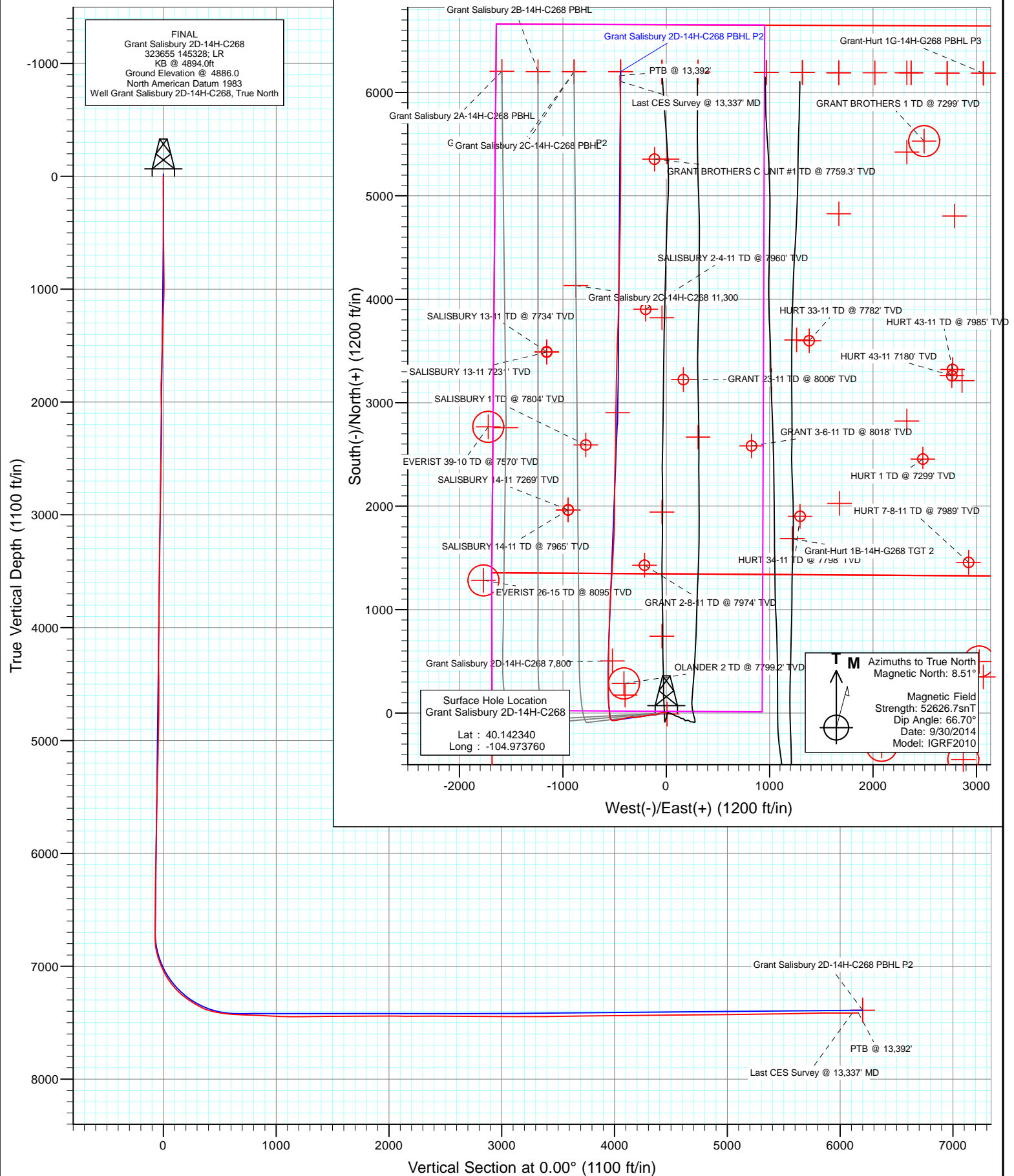




Project: DJ Wattenberg
Site: S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)
Well: Grant Salisbury 2D-14H-C268
Wellbore: Hz
Design: FINAL



Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Grant Salisbury 2D-14H-C268
Project:	DJ Wattenberg	TVD Reference:	KB @ 4894.0ft
Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	MD Reference:	KB @ 4894.0ft
Well:	Grant Salisbury 2D-14H-C268	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-T2N-R68W (Grant Elmquist/Salisbury/Hurt)			
Site Position:		Northing:	1,295,686.81 ft	Latitude:	40.143850
From:	Lat/Long	Easting:	3,147,060.98 ft	Longitude:	-104.973980
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.34 °

Well	Grant Salisbury 2D-14H-C268					
Well Position	+N/-S	0.0 ft	Northing:	1,295,137.10 ft	Latitude:	40.142340
	+E/-W	0.0 ft	Easting:	3,147,125.75 ft	Longitude:	-104.973760
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,886.0 ft

Wellbore	Hz				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	9/30/2014	8.51	66.70	52,627

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	10/9/2014			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
141.0	13,392.0	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	
141.0	1.80	76.60	141.0	0.5	2.2	0.5	1.28	1.28	
234.0	0.30	96.10	234.0	0.8	3.8	0.8	1.63	-1.61	
327.0	0.30	120.50	327.0	0.7	4.3	0.7	0.14	0.00	
421.0	1.80	305.60	420.9	1.4	3.3	1.4	2.23	1.60	
515.0	2.80	258.70	514.9	1.8	-0.2	1.8	2.18	1.06	
608.0	3.10	286.30	607.8	2.1	-4.8	2.1	1.54	0.32	
702.0	4.20	281.40	701.6	3.5	-10.6	3.5	1.22	1.17	
795.0	5.00	275.60	794.3	4.5	-18.0	4.5	0.99	0.86	
884.0	5.20	277.90	882.9	5.5	-25.9	5.5	0.32	0.22	
994.0	6.80	269.40	992.3	6.1	-37.3	6.1	1.66	1.45	
1,087.0	6.90	249.00	1,084.7	4.0	-48.0	4.0	2.60	0.11	
1,181.0	5.60	235.60	1,178.1	-0.6	-57.1	-0.6	2.07	-1.38	

