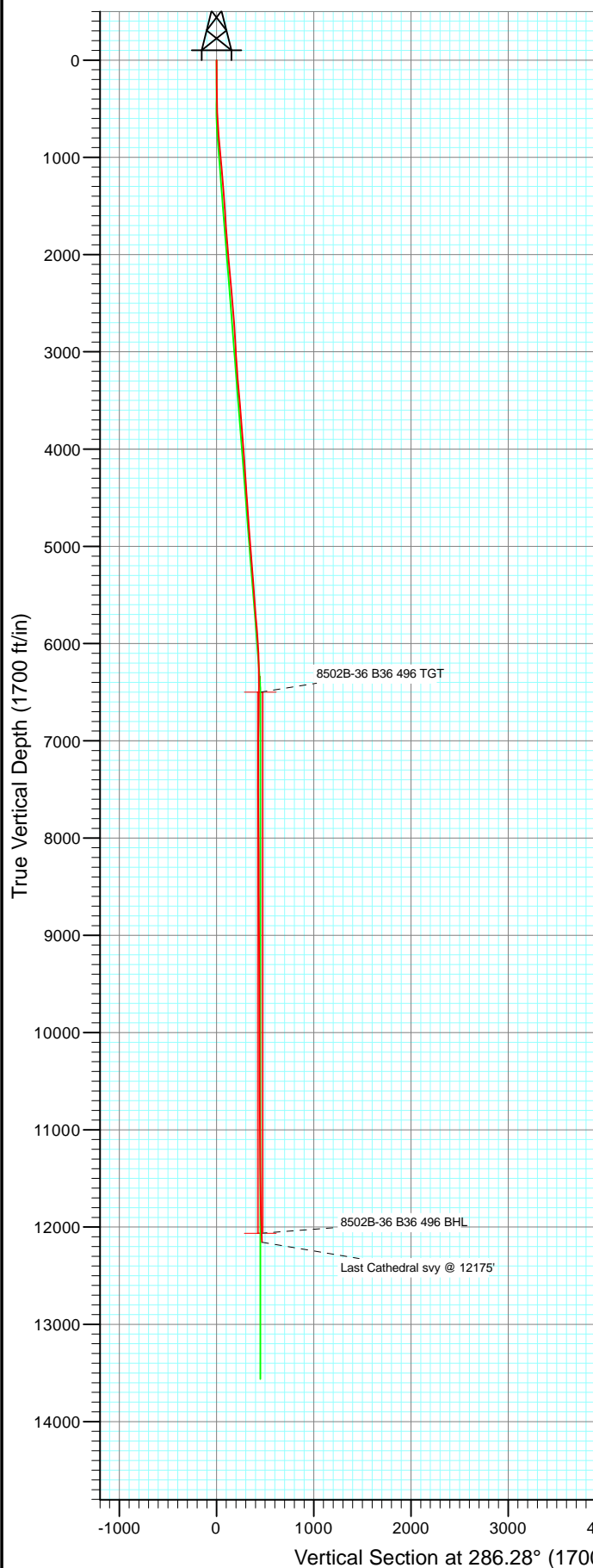




Project: Story Gulch
 Site: S36-T4S-R96W (B36 496)
 Well: 8502B-36 B36 496
 Wellbore: Final
 Design: DD



Approximate Bottom Hole Location
 8502B-36 B36 496
 Lat : 39° 39' 52.26 N
 Long : 108° 6' 53.87 W



Azimuths to True North
 Magnetic North: 10.55°

Magnetic Field
 Strength: 52454.8nT
 Dip Angle: 65.90°
 Date: 4/12/2010
 Model: IGRF200510

