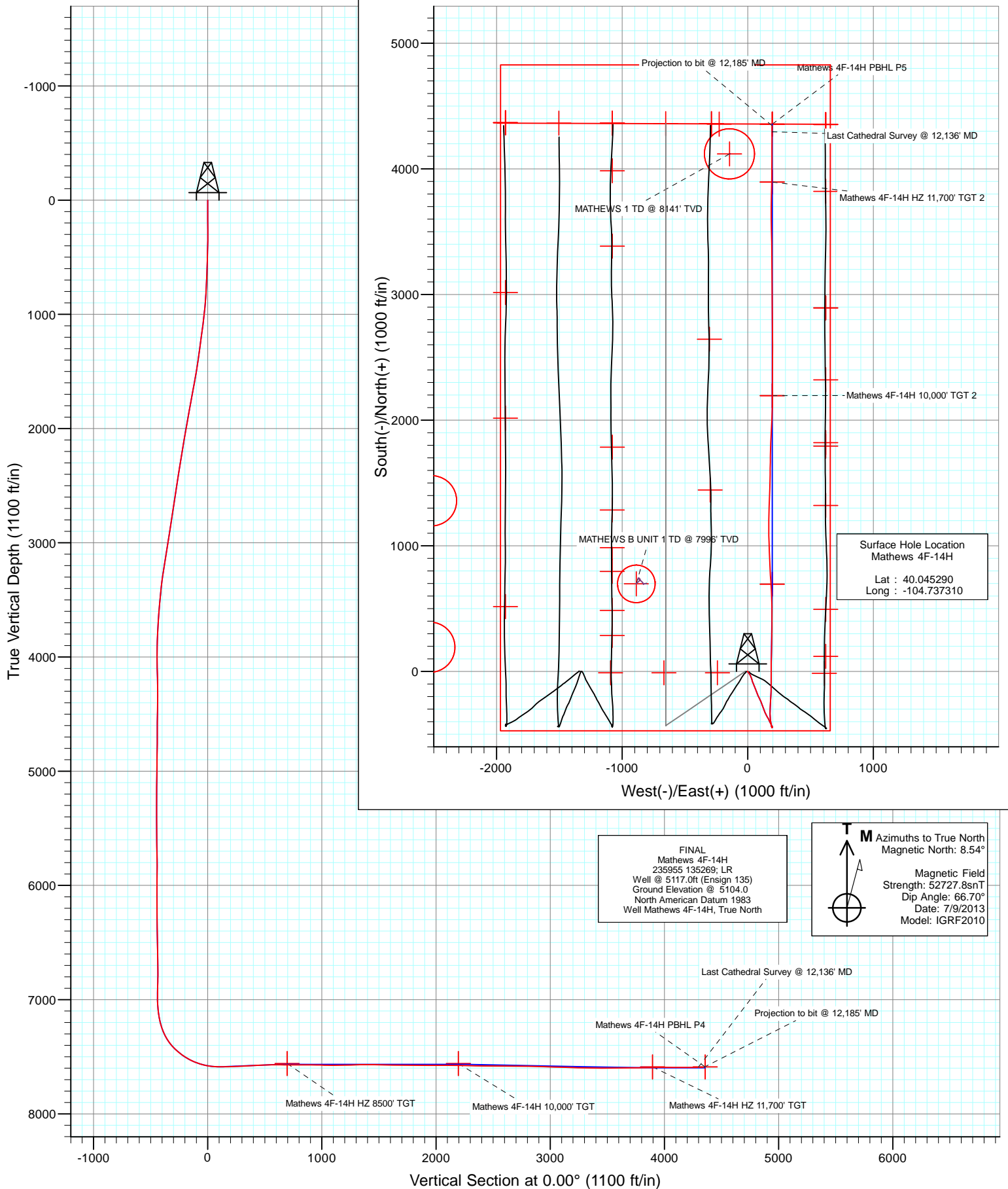




Project: DJ Wattenberg
Site: S14 T1N-R66W (Mathews)
Well: Mathews 4F-14H
Wellbore: HZ
Design: FINAL



Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Mathews 4F-14H
Project:	DJ Wattenberg	TVD Reference:	Well @ 5117.0ft (Ensign 135)
Site:	S14 T1N-R66W (Mathews)	MD Reference:	Well @ 5117.0ft (Ensign 135)
Well:	Mathews 4F-14H	North Reference:	True
Wellbore:	HZ	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Project	DJ Wattenberg		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site	S14 T1N-R66W (Mathews)				
Site Position:		Northing:	1,260,084.79 ft	Latitude:	40.044810
From:	Lat/Long	Easting:	3,212,836.64 ft	Longitude:	-104.739800
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.49 °

Well	Mathews 4F-14H					
Well Position	+N/-S	0.0 ft	Northing:	1,260,265.61 ft	Latitude:	40.045290
	+E/-W	0.0 ft	Easting:	3,213,532.24 ft	Longitude:	-104.737310
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,104.0 ft

Wellbore	HZ				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	7/9/2013	8.54	66.70	52,728

Design	FINAL				
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	0.00	

Survey Program	Date	7/13/2013			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
171.0	12,185.0	Survey #1 (HZ)	Geolink 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		
171.0	0.10	287.50	171.0	0.0	-0.1	0.0	0.06	0.06		
263.0	0.30	13.30	263.0	0.3	-0.2	0.3	0.34	0.22		
355.0	0.60	134.00	355.0	0.2	0.2	0.2	0.87	0.33		
446.0	1.30	173.50	446.0	-1.2	0.7	-1.2	1.01	0.77		
538.0	2.00	161.10	537.9	-3.7	1.3	-3.7	0.85	0.76		
630.0	2.70	130.80	629.9	-6.6	3.5	-6.6	1.52	0.76		
722.0	3.90	139.70	721.7	-10.4	7.2	-10.4	1.41	1.30		
814.0	4.10	139.80	813.5	-15.3	11.3	-15.3	0.22	0.22		
906.0	5.80	148.60	905.1	-21.8	15.9	-21.8	2.02	1.85		
998.0	7.10	152.40	996.6	-30.8	20.9	-30.8	1.49	1.41		
1,090.0	7.70	158.80	1,087.8	-41.6	25.8	-41.6	1.11	0.65		
1,182.0	8.50	162.40	1,178.9	-53.8	30.1	-53.8	1.03	0.87		

