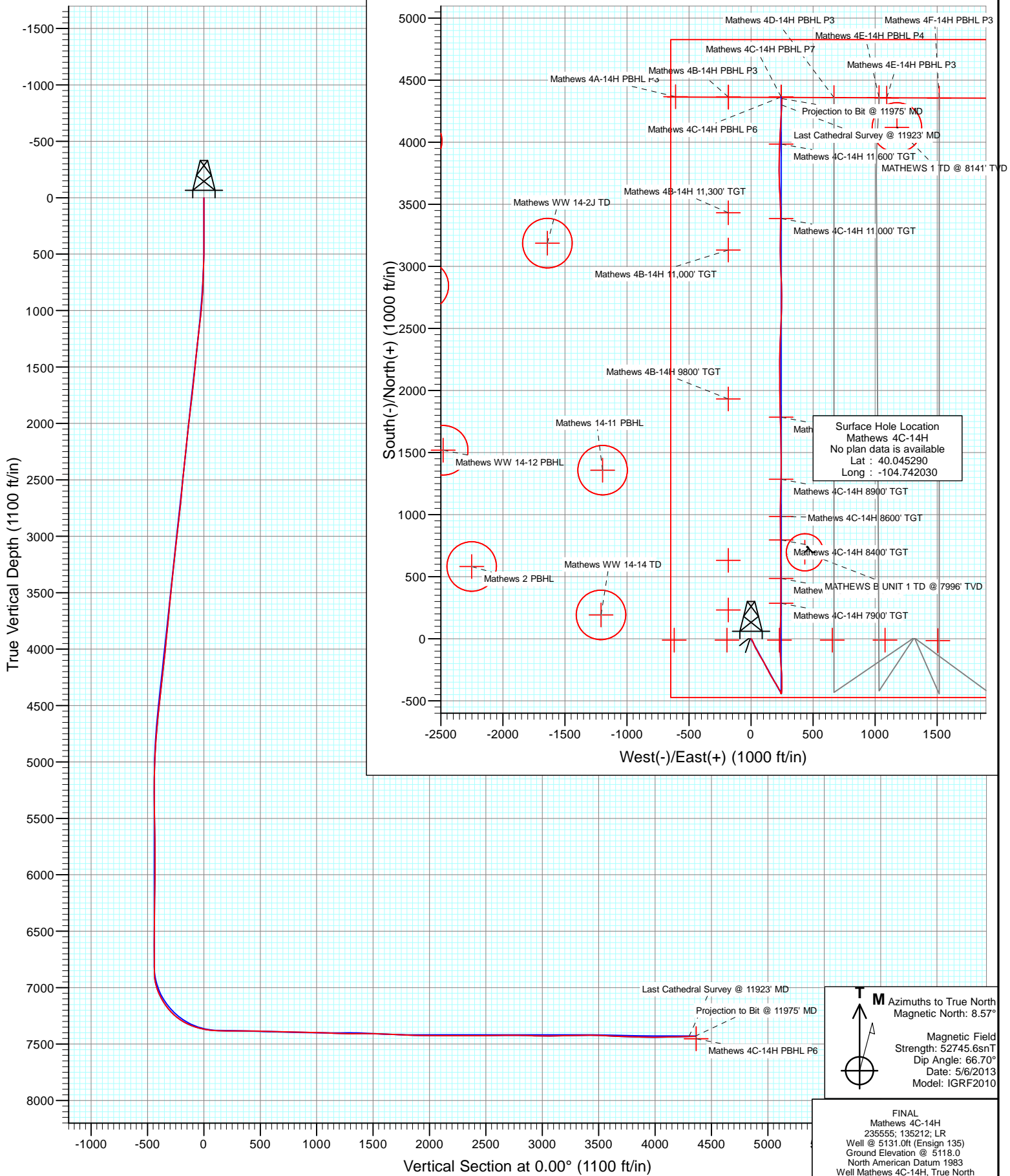




Project: DJ Wattenberg
Site: S14 T1N-R66W (Mathews)
Well: Mathews 4C-14H
Wellbore: HZ
Design: FINAL



Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Mathews 4C-14H
Project:	DJ Wattenberg	TVD Reference:	Well @ 5131.0ft (Ensign 135)
Site:	S14 T1N-R66W (Mathews)	MD Reference:	Well @ 5131.0ft (Ensign 135)
Well:	Mathews 4C-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 4C-14H					
Well Position	+N/-S	0.0 ft	Northing:	1,260,254.28 ft	Latitude:	40.045290
	+E/-W	0.0 ft	Easting:	3,212,210.84 ft	Longitude:	-104.742030
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,118.0 ft