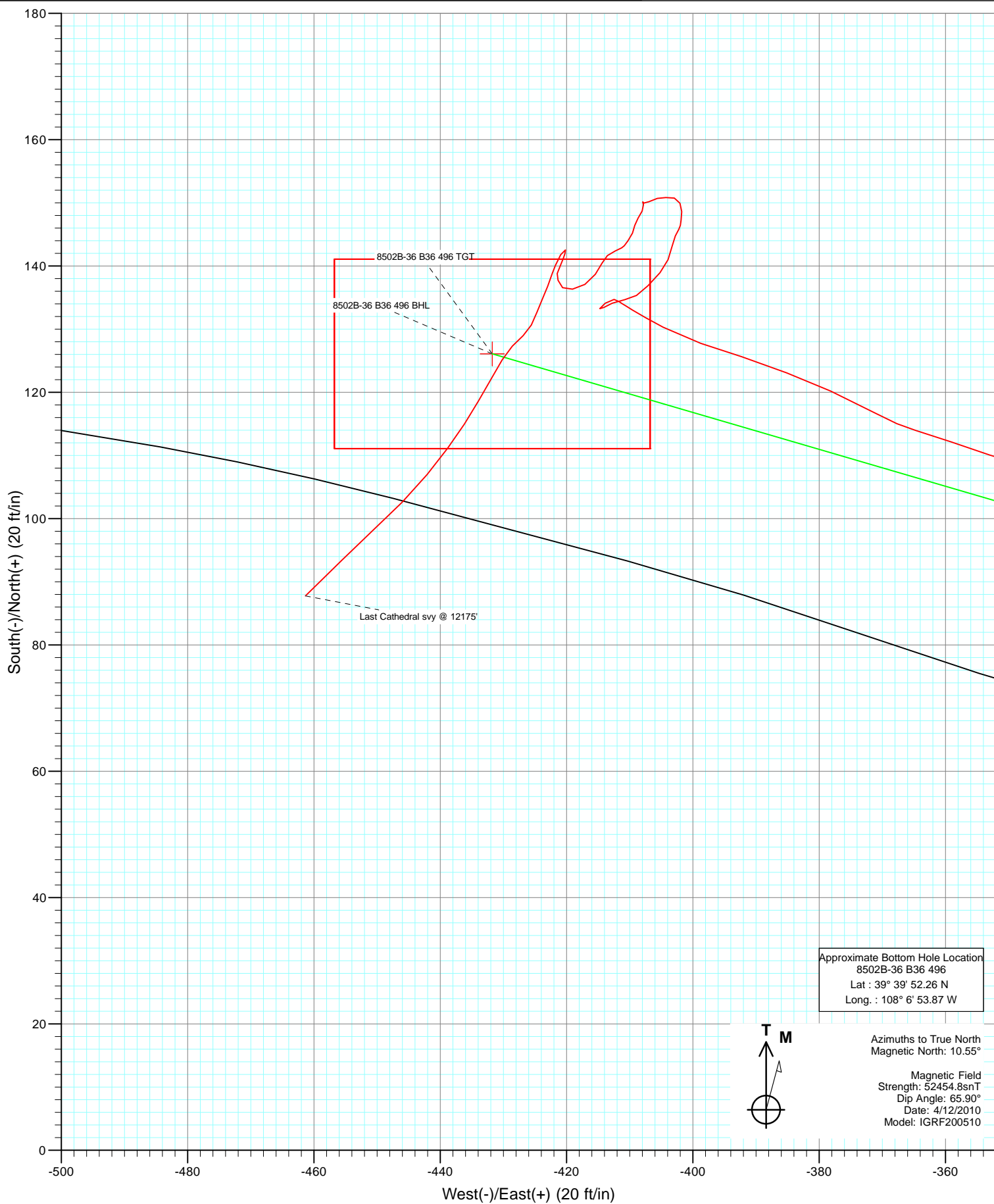
DESIGN DETAILS: DD
 105160; BH

KBE @ 8374.0ft (Patterson 308)

Target	Azimuth	Origin	N/S	E/W	From TVD
8502B-36 B36 496 BHL	286.28	Slot	0.0	0.0	0.0



Project: Story Gulch
Site: S36-T4S-R96W (B36 496)
Well: 8502B-36 B36 496
Design: DD



Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8502B-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:	8502B-36 B36 496	North Reference:	True
Wellbore:	Final	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	8502B-36 B36 496					
Well Position	+N/-S	0.0 ft	Northing:	1,677,425.89 ft	Latitude:	39° 39' 51.39 N
	+E/-W	0.0 ft	Easting:	2,264,387.75 ft	Longitude:	108° 6' 47.97 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	8,352.0 ft

Wellbore	Final				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	4/12/2010	10.55	65.90	52,455

Design	DD				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(ft)	(ft)	(ft)	(°)	
	0.0	0.0	0.0	286.28	

Survey Program	Date	10/20/2010			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
175.0	3,045.0	Survey #1 (Final)	MWD	Geolink MWD	
3,178.0	12,175.0	Survey #2 (Final)	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	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00		
175.0	0.80	234.90	175.0	-0.7	-1.0	0.8	0.46	0.46		
234.0	0.80	237.30	234.0	-1.2	-1.7	1.3	0.06	0.00		
327.0	1.30	258.80	327.0	-1.7	-3.3	2.7	0.68	0.54		
419.0	0.80	265.70	419.0	-2.0	-4.9	4.2	0.56	-0.54		
512.0	1.80	322.90	511.9	-0.9	-6.5	6.0	1.64	1.08		
604.0	3.30	308.60	603.8	2.0	-9.4	9.6	1.76	1.63		
696.0	4.30	304.10	695.6	5.5	-14.3	15.3	1.13	1.09		
791.0	5.20	300.90	790.3	9.7	-21.0	22.9	0.99	0.95		
886.0	5.40	278.70	884.9	12.6	-29.1	31.5	2.16	0.21		
982.0	5.60	276.10	980.5	13.8	-38.2	40.5	0.33	0.21		
1,077.0	4.70	274.90	1,075.1	14.6	-46.7	48.9	0.95	-0.95		