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Mathews 4F-14H
Project:	DJ Wattenberg	TVD Reference:	Well @ 5117.0ft (Ensign 135)
Site:	S14 T1N-R66W (Mathews)	MD Reference:	Well @ 5117.0ft (Ensign 135)
Well:	Mathews 4F-14H	North Reference:	True
Wellbore:	HZ	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	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
1,274.0	8.20	162.00	1,269.9	-66.6	34.1	-66.6	0.33	-0.33	
1,363.0	7.80	162.70	1,358.0	-78.4	37.9	-78.4	0.46	-0.45	
1,435.0	8.90	161.40	1,429.3	-88.3	41.1	-88.3	1.55	1.53	
1,496.0	10.50	157.60	1,489.4	-97.9	44.8	-97.9	2.82	2.62	
1,588.0	11.50	154.70	1,579.7	-114.0	51.9	-114.0	1.24	1.09	
1,680.0	10.50	160.60	1,670.0	-130.2	58.6	-130.2	1.64	-1.09	
1,772.0	11.40	157.40	1,760.3	-146.5	64.8	-146.5	1.18	0.98	
1,864.0	10.60	161.40	1,850.7	-162.9	71.0	-162.9	1.20	-0.87	
1,956.0	10.80	160.10	1,941.1	-179.0	76.7	-179.0	0.34	0.22	
2,051.0	10.30	153.70	2,034.5	-195.0	83.5	-195.0	1.34	-0.53	
2,146.0	11.20	152.60	2,127.8	-210.8	91.5	-210.8	0.97	0.95	
2,240.0	10.60	156.00	2,220.1	-226.8	99.2	-226.8	0.94	-0.64	
2,335.0	9.90	154.40	2,313.6	-242.1	106.3	-242.1	0.80	-0.74	
2,430.0	10.40	160.30	2,407.1	-257.6	112.7	-257.6	1.21	0.53	
2,524.0	8.80	157.50	2,499.8	-272.2	118.3	-272.2	1.77	-1.70	
2,619.0	8.60	163.10	2,593.7	-285.7	123.2	-285.7	0.92	-0.21	
2,714.0	8.80	162.20	2,687.6	-299.4	127.4	-299.4	0.25	0.21	
2,809.0	10.70	159.10	2,781.2	-314.6	132.8	-314.6	2.07	2.00	
2,904.0	9.50	152.80	2,874.7	-329.8	139.5	-329.8	1.72	-1.26	
2,998.0	9.30	153.10	2,967.5	-343.5	146.5	-343.5	0.22	-0.21	
3,093.0	10.60	150.10	3,061.0	-357.9	154.3	-357.9	1.47	1.37	
3,188.0	10.90	148.90	3,154.4	-373.2	163.3	-373.2	0.39	0.32	
3,282.0	9.60	159.40	3,246.9	-388.1	170.7	-388.1	2.42	-1.38	
3,377.0	8.10	153.70	3,340.8	-401.5	176.4	-401.5	1.83	-1.58	
3,472.0	6.30	148.50	3,435.0	-412.0	182.1	-412.0	2.01	-1.89	
3,566.0	5.80	157.70	3,528.5	-420.8	186.6	-420.8	1.16	-0.53	
3,661.0	4.60	164.60	3,623.1	-428.9	189.5	-428.9	1.42	-1.26	
3,756.0	3.30	173.10	3,717.9	-435.3	190.8	-435.3	1.50	-1.37	
3,851.0	2.20	179.40	3,812.8	-439.8	191.2	-439.8	1.20	-1.16	
3,945.0	1.10	166.80	3,906.7	-442.5	191.4	-442.5	1.23	-1.17	
4,039.0	0.50	69.60	4,000.7	-443.2	192.0	-443.2	1.34	-0.64	
4,134.0	1.10	27.10	4,095.7	-442.3	192.8	-442.3	0.85	0.63	
4,229.0	1.70	20.50	4,190.7	-440.1	193.7	-440.1	0.65	0.63	
4,323.0	0.80	21.90	4,284.6	-438.2	194.4	-438.2	0.96	-0.96	
4,418.0	1.60	108.60	4,379.6	-438.0	195.9	-438.0	1.84	0.84	
4,513.0	1.70	146.00	4,474.6	-439.6	198.0	-439.6	1.12	0.11	
4,608.0	0.90	228.70	4,569.6	-441.3	198.2	-441.3	1.92	-0.84	
4,703.0	0.50	314.90	4,664.6	-441.5	197.3	-441.5	1.05	-0.42	
4,797.0	1.70	248.90	4,758.6	-441.7	195.7	-441.7	1.66	1.28	
4,892.0	1.30	202.00	4,853.5	-443.2	194.0	-443.2	1.31	-0.42	
4,987.0	0.80	216.60	4,948.5	-444.7	193.2	-444.7	0.59	-0.53	
5,082.0	1.10	124.70	5,043.5	-445.8	193.6	-445.8	1.45	0.32	
5,176.0	1.10	118.30	5,137.5	-446.7	195.1	-446.7	0.13	0.00	
5,271.0	0.70	289.60	5,232.5	-447.0	195.4	-447.0	1.89	-0.42	
5,366.0	0.60	291.30	5,327.5	-446.6	194.4	-446.6	0.11	-0.11	
5,460.0	0.40	243.10	5,421.5	-446.6	193.6	-446.6	0.48	-0.21	
5,555.0	0.80	152.60	5,516.5	-447.3	193.6	-447.3	0.94	0.42	
5,650.0	1.10	335.70	5,611.5	-447.1	193.6	-447.1	2.00	0.32	
5,745.0	2.40	36.40	5,706.4	-444.6	194.4	-444.6	2.20	1.37	
5,808.0	1.30	30.60	5,769.4	-443.0	195.5	-443.0	1.77	-1.75	
5,871.0	0.90	177.70	5,832.4	-442.8	195.9	-442.8	3.35	-0.63	
5,934.0	0.80	181.80	5,895.4	-443.8	195.9	-443.8	0.19	-0.16	
6,029.0	0.10	100.20	5,990.4	-444.4	196.0	-444.4	0.83	-0.74	