Wellbore	HZ				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	5/6/2013	8.57	66.70	52,746

Design	FINAL				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.0	0.0	0.0	0.00	

Survey Program	Date	5/16/2013			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
226.0	11,975.0	Survey #1 (HZ)	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		
226.0	0.00	19.10	226.0	0.0	0.0	0.0	0.00	0.00		
318.0	0.20	98.60	318.0	0.0	0.2	0.0	0.22	0.22		
410.0	0.40	91.90	410.0	-0.1	0.6	-0.1	0.22	0.22		
501.0	1.50	126.30	501.0	-0.8	1.9	-0.8	1.31	1.21		
593.0	2.10	142.00	592.9	-2.8	3.9	-2.8	0.84	0.65		
685.0	2.50	144.50	684.9	-5.8	6.1	-5.8	0.45	0.43		
777.0	2.90	145.90	776.8	-9.3	8.6	-9.3	0.44	0.43		
869.0	3.80	151.00	868.6	-13.9	11.4	-13.9	1.03	0.98		
961.0	5.40	155.30	960.3	-20.5	14.7	-20.5	1.78	1.74		
1,052.0	6.50	158.00	1,050.8	-29.2	18.4	-29.2	1.25	1.21		
1,144.0	7.60	158.90	1,142.1	-39.7	22.5	-39.7	1.20	1.20		
1,236.0	7.20	159.70	1,233.4	-50.8	26.7	-50.8	0.45	-0.43		