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8502B-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:	8502B-36 B36 496	North Reference:	True
Wellbore:	Final	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
1,172.0	4.70	280.90	1,169.8	15.7	-54.4	56.6	0.52	0.00	
1,267.0	4.40	277.10	1,264.5	16.9	-61.8	64.1	0.45	-0.32	
1,362.0	4.90	279.90	1,359.2	18.0	-69.4	71.7	0.58	0.53	
1,457.0	4.40	300.80	1,453.9	20.6	-76.6	79.3	1.85	-0.53	
1,552.0	4.50	308.10	1,548.6	24.8	-82.6	86.3	0.61	0.11	
1,647.0	4.10	301.40	1,643.3	28.8	-88.5	93.0	0.68	-0.42	
1,743.0	4.00	304.10	1,739.1	32.5	-94.2	99.5	0.22	-0.10	
1,837.0	4.50	288.90	1,832.8	35.5	-100.4	106.3	1.31	0.53	
1,932.0	4.00	285.40	1,927.5	37.6	-107.1	113.3	0.59	-0.53	
2,027.0	4.30	278.70	2,022.3	39.0	-113.8	120.2	0.60	0.32	
2,123.0	5.10	274.70	2,118.0	39.9	-121.6	127.9	0.90	0.83	
2,218.0	5.50	272.40	2,212.6	40.5	-130.4	136.5	0.48	0.42	
2,313.0	5.80	277.40	2,307.1	41.3	-139.7	145.7	0.61	0.32	
2,408.0	5.80	277.90	2,401.6	42.6	-149.2	155.1	0.05	0.00	
2,504.0	5.20	278.30	2,497.2	43.9	-158.3	164.3	0.63	-0.62	
2,599.0	4.50	273.90	2,591.8	44.7	-166.3	172.2	0.83	-0.74	
2,694.0	3.70	270.70	2,686.6	45.0	-173.1	178.7	0.88	-0.84	
2,788.0	3.80	269.40	2,780.4	45.0	-179.2	184.7	0.14	0.11	
2,883.0	3.90	262.30	2,875.2	44.6	-185.6	190.6	0.51	0.11	
2,977.0	4.00	259.70	2,969.0	43.5	-192.0	196.5	0.22	0.11	
3,045.0	3.90	256.80	3,036.8	42.6	-196.5	200.6	0.33	-0.15	
3,178.0	4.30	269.80	3,169.5	41.5	-205.9	209.3	0.76	0.30	
3,270.0	4.30	290.00	3,261.2	42.7	-212.6	216.1	1.64	0.00	
3,362.0	4.10	291.10	3,353.0	45.1	-218.9	222.8	0.23	-0.22	
3,454.0	5.50	296.60	3,444.6	48.2	-225.9	230.4	1.60	1.52	
3,545.0	5.50	297.50	3,535.2	52.2	-233.7	239.0	0.09	0.00	
3,637.0	5.10	293.70	3,626.8	55.9	-241.4	247.4	0.58	-0.43	
3,729.0	4.30	292.00	3,718.5	58.8	-248.3	254.8	0.88	-0.87	
3,820.0	5.10	290.60	3,809.2	61.5	-255.3	262.3	0.89	0.88	
3,912.0	4.40	299.40	3,900.9	64.7	-262.2	269.8	1.10	-0.76	
4,004.0	3.60	298.60	3,992.7	67.8	-267.8	276.0	0.87	-0.87	
4,099.0	3.30	291.70	4,087.5	70.2	-272.9	281.7	0.54	-0.32	
4,191.0	4.30	302.90	4,179.3	73.1	-278.3	287.6	1.35	1.09	
4,282.0	4.60	299.40	4,270.0	76.7	-284.3	294.4	0.44	0.33	
4,374.0	4.00	295.50	4,361.8	79.9	-290.4	301.2	0.73	-0.65	
4,466.0	4.10	293.30	4,453.5	82.6	-296.4	307.6	0.20	0.11	
4,558.0	3.60	297.00	4,545.3	85.2	-302.0	313.7	0.61	-0.54	
4,649.0	4.40	304.00	4,636.1	88.5	-307.4	319.9	1.03	0.88	
4,741.0	3.70	298.50	4,727.9	91.9	-312.9	326.1	0.87	-0.76	
4,833.0	5.50	300.40	4,819.6	95.5	-319.3	333.3	1.96	1.96	
4,924.0	4.90	298.00	4,910.2	99.5	-326.5	341.3	0.70	-0.66	
5,016.0	4.60	295.60	5,001.9	103.0	-333.3	348.8	0.39	-0.33	
5,108.0	4.50	292.20	5,093.6	105.9	-340.0	356.1	0.31	-0.11	
5,200.0	4.30	285.30	5,185.3	108.2	-346.7	363.1	0.61	-0.22	
5,291.0	4.00	287.40	5,276.1	110.1	-353.0	369.7	0.37	-0.33	
5,383.0	4.00	290.20	5,367.8	112.1	-359.1	376.1	0.21	0.00	
5,475.0	3.50	285.50	5,459.7	114.0	-364.8	382.1	0.64	-0.54	
5,566.0	5.20	298.50	5,550.4	116.7	-371.1	388.9	2.15	1.87	
5,658.0	4.70	293.80	5,642.0	120.2	-378.2	396.7	0.70	-0.54	
5,749.0	4.80	291.20	5,732.7	123.1	-385.1	404.2	0.26	0.11	
5,841.0	4.60	288.20	5,824.4	125.6	-392.2	411.7	0.34	-0.22	
5,933.0	3.90	288.00	5,916.2	127.8	-398.7	418.5	0.76	-0.76	
6,024.0	4.30	297.90	6,006.9	130.3	-404.7	425.0	0.89	0.44	