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Grant Salisbury 2D-14H-C268
Project:	DJ Wattenberg	TVD Reference:	KB @ 4894.0ft
Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	MD Reference:	KB @ 4894.0ft
Well:	Grant Salisbury 2D-14H-C268	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	4.50	262.40	1,270.8	-3.6	-64.4	-3.6	2.76	-1.18	
1,368.0	4.10	252.30	1,364.5	-5.1	-71.3	-5.1	0.91	-0.43	
1,462.0	4.30	245.20	1,458.2	-7.6	-77.7	-7.6	0.59	0.21	
1,555.0	4.40	245.70	1,551.0	-10.6	-84.1	-10.6	0.11	0.11	
1,649.0	4.50	242.60	1,644.7	-13.7	-90.7	-13.7	0.28	0.11	
1,742.0	3.90	235.00	1,737.4	-17.2	-96.5	-17.2	0.88	-0.65	
1,836.0	2.80	268.50	1,831.3	-19.1	-101.4	-19.1	2.34	-1.17	
1,930.0	1.10	268.50	1,925.2	-19.2	-104.6	-19.2	1.81	-1.81	
2,023.0	3.40	287.20	2,018.2	-18.4	-108.1	-18.4	2.56	2.47	
2,117.0	6.30	282.40	2,111.8	-16.5	-115.8	-16.5	3.11	3.09	
2,210.0	6.20	278.80	2,204.3	-14.6	-125.8	-14.6	0.43	-0.11	
2,305.0	7.20	265.50	2,298.6	-14.3	-136.8	-14.3	1.94	1.05	
2,400.0	5.40	251.00	2,393.0	-16.2	-147.0	-16.2	2.51	-1.89	
2,494.0	5.90	252.20	2,486.6	-19.2	-155.7	-19.2	0.55	0.53	
2,588.0	5.70	249.60	2,580.1	-22.3	-164.7	-22.3	0.35	-0.21	
2,684.0	5.40	266.70	2,675.7	-24.2	-173.7	-24.2	1.74	-0.31	
2,779.0	5.50	264.10	2,770.2	-24.9	-182.7	-24.9	0.28	0.11	
2,873.0	5.30	263.30	2,863.8	-25.9	-191.5	-25.9	0.23	-0.21	
2,967.0	5.40	261.00	2,957.4	-27.1	-200.2	-27.1	0.25	0.11	
3,062.0	5.40	260.20	3,052.0	-28.5	-209.0	-28.5	0.08	0.00	
3,157.0	5.10	254.00	3,146.6	-30.5	-217.4	-30.5	0.68	-0.32	
3,251.0	5.00	251.80	3,240.2	-32.9	-225.4	-32.9	0.23	-0.11	
3,345.0	4.40	268.50	3,333.9	-34.3	-232.9	-34.3	1.58	-0.64	
3,440.0	4.70	263.90	3,428.6	-34.8	-240.4	-34.8	0.50	0.32	
3,534.0	4.40	262.70	3,522.3	-35.6	-247.8	-35.6	0.33	-0.32	
3,629.0	4.30	264.10	3,617.0	-36.5	-254.9	-36.5	0.15	-0.11	
3,723.0	4.40	262.70	3,710.8	-37.3	-262.0	-37.3	0.16	0.11	
3,818.0	4.40	260.10	3,805.5	-38.4	-269.2	-38.4	0.21	0.00	
3,912.0	4.40	259.70	3,899.2	-39.6	-276.3	-39.6	0.03	0.00	
4,007.0	3.90	260.30	3,994.0	-40.8	-283.1	-40.8	0.53	-0.53	
4,101.0	4.00	256.00	4,087.7	-42.2	-289.4	-42.2	0.33	0.11	
4,196.0	4.90	271.20	4,182.5	-42.9	-296.7	-42.9	1.55	0.95	
4,290.0	5.30	278.00	4,276.1	-42.2	-305.0	-42.2	0.77	0.43	
4,385.0	5.20	276.50	4,370.7	-41.1	-313.6	-41.1	0.18	-0.11	
4,479.0	5.00	274.60	4,464.3	-40.3	-321.9	-40.3	0.28	-0.21	
4,575.0	6.60	270.10	4,559.8	-39.9	-331.6	-39.9	1.73	1.67	
4,669.0	6.30	271.40	4,653.2	-39.8	-342.2	-39.8	0.35	-0.32	
4,763.0	5.40	259.00	4,746.7	-40.5	-351.7	-40.5	1.65	-0.96	
4,858.0	5.50	258.20	4,841.3	-42.3	-360.5	-42.3	0.13	0.11	
4,952.0	5.20	261.20	4,934.9	-43.9	-369.1	-43.9	0.44	-0.32	
5,047.0	4.90	261.00	5,029.5	-45.2	-377.4	-45.2	0.32	-0.32	
5,141.0	4.70	257.50	5,123.2	-46.6	-385.1	-46.6	0.38	-0.21	
5,236.0	5.70	252.70	5,217.8	-48.9	-393.4	-48.9	1.15	1.05	
5,330.0	5.60	252.60	5,311.4	-51.6	-402.3	-51.6	0.11	-0.11	
5,424.0	5.10	253.10	5,404.9	-54.2	-410.6	-54.2	0.53	-0.53	
5,519.0	4.90	254.10	5,499.6	-56.6	-418.6	-56.6	0.23	-0.21	
5,614.0	4.40	251.50	5,594.3	-58.8	-425.9	-58.8	0.57	-0.53	
5,708.0	5.30	260.90	5,687.9	-60.7	-433.7	-60.7	1.27	0.96	
5,803.0	5.20	262.60	5,782.5	-61.9	-442.3	-61.9	0.19	-0.11	
5,898.0	4.70	260.30	5,877.2	-63.1	-450.4	-63.1	0.57	-0.53	
5,992.0	4.40	255.90	5,970.9	-64.7	-457.7	-64.7	0.49	-0.32	
6,087.0	4.00	256.00	6,065.6	-66.3	-464.4	-66.3	0.42	-0.42	
6,181.0	5.10	261.50	6,159.3	-67.8	-471.7	-67.8	1.26	1.17	