Cathedral Energy Services

Survey Report

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Project:	DJ Wattenberg	TVD Reference:	Well @ 5131.0ft (Ensign 135)
Site:	S14 T1N-R66W (Mathews)	MD Reference:	Well @ 5131.0ft (Ensign 135)
Well:	Mathews 4C-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
1,268.0	6.80	160.10	1,265.1	-54.4	28.1	-54.4	1.26	-1.25	
1,372.0	5.70	155.80	1,368.5	-64.9	32.3	-64.9	1.15	-1.06	
1,464.0	7.10	149.50	1,459.9	-74.0	37.0	-74.0	1.70	1.52	
1,556.0	7.50	146.60	1,551.2	-83.9	43.2	-83.9	0.59	0.43	
1,648.0	6.50	151.50	1,642.5	-93.5	49.0	-93.5	1.27	-1.09	
1,739.0	7.30	145.20	1,732.8	-102.8	54.8	-102.8	1.21	0.88	
1,831.0	8.00	157.70	1,824.0	-113.5	60.5	-113.5	1.96	0.76	
1,923.0	7.60	153.50	1,915.2	-124.9	65.7	-124.9	0.76	-0.43	
2,018.0	7.10	149.50	2,009.4	-135.6	71.5	-135.6	0.75	-0.53	
2,113.0	7.60	149.80	2,103.6	-146.1	77.6	-146.1	0.53	0.53	
2,207.0	7.30	146.80	2,196.8	-156.4	84.0	-156.4	0.52	-0.32	
2,302.0	6.50	144.00	2,291.1	-165.8	90.5	-165.8	0.91	-0.84	
2,397.0	7.40	147.90	2,385.4	-175.4	96.9	-175.4	1.07	0.95	
2,492.0	6.50	158.20	2,479.7	-185.5	102.1	-185.5	1.61	-0.95	
2,586.0	5.40	152.40	2,573.2	-194.4	106.1	-194.4	1.33	-1.17	
2,681.0	6.10	152.50	2,667.7	-202.8	110.5	-202.8	0.74	0.74	
2,776.0	7.20	153.60	2,762.1	-212.6	115.5	-212.6	1.17	1.16	
2,871.0	7.50	150.80	2,856.3	-223.4	121.2	-223.4	0.49	0.32	
2,966.0	7.10	153.50	2,950.6	-234.0	126.8	-234.0	0.55	-0.42	
3,060.0	7.50	146.10	3,043.8	-244.3	132.9	-244.3	1.09	0.43	
3,155.0	6.30	151.40	3,138.1	-254.1	138.8	-254.1	1.43	-1.26	
3,250.0	7.30	158.60	3,232.4	-264.3	143.5	-264.3	1.38	1.05	
3,345.0	7.60	151.50	3,326.6	-275.4	148.7	-275.4	1.02	0.32	
3,440.0	6.20	146.90	3,420.9	-285.2	154.5	-285.2	1.58	-1.47	
3,534.0	6.50	151.70	3,514.4	-294.2	159.8	-294.2	0.65	0.32	
3,629.0	6.50	154.60	3,608.8	-303.7	164.7	-303.7	0.35	0.00	
3,724.0	6.80	145.30	3,703.1	-313.2	170.2	-313.2	1.18	0.32	
3,819.0	6.40	144.40	3,797.5	-322.2	176.5	-322.2	0.43	-0.42	
3,914.0	6.20	153.20	3,891.9	-331.0	181.8	-331.0	1.04	-0.21	
4,008.0	7.90	149.10	3,985.2	-341.1	187.5	-341.1	1.88	1.81	
4,103.0	6.70	145.40	4,079.4	-351.3	194.0	-351.3	1.36	-1.26	
4,198.0	7.00	145.60	4,173.8	-360.6	200.4	-360.6	0.32	0.32	
4,292.0	6.90	156.10	4,267.1	-370.5	205.9	-370.5	1.35	-0.11	
4,387.0	8.20	147.80	4,361.2	-381.5	211.8	-381.5	1.78	1.37	
4,482.0	6.40	148.40	4,455.5	-391.7	218.2	-391.7	1.90	-1.89	
4,577.0	7.60	152.30	4,549.8	-401.8	223.9	-401.8	1.36	1.26	
4,672.0	7.40	143.70	4,644.0	-412.3	230.4	-412.3	1.20	-0.21	
4,766.0	5.20	149.90	4,737.4	-420.8	236.2	-420.8	2.45	-2.34	
4,861.0	3.50	152.00	4,832.1	-427.1	239.7	-427.1	1.80	-1.79	
4,956.0	2.30	173.00	4,927.0	-431.6	241.3	-431.6	1.67	-1.26	
5,050.0	2.80	156.90	5,020.9	-435.6	242.4	-435.6	0.92	0.53	
5,145.0	2.20	142.70	5,115.8	-439.1	244.4	-439.1	0.90	-0.63	
5,240.0	0.70	235.20	5,210.8	-440.9	245.0	-440.9	2.46	-1.58	
5,335.0	0.90	301.90	5,305.8	-440.9	243.9	-440.9	0.94	0.21	
5,430.0	1.10	323.90	5,400.8	-439.7	242.8	-439.7	0.45	0.21	
5,524.0	1.10	314.10	5,494.7	-438.4	241.6	-438.4	0.20	0.00	
5,619.0	1.60	333.90	5,589.7	-436.5	240.3	-436.5	0.71	0.53	
5,714.0	1.20	337.00	5,684.7	-434.4	239.4	-434.4	0.43	-0.42	
5,809.0	0.80	110.20	5,779.7	-433.8	239.6	-433.8	1.94	-0.42	
5,903.0	1.00	85.70	5,873.7	-433.9	241.0	-433.9	0.46	0.21	
5,998.0	1.70	99.30	5,968.6	-434.1	243.3	-434.1	0.81	0.74	
6,093.0	0.40	166.30	6,063.6	-434.6	244.7	-434.6	1.67	-1.37	
6,188.0	0.70	172.00	6,158.6	-435.5	244.9	-435.5	0.32	0.32	