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8502B-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:	8502B-36 B36 496	North Reference:	True
Wellbore:	Final	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
6,116.0	2.60	301.50	6,098.8	133.0	-409.5	430.4	1.86	-1.85	
6,208.0	0.60	303.60	6,190.7	134.4	-411.7	432.8	2.17	-2.17	
6,299.0	0.50	280.60	6,281.7	134.7	-412.5	433.7	0.26	-0.11	
6,391.0	1.50	236.10	6,373.7	134.1	-413.9	434.9	1.30	1.09	
6,483.0	0.30	137.10	6,465.7	133.3	-414.7	435.4	1.71	-1.30	
6,575.0	0.70	52.50	6,557.7	133.4	-414.1	434.9	0.80	0.43	
6,666.0	1.20	68.40	6,648.7	134.1	-412.8	433.8	0.62	0.55	
6,758.0	1.40	79.60	6,740.7	134.7	-410.8	432.1	0.35	0.22	
6,850.0	1.10	59.60	6,832.6	135.3	-408.9	430.4	0.57	-0.33	
6,942.0	1.90	43.20	6,924.6	136.9	-407.1	429.1	0.98	0.87	
7,034.0	1.60	41.90	7,016.6	138.9	-405.2	427.9	0.33	-0.33	
7,125.0	1.50	20.90	7,107.5	141.0	-403.9	427.3	0.63	-0.11	
7,217.0	1.30	12.30	7,199.5	143.2	-403.3	427.2	0.31	-0.22	
7,309.0	0.80	24.60	7,291.5	144.8	-402.8	427.2	0.59	-0.54	
7,401.0	0.70	31.70	7,383.5	145.8	-402.2	427.0	0.15	-0.11	
7,492.0	0.20	339.30	7,474.5	146.4	-402.0	426.9	0.66	-0.55	
7,584.0	0.90	15.00	7,566.5	147.3	-401.8	427.0	0.81	0.76	
7,675.0	0.80	352.80	7,657.5	148.6	-401.7	427.3	0.38	-0.11	
7,767.0	0.90	344.20	7,749.5	149.9	-402.0	427.9	0.18	0.11	
7,858.0	0.90	280.60	7,840.4	150.8	-402.9	429.0	1.04	0.00	
7,950.0	0.80	264.50	7,932.4	150.8	-404.3	430.3	0.28	-0.11	
8,041.0	0.90	265.00	8,023.4	150.7	-405.6	431.6	0.11	0.11	
8,133.0	1.00	233.00	8,115.4	150.2	-407.0	432.7	0.58	0.11	
8,225.0	0.40	326.10	8,207.4	149.9	-407.8	433.5	1.19	-0.65	
8,316.0	0.10	127.10	8,298.4	150.2	-407.9	433.6	0.54	-0.33	
8,408.0	0.50	174.10	8,390.4	149.7	-407.8	433.4	0.48	0.43	
8,500.8	0.80	201.90	8,483.2	148.7	-408.0	433.3	0.46	0.32	
8,591.0	0.90	217.40	8,573.4	147.6	-408.7	433.6	0.28	0.11	
8,683.0	0.70	188.70	8,665.4	146.4	-409.2	433.8	0.48	-0.22	
8,775.0	0.90	202.50	8,757.4	145.2	-409.6	433.8	0.30	0.22	
8,866.0	0.90	218.10	8,848.4	144.0	-410.3	434.2	0.27	0.00	
8,958.0	0.30	214.90	8,940.4	143.2	-410.9	434.5	0.65	-0.65	
9,050.0	0.40	242.30	9,032.4	142.9	-411.3	434.8	0.21	0.11	
9,141.0	1.00	244.50	9,123.3	142.4	-412.3	435.7	0.66	0.66	
9,233.0	0.80	232.30	9,215.3	141.6	-413.5	436.6	0.30	-0.22	
9,325.0	1.10	204.40	9,307.3	140.4	-414.4	437.1	0.59	0.33	
9,416.0	1.50	216.10	9,398.3	138.7	-415.4	437.7	0.53	0.44	
9,508.0	1.40	236.20	9,490.3	137.1	-417.1	438.8	0.56	-0.11	
9,600.0	1.30	262.60	9,582.2	136.3	-419.1	440.5	0.68	-0.11	
9,692.0	0.80	306.50	9,674.2	136.6	-420.6	442.0	0.99	-0.54	
9,783.0	1.00	344.60	9,765.2	137.7	-421.3	443.0	0.68	0.22	
9,875.0	0.40	10.80	9,857.2	138.8	-421.5	443.5	0.72	-0.65	
9,967.0	1.10	26.40	9,949.2	139.9	-421.0	443.4	0.79	0.76	
10,058.0	0.60	15.60	10,040.2	141.2	-420.5	443.2	0.57	-0.55	
10,150.0	0.40	22.20	10,132.2	141.9	-420.3	443.2	0.23	-0.22	
10,241.0	0.40	354.80	10,223.2	142.5	-420.2	443.3	0.21	0.00	
10,446.0	0.90	205.30	10,428.2	141.8	-420.9	443.8	0.62	0.24	
10,512.0	0.50	206.20	10,494.2	141.1	-421.3	443.9	0.61	-0.61	
10,604.0	0.80	207.20	10,586.2	140.1	-421.7	444.1	0.33	0.33	
10,695.0	1.10	197.30	10,677.2	138.7	-422.3	444.2	0.37	0.33	
10,787.0	1.50	201.40	10,769.1	136.8	-423.0	444.4	0.45	0.43	
10,879.0	1.20	203.20	10,861.1	134.8	-423.8	444.6	0.33	-0.33	
10,970.0	1.60	202.20	10,952.1	132.7	-424.7	444.8	0.44	0.44	