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Grant Salisbury 2D-14H-C268
Project:	DJ Wattenberg	TVD Reference:	KB @ 4894.0ft
Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	MD Reference:	KB @ 4894.0ft
Well:	Grant Salisbury 2D-14H-C268	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
6,276.0	4.70	262.70	6,254.0	-68.9	-479.8	-68.9	0.43	-0.42	
6,370.0	4.30	258.30	6,347.7	-70.1	-487.0	-70.1	0.56	-0.43	
6,465.0	4.80	267.00	6,442.4	-71.0	-494.5	-71.0	0.90	0.53	
6,560.0	4.30	262.00	6,537.1	-71.7	-502.0	-71.7	0.67	-0.53	
6,653.0	4.00	255.50	6,629.9	-73.0	-508.6	-73.0	0.60	-0.32	
6,747.0	4.40	268.90	6,723.6	-73.9	-515.3	-73.9	1.12	0.43	
6,794.0	8.60	291.20	6,770.3	-72.7	-520.4	-72.7	10.27	8.94	
6,842.0	11.50	305.20	6,817.6	-68.6	-527.7	-68.6	7.86	6.04	
6,889.0	14.10	317.80	6,863.4	-61.7	-535.4	-61.7	8.09	5.53	
6,936.0	17.50	336.40	6,908.6	-50.9	-542.0	-50.9	12.89	7.23	
6,983.0	21.50	354.30	6,953.0	-35.9	-545.7	-35.9	15.21	8.51	
7,032.0	23.00	359.60	6,998.3	-17.4	-546.7	-17.4	5.11	3.06	
7,079.0	25.20	353.60	7,041.2	1.8	-547.9	1.8	7.00	4.68	
7,126.0	29.10	354.00	7,083.1	23.1	-550.2	23.1	8.31	8.30	
7,173.0	35.40	352.90	7,122.8	48.0	-553.1	48.0	13.46	13.40	
7,221.0	38.50	354.90	7,161.1	76.7	-556.1	76.7	6.93	6.46	
7,268.0	42.10	354.80	7,197.0	106.9	-558.8	106.9	7.66	7.66	
7,315.0	46.90	356.90	7,230.5	139.8	-561.2	139.8	10.68	10.21	
7,362.0	50.50	359.00	7,261.5	175.1	-562.4	175.1	8.36	7.66	
7,410.0	54.60	1.60	7,290.7	213.2	-562.2	213.2	9.56	8.54	
7,457.0	58.10	1.20	7,316.7	252.3	-561.3	252.3	7.48	7.45	
7,504.0	60.20	0.70	7,340.8	292.6	-560.6	292.6	4.56	4.47	
7,551.0	62.70	0.00	7,363.3	333.9	-560.4	333.9	5.48	5.32	
7,599.0	68.70	1.00	7,383.0	377.6	-560.0	377.6	12.64	12.50	
7,646.0	75.60	1.30	7,397.4	422.3	-559.1	422.3	14.69	14.68	
7,693.0	79.50	0.40	7,407.6	468.2	-558.4	468.2	8.51	8.30	
7,740.0	81.50	0.90	7,415.3	514.6	-557.9	514.6	4.38	4.26	
7,788.0	83.60	1.30	7,421.6	562.1	-556.9	562.1	4.45	4.37	
7,805.0	85.10	1.70	7,423.2	579.0	-556.5	579.0	9.13	8.82	
7,882.0	87.60	1.00	7,428.1	655.8	-554.7	655.8	3.37	3.25	
7,976.0	87.30	0.40	7,432.3	749.7	-553.5	749.7	0.71	-0.32	
8,070.0	88.10	2.50	7,436.1	843.6	-551.2	843.6	2.39	0.85	
8,163.0	86.70	1.80	7,440.3	936.5	-547.7	936.5	1.68	-1.51	
8,257.0	87.90	2.10	7,444.7	1,030.3	-544.5	1,030.3	1.32	1.28	
8,350.0	89.20	3.00	7,447.1	1,123.2	-540.4	1,123.2	1.70	1.40	
8,444.0	91.20	4.50	7,446.8	1,217.0	-534.2	1,217.0	2.66	2.13	
8,537.0	90.70	3.40	7,445.2	1,309.7	-527.8	1,309.7	1.30	-0.54	
8,631.0	90.40	3.20	7,444.3	1,403.6	-522.4	1,403.6	0.38	-0.32	
8,724.0	90.90	3.50	7,443.3	1,496.4	-517.0	1,496.4	0.63	0.54	
8,818.0	89.70	2.40	7,442.8	1,590.3	-512.1	1,590.3	1.73	-1.28	
8,911.0	90.00	3.50	7,443.0	1,683.2	-507.3	1,683.2	1.23	0.32	
9,005.0	90.40	1.70	7,442.7	1,777.1	-503.1	1,777.1	1.96	0.43	
9,098.0	90.40	1.00	7,442.0	1,870.0	-500.9	1,870.0	0.75	0.00	
9,192.0	90.50	0.90	7,441.3	1,964.0	-499.3	1,964.0	0.15	0.11	
9,287.0	89.10	359.10	7,441.6	2,059.0	-499.3	2,059.0	2.40	-1.47	
9,381.0	89.00	0.30	7,443.2	2,153.0	-499.8	2,153.0	1.28	-0.11	
9,476.0	90.00	0.90	7,444.0	2,248.0	-498.8	2,248.0	1.23	1.05	
9,570.0	90.10	2.00	7,443.9	2,341.9	-496.4	2,341.9	1.18	0.11	
9,665.0	90.90	2.20	7,443.1	2,436.9	-493.0	2,436.9	0.87	0.84	
9,759.0	90.70	1.00	7,441.8	2,530.8	-490.3	2,530.8	1.29	-0.21	
9,854.0	89.10	359.80	7,442.0	2,625.8	-489.7	2,625.8	2.11	-1.68	
9,948.0	88.80	0.30	7,443.7	2,719.8	-489.6	2,719.8	0.62	-0.32	
10,042.0	89.50	0.80	7,445.1	2,813.8	-488.7	2,813.8	0.92	0.74	