Cathedral Energy Services

Survey Report

Company: EnCana Oil & Gas (USA) Inc
Project: DJ Wattenberg
Site: S14 T1N-R66W (Mathews)
Well: Mathews 4F-14H
Wellbore: HZ
Design: FINAL

Local Co-ordinate Reference: Well Mathews 4F-14H
TVD Reference: Well @ 5117.0ft (Ensign 135)
MD Reference: Well @ 5117.0ft (Ensign 135)
North Reference: True
Survey Calculation Method: Minimum Curvature
Database: 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
6,124.0	0.10	324.00	6,085.4	-444.4	196.0	-444.4	0.20	0.00	
6,218.0	0.00	173.70	6,179.4	-444.3	195.9	-444.3	0.11	-0.11	
6,313.0	1.20	292.90	6,274.4	-443.9	195.0	-443.9	1.26	1.26	
6,407.0	1.50	287.60	6,368.3	-443.2	192.9	-443.2	0.35	0.32	
6,502.0	1.10	8.10	6,463.3	-441.9	191.9	-441.9	1.80	-0.42	
6,597.0	1.50	8.80	6,558.3	-439.8	192.2	-439.8	0.42	0.42	
6,692.0	1.10	8.70	6,653.3	-437.6	192.5	-437.6	0.42	-0.42	
6,787.0	1.20	73.60	6,748.3	-436.5	193.6	-436.5	1.30	0.11	
6,881.0	2.20	230.80	6,842.2	-437.3	193.2	-437.3	3.55	1.06	
6,944.0	1.50	200.00	6,905.2	-438.9	192.0	-438.9	1.89	-1.11	
7,008.0	0.40	169.50	6,969.2	-439.9	191.7	-439.9	1.83	-1.72	
7,039.0	0.40	209.40	7,000.2	-440.1	191.7	-440.1	0.88	0.00	
7,071.0	1.80	340.60	7,032.2	-439.7	191.5	-439.7	6.52	4.37	
7,102.0	4.70	346.60	7,063.1	-438.0	191.0	-438.0	9.41	9.35	
7,134.0	7.20	345.40	7,095.0	-434.8	190.2	-434.8	7.83	7.82	
7,165.0	9.40	345.90	7,125.6	-430.4	189.1	-430.4	7.10	7.10	
7,197.0	11.70	346.80	7,157.1	-424.8	187.7	-424.8	7.21	7.19	
7,229.0	13.80	348.60	7,188.3	-417.9	186.2	-417.9	6.68	6.56	
7,242.0	14.70	349.30	7,200.9	-414.7	185.6	-414.7	7.05	6.92	
7,274.0	16.90	351.70	7,231.7	-406.1	184.2	-406.1	7.17	6.87	
7,305.0	18.70	353.50	7,261.2	-396.7	183.0	-396.7	6.07	5.81	
7,337.0	22.90	355.00	7,291.1	-385.4	181.8	-385.4	13.23	13.12	
7,368.0	27.30	356.20	7,319.2	-372.3	180.8	-372.3	14.29	14.19	