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Mathews 4C-14H
Project:	DJ Wattenberg	TVD Reference:	Well @ 5131.0ft (Ensign 135)
Site:	S14 T1N-R66W (Mathews)	MD Reference:	Well @ 5131.0ft (Ensign 135)
Well:	Mathews 4C-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
6,283.0	1.50	211.30	6,253.6	-437.2	244.3	-437.2	1.11	0.84	
6,378.0	0.70	198.90	6,348.6	-438.8	243.5	-438.8	0.87	-0.84	
6,472.0	0.60	215.50	6,442.6	-439.7	243.0	-439.7	0.23	-0.11	
6,567.0	0.80	262.40	6,537.6	-440.2	242.1	-440.2	0.62	0.21	
6,662.0	1.20	105.00	6,632.6	-440.6	242.4	-440.6	2.07	0.42	
6,757.0	0.80	59.60	6,727.6	-440.5	243.9	-440.5	0.90	-0.42	
6,852.0	0.50	49.60	6,822.5	-439.9	244.8	-439.9	0.34	-0.32	
6,883.0	0.40	81.10	6,853.5	-439.8	245.0	-439.8	0.85	-0.32	
6,915.0	2.80	14.70	6,885.5	-439.0	245.3	-439.0	8.33	7.50	
6,946.0	6.90	10.20	6,916.4	-436.4	245.8	-436.4	13.27	13.23	
6,978.0	11.30	10.60	6,948.0	-431.5	246.8	-431.5	13.75	13.75	
7,010.0	15.40	8.00	6,979.1	-424.2	247.9	-424.2	12.95	12.81	
7,041.0	18.80	4.90	7,008.8	-415.1	248.9	-415.1	11.35	10.97	
7,073.0	22.20	3.00	7,038.7	-403.9	249.7	-403.9	10.83	10.62	
7,105.0	25.00	0.50	7,068.0	-391.1	250.1	-391.1	9.29	8.75	
7,136.0	28.60	358.60	7,095.7	-377.2	249.9	-377.2	11.94	11.61	
7,168.0	32.40	358.80	7,123.3	-360.9	249.6	-360.9	11.88	11.87	
7,199.0	35.40	359.90	7,149.0	-343.6	249.4	-343.6	9.88	9.68	
7,231.0	37.30	359.10	7,174.8	-324.7	249.2	-324.7	6.12	5.94	
7,263.0	40.40	357.60	7,199.7	-304.6	248.6	-304.6	10.12	9.69	
7,294.0	43.90	356.00	7,222.7	-283.8	247.5	-283.8	11.81	11.29	
7,326.0	48.70	355.50	7,244.8	-260.8	245.7	-260.8	15.04	15.00	
7,357.0	52.70	356.00	7,264.4	-236.9	244.0	-236.9	12.96	12.90	
7,389.0	56.20	355.80	7,283.0	-210.9	242.1	-210.9	10.95	10.94	
7,420.0	58.50	356.40	7,299.7	-184.9	240.3	-184.9	7.60	7.42	
7,452.0	62.10	357.00	7,315.6	-157.1	238.7	-157.1	11.37	11.25	
7,483.0	66.50	358.00	7,329.0	-129.2	237.5	-129.2	14.49	14.19	
7,515.0	70.40	358.60	7,340.8	-99.5	236.6	-99.5	12.31	12.19	
7,547.0	72.30	358.90	7,351.0	-69.2	236.0	-69.2	6.00	5.94	
7,578.0	75.30	359.00	7,359.7	-39.4	235.4	-39.4	9.68	9.68	
7,610.0	78.90	359.40	7,366.8	-8.2	235.0	-8.2	11.32	11.25	
7,641.0	81.80	0.70	7,372.0	22.3	235.0	22.3	10.23	9.35	
7,672.0	82.80	1.20	7,376.2	53.1	235.5	53.1	3.60	3.23	
7,728.0	86.90	1.00	7,381.2	108.8	236.6	108.8	7.33	7.32	
7,823.0	90.10	1.90	7,383.7	203.7	239.0	203.7	3.50	3.37	
7,918.0	89.50	0.80	7,384.0	298.7	241.2	298.7	1.32	-0.63	
8,012.0	89.50	0.00	7,384.8	392.7	241.9	392.7	0.85	0.00	
8,107.0	89.50	359.70	7,385.7	487.7	241.6	487.7	0.32	0.00	
8,170.0	88.50	358.90	7,386.8	550.7	240.9	550.7	2.03	-1.59	
8,233.0	88.00	359.00	7,388.7	613.6	239.7	613.6	0.81	-0.79	
8,297.0	87.60	359.60	7,391.1	677.6	238.9	677.6	1.13	-0.62	
8,391.0	89.60	359.60	7,393.4	771.6	238.3	771.6	2.13	2.13	
8,486.0	89.10	359.80	7,394.5	866.5	237.8	866.5	0.57	-0.53	
8,581.0	87.80	359.60	7,397.1	961.5	237.3	961.5	1.38	-1.37	
8,675.0	88.50	0.80	7,400.1	1,055.5	237.6	1,055.5	1.48	0.74	
8,770.0	87.20	1.00	7,403.7	1,150.4	239.1	1,150.4	1.38	-1.37	
8,833.0	87.70	2.00	7,406.5	1,213.3	240.8	1,213.3	1.77	0.79	
8,897.0	89.00	1.40	7,408.3	1,277.2	242.7	1,277.2	2.24	2.03	
8,960.0	90.50	0.70	7,408.6	1,340.2	243.8	1,340.2	2.63	2.38	
9,023.0	90.70	359.60	7,407.9	1,403.2	244.0	1,403.2	1.77	0.32	
9,086.0	90.10	359.90	7,407.5	1,466.2	243.7	1,466.2	1.06	-0.95	
9,149.0	88.60	358.80	7,408.2	1,529.2	243.0	1,529.2	2.95	-2.38	
9,244.0	87.00	358.60	7,411.9	1,624.1	240.8	1,624.1	1.70	-1.68	