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Grant Salisbury 2D-14H-C268
Project:	DJ Wattenberg	TVD Reference:	KB @ 4894.0ft
Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	MD Reference:	KB @ 4894.0ft
Well:	Grant Salisbury 2D-14H-C268	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
10,137.0	89.90	0.90	7,445.6	2,908.8	-487.3	2,908.8	0.43	0.42	
10,231.0	90.30	1.00	7,445.4	3,002.8	-485.7	3,002.8	0.44	0.43	
10,326.0	89.80	1.50	7,445.3	3,097.7	-483.6	3,097.7	0.74	-0.53	
10,420.0	89.90	0.90	7,445.6	3,191.7	-481.7	3,191.7	0.65	0.11	
10,514.0	90.10	0.30	7,445.6	3,285.7	-480.7	3,285.7	0.67	0.21	
10,609.0	90.00	2.00	7,445.5	3,380.7	-478.8	3,380.7	1.79	-0.11	
10,703.0	89.90	1.30	7,445.6	3,474.7	-476.1	3,474.7	0.75	-0.11	
10,797.0	92.00	2.70	7,444.0	3,568.6	-472.8	3,568.6	2.68	2.23	
10,892.0	91.50	1.90	7,441.1	3,663.5	-469.0	3,663.5	0.99	-0.53	
10,986.0	90.90	2.00	7,439.1	3,757.4	-465.8	3,757.4	0.65	-0.64	
11,081.0	90.20	0.70	7,438.2	3,852.3	-463.6	3,852.3	1.55	-0.74	
11,175.0	90.30	1.40	7,437.8	3,946.3	-461.8	3,946.3	0.75	0.11	
11,270.0	90.40	0.60	7,437.2	4,041.3	-460.2	4,041.3	0.85	0.11	
11,363.0	90.60	1.70	7,436.4	4,134.3	-458.3	4,134.3	1.20	0.22	
11,458.0	90.40	1.30	7,435.6	4,229.3	-455.8	4,229.3	0.47	-0.21	
11,553.0	90.30	1.00	7,435.0	4,324.2	-453.9	4,324.2	0.33	-0.11	
11,647.0	90.40	1.80	7,434.4	4,418.2	-451.6	4,418.2	0.86	0.11	
11,742.0	91.10	2.20	7,433.2	4,513.1	-448.3	4,513.1	0.85	0.74	
11,836.0	91.00	0.30	7,431.5	4,607.1	-446.2	4,607.1	2.02	-0.11	
11,931.0	90.30	359.90	7,430.4	4,702.1	-446.1	4,702.1	0.85	-0.74	
12,026.0	89.90	359.90	7,430.2	4,797.1	-446.2	4,797.1	0.42	-0.42	
12,120.0	90.10	1.70	7,430.2	4,891.1	-444.9	4,891.1	1.93	0.21	
12,214.0	91.00	0.90	7,429.3	4,985.0	-442.8	4,985.0	1.28	0.96	
12,309.0	91.00	0.80	7,427.7	5,080.0	-441.4	5,080.0	0.11	0.00	
12,404.0	91.10	0.30	7,425.9	5,175.0	-440.5	5,175.0	0.54	0.11	
12,498.0	91.30	0.60	7,424.0	5,269.0	-439.7	5,269.0	0.38	0.21	
12,592.0	90.70	359.20	7,422.3	5,363.0	-439.9	5,363.0	1.62	-0.64	
12,687.0	90.80	359.30	7,421.1	5,457.9	-441.2	5,457.9	0.15	0.11	
12,781.0	90.90	359.20	7,419.7	5,551.9	-442.4	5,551.9	0.15	0.11	
12,876.0	91.10	359.70	7,418.0	5,646.9	-443.3	5,646.9	0.57	0.21	
12,970.0	91.10	0.40	7,416.2	5,740.9	-443.2	5,740.9	0.74	0.00	
13,065.0	90.00	359.30	7,415.3	5,835.9	-443.5	5,835.9	1.64	-1.16	
13,159.0	90.10	359.60	7,415.2	5,929.9	-444.4	5,929.9	0.34	0.11	
13,254.0	90.10	359.00	7,415.1	6,024.9	-445.5	6,024.9	0.63	0.00	
13,337.0	90.40	358.90	7,414.7	6,107.8	-447.0	6,107.8	0.38	0.36	Last CES Survey @ 13,337' MD
13,392.0	90.40	358.90	7,414.3	6,162.8	-448.1	6,162.8	0.00	0.00	PTB @ 13,392'