7,400.0	32.10	356.40	7,347.0	-356.5	179.8	-356.5	15.00	15.00	
7,431.0	36.70	357.80	7,372.5	-339.0	178.9	-339.0	15.06	14.84	
7,463.0	41.20	359.30	7,397.4	-318.9	178.4	-318.9	14.37	14.06	
7,494.0	44.60	1.50	7,420.1	-297.8	178.6	-297.8	11.98	10.97	
7,526.0	47.00	3.80	7,442.4	-274.9	179.7	-274.9	9.10	7.50	
7,557.0	49.90	4.70	7,463.0	-251.8	181.4	-251.8	9.60	9.35	
7,589.0	54.00	4.00	7,482.7	-226.6	183.3	-226.6	12.93	12.81	
7,621.0	58.20	2.60	7,500.6	-200.1	184.8	-200.1	13.62	13.12	
7,652.0	60.90	1.10	7,516.3	-173.4	185.7	-173.4	9.66	8.71	
7,684.0	62.90	1.40	7,531.3	-145.2	186.3	-145.2	6.30	6.25	
7,715.0	66.50	1.00	7,544.6	-117.2	186.9	-117.2	11.67	11.61	
7,747.0	70.60	0.10	7,556.3	-87.4	187.2	-87.4	13.08	12.81	
7,778.0	74.20	359.90	7,565.7	-57.9	187.2	-57.9	11.63	11.61	
7,810.0	76.90	0.10	7,573.6	-26.9	187.2	-26.9	8.46	8.44	
7,842.0	80.20	359.80	7,580.0	4.5	187.1	4.5	10.35	10.31	
7,868.0	83.90	0.30	7,583.6	30.2	187.2	30.2	14.35	14.22	
7,942.0	89.60	1.50	7,587.8	104.1	188.3	104.1	7.87	7.70	
8,036.0	91.30	1.30	7,587.0	198.0	190.6	198.0	1.82	1.81	
8,131.0	92.70	1.30	7,583.7	293.0	192.8	293.0	1.47	1.47	
8,226.0	93.90	0.60	7,578.3	387.8	194.3	387.8	1.46	1.26	
8,320.0	92.70	359.40	7,572.9	481.6	194.3	481.6	1.80	-1.28	
8,414.0	89.80	357.30	7,570.8	575.6	191.6	575.6	3.81	-3.09	
8,509.0	89.20	356.20	7,571.6	670.4	186.3	670.4	1.32	-0.63	
8,604.0	90.50	357.30	7,571.9	765.2	180.9	765.2	1.79	1.37	
8,698.0	90.40	357.80	7,571.1	859.1	176.9	859.1	0.54	-0.11	
8,793.0	88.50	357.30	7,572.1	954.1	172.8	954.1	2.07	-2.00	
8,857.0	89.80	358.40	7,573.0	1,018.0	170.4	1,018.0	2.66	2.03	
8,920.0	88.40	358.90	7,574.0	1,081.0	168.9	1,081.0	2.36	-2.22	
8,983.0	90.20	0.00	7,574.8	1,144.0	168.3	1,144.0	3.35	2.86	
9,046.0	91.80	0.80	7,573.7	1,206.9	168.7	1,206.9	2.84	2.54	
9,109.0	92.30	1.50	7,571.4	1,269.9	170.0	1,269.9	1.36	0.79	