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well 8502B-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:	8502B-36 B36 496	North Reference:	True
Wellbore:	Final	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
11,062.0	1.20	205.70	11,044.1	130.7	-425.6	445.1	0.44	-0.43	
11,154.0	1.50	227.80	11,136.0	129.0	-426.9	445.9	0.65	0.33	
11,245.0	1.50	224.00	11,227.0	127.3	-428.6	447.1	0.11	0.00	
11,337.0	1.90	210.40	11,319.0	125.1	-430.2	448.0	0.61	0.43	
11,429.0	2.40	209.20	11,410.9	122.1	-431.9	448.8	0.55	0.54	
11,520.0	2.70	210.80	11,501.8	118.6	-433.9	449.8	0.34	0.33	
11,611.0	2.70	211.90	11,592.7	115.0	-436.2	450.9	0.06	0.00	
11,703.0	3.10	216.90	11,684.6	111.1	-438.8	452.4	0.51	0.43	
11,795.0	3.50	219.30	11,776.4	107.0	-442.1	454.3	0.46	0.43	
11,886.0	4.00	224.40	11,867.2	102.6	-446.1	456.9	0.66	0.55	
12,070.0	4.30	227.70	12,050.8	93.3	-455.6	463.5	0.21	0.16	
12,175.0	4.40	223.60	12,155.5	87.8	-461.3	467.4	0.31	0.10	

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
8502B-36 B36 496 TGT - actual wellpath misses target center by 18.6ft at 6517.2ft MD (6499.9 TVD, 133.2 N, -414.5 E) - Point	0.00	0.00	6,500.0	126.1	-431.8	1,677,564.35	2,263,959.81	39° 39' 52.64 N	108° 6' 53.49 W
8502B-36 B36 496 BHL - actual wellpath misses target center by 42.7ft at 12070.0ft MD (12050.8 TVD, 93.3 N, -455.6 E) - Rectangle (sides W30.0 H50.0 D0.0)	0.00	0.00	12,064.0	126.1	-431.8	1,677,564.35	2,263,959.81	39° 39' 52.64 N	108° 6' 53.49 W

Design Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	+E/-W (ft)	Comment
12,175.0	12,155.5	87.8	-461.3	Last Cathedral svy @ 12175'

Checked By: _____ Approved By: _____ Date: _____