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Grant Salisbury 2D-14H-C268
Project:	DJ Wattenberg	TVD Reference:	KB @ 4894.0ft
Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	MD Reference:	KB @ 4894.0ft
Well:	Grant Salisbury 2D-14H-C268	North Reference:	True
Wellbore:	Hz	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 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									
Grant Salisbury 2D-14H-	0.00	0.00	7,410.0	6,200.1	-441.6	1,301,334.46	3,146,647.35	40.159360	-104.975340
- actual wellpath misses target center by 38.1ft at 13392.0ft MD (7414.3 TVD, 6162.8 N, -448.1 E)									
- Point									
Grant Salisbury 2D-14H-	0.00	0.00	7,389.5	6,200.1	-441.6	1,301,334.46	3,146,647.35	40.159360	-104.975340
- actual wellpath misses target center by 45.2ft at 13392.0ft MD (7414.3 TVD, 6162.8 N, -448.1 E)									
- Point									
Grant Salisbury 2D-14H-	0.00	0.00	7,419.5	2,904.3	-470.4	1,298,038.57	3,146,638.15	40.150313	-104.975443
- actual wellpath misses target center by 31.1ft at 10132.6ft MD (7445.6 TVD, 2904.4 N, -487.3 E)									
- Point									
Grant Salisbury 2D-14H-	0.00	0.00	7,419.5	504.4	-520.3	1,295,638.40	3,146,602.46	40.143725	-104.975621
- actual wellpath misses target center by 38.1ft at 7731.1ft MD (7414.0 TVD, 505.8 N, -558.0 E)									
- Point									