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Mathews 4F-14H
Project:	DJ Wattenberg	TVD Reference:	Well @ 5117.0ft (Ensign 135)
Site:	S14 T1N-R66W (Mathews)	MD Reference:	Well @ 5117.0ft (Ensign 135)
Well:	Mathews 4F-14H	North Reference:	True
Wellbore:	HZ	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	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
9,173.0	91.20	1.80	7,569.5	1,333.8	171.8	1,333.8	1.78	-1.72	
9,236.0	89.70	2.00	7,569.0	1,396.8	173.9	1,396.8	2.40	-2.38	
9,299.0	90.00	1.90	7,569.1	1,459.8	176.1	1,459.8	0.50	0.48	
9,362.0	88.60	2.00	7,569.9	1,522.7	178.2	1,522.7	2.23	-2.22	
9,457.0	88.50	0.00	7,572.3	1,617.7	179.9	1,617.7	2.11	-0.11	
9,552.0	88.50	1.10	7,574.8	1,712.6	180.8	1,712.6	1.16	0.00	
9,646.0	90.90	2.10	7,575.3	1,806.6	183.4	1,806.6	2.77	2.55	
9,741.0	90.50	3.00	7,574.1	1,901.5	187.6	1,901.5	1.04	-0.42	
9,836.0	89.80	2.90	7,573.9	1,996.4	192.5	1,996.4	0.74	-0.74	
9,930.0	89.30	1.70	7,574.6	2,090.3	196.3	2,090.3	1.38	-0.53	
10,025.0	88.90	359.30	7,576.1	2,185.2	197.1	2,185.2	2.56	-0.42	
10,120.0	88.70	0.60	7,578.1	2,280.2	197.0	2,280.2	1.38	-0.21	
10,183.0	88.90	0.20	7,579.4	2,343.2	197.5	2,343.2	0.71	0.32	
10,246.0	89.80	0.40	7,580.1	2,406.2	197.8	2,406.2	1.46	1.43	
10,310.0	89.30	359.80	7,580.6	2,470.2	197.9	2,470.2	1.22	-0.78	
10,404.0	89.40	0.40	7,581.7	2,564.2	198.1	2,564.2	0.65	0.11	
10,499.0	89.50	0.10	7,582.6	2,659.2	198.5	2,659.2	0.33	0.11	
10,593.0	90.20	359.10	7,582.8	2,753.2	197.9	2,753.2	1.30	0.74	
10,688.0	88.20	359.00	7,584.2	2,848.1	196.3	2,848.1	2.11	-2.11	
10,783.0	88.30	359.50	7,587.1	2,943.1	195.0	2,943.1	0.54	0.11	
10,878.0	88.40	359.70	7,589.8	3,038.0	194.4	3,038.0	0.24	0.11	
10,972.0	88.20	0.20	7,592.6	3,132.0	194.3	3,132.0	0.57	-0.21	
11,067.0	88.30	359.20	7,595.5	3,227.0	193.8	3,227.0	1.06	0.11	
11,162.0	88.70	359.30	7,598.0	3,321.9	192.6	3,321.9	0.43	0.42	
11,256.0	89.60	359.30	7,599.4	3,415.9	191.4	3,415.9	0.96	0.96	
11,351.0	89.80	358.60	7,599.9	3,510.9	189.7	3,510.9	0.77	0.21	
11,446.0	90.20	358.60	7,599.9	3,605.9	187.3	3,605.9	0.42	0.42	
11,541.0	91.90	1.10	7,598.1	3,700.8	187.1	3,700.8	3.18	1.79	
11,635.0	91.80	1.30	7,595.1	3,794.8	189.1	3,794.8	0.24	-0.11	
11,730.0	90.50	1.10	7,593.2	3,889.7	191.0	3,889.7	1.38	-1.37	
11,824.0	90.10	0.50	7,592.7	3,983.7	192.4	3,983.7	0.77	-0.43	
11,919.0	89.60	0.30	7,593.0	4,078.7	193.0	4,078.7	0.57	-0.53	
12,014.0	90.00	0.60	7,593.3	4,173.7	193.8	4,173.7	0.53	0.42	
12,109.0	90.40	359.90	7,593.0	4,268.7	194.2	4,268.7	0.85	0.42	
12,136.0	90.70	0.00	7,592.7	4,295.7	194.2	4,295.7	1.17	1.11	Last Cathedral Survey @ 12,136' MD
12,185.0	90.70	0.00	7,592.1	4,344.7	194.2	4,344.7	0.00	0.00	Projection to bit @ 12,185' MD