Cathedral Energy Services

Survey Report

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Project:	DJ Wattenberg	TVD Reference:	Well @ 5131.0ft (Ensign 135)
Site:	S14 T1N-R66W (Mathews)	MD Reference:	Well @ 5131.0ft (Ensign 135)
Well:	Mathews 4C-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
9,339.0	87.60	358.70	7,416.3	1,719.0	238.6	1,719.0	0.64	0.63	
9,433.0	87.30	358.20	7,420.5	1,812.8	236.1	1,812.8	0.62	-0.32	
9,528.0	88.60	358.80	7,423.9	1,907.7	233.6	1,907.7	1.51	1.37	
9,623.0	90.40	0.40	7,424.7	2,002.7	232.9	2,002.7	2.53	1.89	
9,718.0	89.60	359.30	7,424.7	2,097.7	232.7	2,097.7	1.43	-0.84	
9,813.0	89.60	359.50	7,425.4	2,192.7	231.7	2,192.7	0.21	0.00	
9,908.0	90.60	1.00	7,425.2	2,287.7	232.1	2,287.7	1.90	1.05	
10,002.0	90.00	2.60	7,424.7	2,381.7	235.0	2,381.7	1.82	-0.64	
10,097.0	89.20	2.30	7,425.4	2,476.6	239.1	2,476.6	0.90	-0.84	
10,192.0	91.40	2.80	7,424.9	2,571.5	243.3	2,571.5	2.37	2.32	
10,286.0	90.80	1.00	7,423.1	2,665.4	246.4	2,665.4	2.02	-0.64	
10,381.0	89.70	359.70	7,422.7	2,760.4	247.0	2,760.4	1.79	-1.16	
10,476.0	88.20	358.30	7,424.4	2,855.4	245.4	2,855.4	2.16	-1.58	
10,571.0	88.10	357.10	7,427.5	2,950.2	241.5	2,950.2	1.27	-0.11	
10,666.0	90.30	358.40	7,428.8	3,045.1	237.8	3,045.1	2.69	2.32	
10,761.0	90.80	359.70	7,427.9	3,140.1	236.2	3,140.1	1.47	0.53	
10,856.0	92.10	0.80	7,425.5	3,235.1	236.7	3,235.1	1.79	1.37	
10,950.0	91.60	1.70	7,422.5	3,329.0	238.7	3,329.0	1.09	-0.53	
11,045.0	89.00	359.20	7,422.0	3,424.0	239.5	3,424.0	3.80	-2.74	
11,140.0	88.30	357.10	7,424.2	3,518.9	236.4	3,518.9	2.33	-0.74	
11,203.0	86.50	356.90	7,427.1	3,581.8	233.1	3,581.8	2.87	-2.86	
11,266.0	87.30	357.60	7,430.5	3,644.6	230.1	3,644.6	1.69	1.27	
11,330.0	88.40	358.00	7,432.9	3,708.5	227.6	3,708.5	1.83	1.72	
11,424.0	88.20	0.80	7,435.7	3,802.4	226.6	3,802.4	2.99	-0.21	
11,519.0	88.10	1.60	7,438.7	3,897.4	228.6	3,897.4	0.85	-0.11	
11,614.0	90.30	2.70	7,440.1	3,992.3	232.2	3,992.3	2.59	2.32	
11,709.0	91.40	2.90	7,438.7	4,087.2	236.8	4,087.2	1.18	1.16	
11,803.0	91.70	3.10	7,436.1	4,181.0	241.7	4,181.0	0.38	0.32	
11,898.0	91.50	2.40	7,433.5	4,275.9	246.3	4,275.9	0.77	-0.21	
11,923.0	91.60	2.10	7,432.8	4,300.8	247.3	4,300.8	1.26	0.40	Last Cathedral Survey @ 11923' MD
11,975.0	91.60	2.10	7,431.3	4,352.8	249.2	4,352.8	0.00	0.00	Projection to Bit @ 11975' MD