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Mathews 4F-14H
Project:	DJ Wattenberg	TVD Reference:	Well @ 5117.0ft (Ensign 135)
Site:	S14 T1N-R66W (Mathews)	MD Reference:	Well @ 5117.0ft (Ensign 135)
Well:	Mathews 4F-14H	North Reference:	True
Wellbore:	HZ	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
Mathews 4F-14H HZ 11, - survey misses target center by 6.3ft at 11735.8ft MD (7593.1 TVD, 3895.5 N, 191.2 E) - Point	0.00	0.00	7,589.0	3,895.4	195.9	1,264,162.54	3,213,694.65	40.055983	-104.736610
Mathews 4F-14H 10,000 - survey misses target center by 17.3ft at 10034.8ft MD (7576.3 TVD, 2195.0 N, 197.0 E) - Point	0.00	0.00	7,559.0	2,195.4	195.8	1,262,462.60	3,213,709.18	40.051317	-104.736610
Mathews 4F-14H 10,000 - survey misses target center by 9.4ft at 10035.0ft MD (7576.3 TVD, 2195.2 N, 197.0 E) - Point	0.00	0.00	7,567.0	2,195.4	195.8	1,262,462.60	3,213,709.18	40.051317	-104.736610
Mathews 4F-14H HZ 85(- survey misses target center by 17.0ft at 8533.4ft MD (7571.9 TVD, 694.7 N, 184.7 E) - Point	0.00	0.00	7,559.0	695.4	195.7	1,260,962.65	3,213,722.00	40.047199	-104.736611
Mathews 4F-14H HZ 85(- survey misses target center by 12.1ft at 8533.4ft MD (7571.9 TVD, 694.7 N, 184.7 E) - Point	0.00	0.00	7,567.0	695.4	195.7	1,260,962.65	3,213,722.00	40.047199	-104.736611
Mathews 4F-14H PBHL - survey misses target center by 40.8ft at 12185.0ft MD (7592.1 TVD, 4344.7 N, 194.2 E) - Point	0.00	0.00	7,631.0	4,356.8	195.9	1,264,623.90	3,213,690.70	40.057250	-104.736610
Mathews 4F-14H HZ 11, - survey misses target center by 6.1ft at 11735.7ft MD (7593.1 TVD, 3895.4 N, 191.2 E) - Point	0.00	0.00	7,597.0	3,895.4	195.9	1,264,162.54	3,213,694.65	40.055983	-104.736610
Mathews 4F-14H PBHL - survey misses target center by 12.6ft at 12185.0ft MD (7592.1 TVD, 4344.7 N, 194.2 E) - Point	0.00	0.00	7,589.0	4,356.8	195.9	1,264,623.90	3,213,690.70	40.057250	-104.736610
Mathews 4F-14H PBHL - survey misses target center by 13.2ft at 12185.0ft MD (7592.1 TVD, 4344.7 N, 194.2 E) - Point	0.00	0.00	7,597.0	4,356.8	195.9	1,264,623.90	3,213,690.70	40.057250	-104.736610
Mathews 4F-14H PBHL - survey misses target center by 2678.9ft at 12185.0ft MD (7592.1 TVD, 4344.7 N, 194.2 E) - Point	0.00	0.00	7,631.0	7,023.3	204.3	1,267,290.38	3,213,676.14	40.064570	-104.736580

Survey Annotations					
Measured Depth	Vertical Depth	Local Coordinates			
(ft)	(ft)	+N/-S	+E/-W	Comment	
		(ft)	(ft)		
12,136.0	7,592.7	4,295.7	194.2	Last Cathedral Survey @ 12,136' MD	
12,185.0	7,592.1	4,344.7	194.2	Projection to bit @ 12,185' MD	

Checked By: _____ Approved By: _____ Date: _____