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Mathews 4C-14H
Project:	DJ Wattenberg	TVD Reference:	Well @ 5131.0ft (Ensign 135)
Site:	S14 T1N-R66W (Mathews)	MD Reference:	Well @ 5131.0ft (Ensign 135)
Well:	Mathews 4C-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 4C-14H 7900' - - survey misses target center by 5.4ft at 7905.7ft MD (7383.9 TVD, 286.4 N, 241.1 E) - Point	0.00	0.00	7,379.0	286.3	243.3	1,260,542.70	3,212,451.68	40.046076	-104.741161
Mathews 4C-14H 11,600' - - survey misses target center by 16.8ft at 11607.2ft MD (7440.1 TVD, 3985.5 N, 231.9 E) - Point	0.00	0.00	7,428.0	3,985.2	243.5	1,264,241.41	3,212,420.28	40.056230	-104.741160
Mathews 4C-14H PBHL - - survey misses target center by 2674.1ft at 11975.0ft MD (7431.3 TVD, 4352.8 N, 249.2 E) - Point	0.00	0.00	7,425.0	7,026.9	249.1	1,267,283.06	3,212,399.87	40.064580	-104.741140
Mathews 4C-14H 8400' - - survey misses target center by 5.3ft at 8416.3ft MD (7393.6 TVD, 796.8 N, 238.1 E) - Point	0.00	0.00	7,393.0	796.9	243.3	1,261,053.20	3,212,447.37	40.047477	-104.741161
Mathews 4C-14H 8900' - - survey misses target center by 8.5ft at 8905.4ft MD (7408.5 TVD, 1285.7 N, 242.9 E) - Point	0.00	0.00	7,400.0	1,285.7	243.4	1,261,541.99	3,212,443.22	40.048819	-104.741161
Mathews 4C-14H PBHL - - survey misses target center by 24.2ft at 11975.0ft MD (7431.3 TVD, 4352.8 N, 249.2 E) - Point	0.00	0.00	7,452.0	4,364.0	243.5	1,264,620.25	3,212,417.06	40.057270	-104.741160
Mathews 4C-14H 8100' - - survey misses target center by 3.1ft at 8105.4ft MD (7385.6 TVD, 486.1 N, 241.7 E) - Point	0.00	0.00	7,383.0	486.1	243.3	1,260,742.49	3,212,449.97	40.046624	-104.741161
Mathews 4C-14H FPP - - survey misses target center by 57.9ft at 7617.1ft MD (7368.1 TVD, -1.3 N, 234.9 E) - Point	0.00	0.00	7,425.0	-10.9	229.6	1,260,245.33	3,212,440.50	40.045260	-104.741210
Mathews 4C-14H 11,000' - - survey misses target center by 5.3ft at 11006.2ft MD (7421.7 TVD, 3385.2 N, 239.6 E) - Point	0.00	0.00	7,418.0	3,385.2	243.5	1,263,641.43	3,212,425.38	40.054583	-104.741160
Mathews 4C-14H 8600' - - survey misses target center by 6.5ft at 8605.3ft MD (7398.0 TVD, 985.8 N, 237.2 E) - Point	0.00	0.00	7,400.0	985.7	243.4	1,261,242.01	3,212,445.77	40.047996	-104.741161
Mathews 4C-14H 9400' - - survey misses target center by 6.6ft at 9405.2ft MD (7419.2 TVD, 1785.1 N, 236.9 E) - Point	0.00	0.00	7,418.0	1,785.3	243.4	1,262,041.64	3,212,438.97	40.050191	-104.741161
Mathews 4C-14H PBHL - - survey misses target center by 13.0ft at 11975.0ft MD (7431.3 TVD, 4352.8 N, 249.2 E) - Point	0.00	0.00	7,428.0	4,364.0	243.5	1,264,620.25	3,212,417.06	40.057270	-104.741160
Mathews 4C-14H PBHL - - survey misses target center by 14.1ft at 11975.0ft MD (7431.3 TVD, 4352.8 N, 249.2 E) - Point	0.00	0.00	7,425.0	4,364.0	243.5	1,264,620.25	3,212,417.06	40.057270	-104.741160

Survey Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
11,923.0	7,432.8	4,300.8	247.3	Last Cathedral Survey @ 11923' MD
11,975.0	7,431.3	4,352.8	249.2	Projection to Bit @ 11975' MD

Checked By: _____ Approved By: _____ Date: _____