Design Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	
13,337.0	7,414.7	6,107.8	-447.0	Last CES Survey @ 13,337' MD
13,392.0	7,414.3	6,162.8	-448.1	PTB @ 13,392'

Checked By: _____	Approved By: _____	Date: _____
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EnCana Oil & Gas (USA) Inc

DJ Wattenberg

S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)

Grant Salisbury 2D-14H-C268

Hz

Design: FINAL

Survey Report - Geographic

09 October, 2014

Survey Report - Geographic

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Grant Salisbury 2D-14H-C268
Project:	DJ Wattenberg	TVD Reference:	KB @ 4894.0ft
Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	MD Reference:	KB @ 4894.0ft
Well:	Grant Salisbury 2D-14H-C268	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-T2N-R68W (Grant Elmquist/Salisbury/Hurt)				
Site Position:		Northing:	1,295,686.81 ft	Latitude:	40.143850
From:	Lat/Long	Easting:	3,147,060.98 ft	Longitude:	-104.973980
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.34 °

Well	Grant Salisbury 2D-14H-C268					
Well Position	+N/-S	0.0 ft	Northing:	1,295,137.10 ft	Latitude:	40.142340
	+E/-W	0.0 ft	Easting:	3,147,125.75 ft	Longitude:	-104.973760
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,886.0 ft

Wellbore	Hz				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	9/30/2014	8.51	66.70	52,627

Design	FINAL				
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	0.00	

Survey Program	Date	10/9/2014			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
141.0	13,392.0	Survey #1 (Hz)	Geolink MWD	Geolink MWD	

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude
0.0	0.00	0.00	0.0	0.0	0.0	1,295,137.10	3,147,125.75	40.142340	-104.973760
141.0	1.80	76.60	141.0	0.5	2.2	1,295,137.62	3,147,127.90	40.142341	-104.973753
234.0	0.30	96.10	234.0	0.8	3.8	1,295,137.95	3,147,129.56	40.142342	-104.973747
327.0	0.30	120.50	327.0	0.7	4.3	1,295,137.80	3,147,130.01	40.142342	-104.973745
421.0	1.80	305.60	420.9	1.4	3.3	1,295,138.53	3,147,129.02	40.142344	-104.973749
515.0	2.80	258.70	514.9	1.8	-0.2	1,295,138.92	3,147,125.56	40.142345	-104.973761
608.0	3.10	286.30	607.8	2.1	-4.8	1,295,139.15	3,147,120.92	40.142346	-104.973777
702.0	4.20	281.40	701.6	3.5	-10.6	1,295,140.51	3,147,115.10	40.142350	-104.973798
795.0	5.00	275.60	794.3	4.5	-18.0	1,295,141.54	3,147,107.72	40.142353	-104.973825
884.0	5.20	277.90	882.9	5.5	-25.9	1,295,142.42	3,147,099.86	40.142355	-104.973853
994.0	6.80	269.40	992.3	6.1	-37.3	1,295,142.97	3,147,088.41	40.142357	-104.973894
1,087.0	6.90	249.00	1,084.7	4.0	-48.0	1,295,140.85	3,147,077.70	40.142351	-104.973932

Survey Report - Geographic

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Grant Salisbury 2D-14H-C268
Project:	DJ Wattenberg	TVD Reference:	KB @ 4894.0ft
Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	MD Reference:	KB @ 4894.0ft
Well:	Grant Salisbury 2D-14H-C268	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)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude
1,181.0	5.60	235.60	1,178.1	-0.6	-57.1	1,295,136.18	3,147,068.67	40.142338	-104.973964
1,274.0	4.50	262.40	1,270.8	-3.6	-64.4	1,295,133.09	3,147,061.33	40.142330	-104.973991
1,368.0	4.10	252.30	1,364.5	-5.1	-71.3	1,295,131.54	3,147,054.48	40.142326	-104.974015
1,462.0	4.30	245.20	1,458.2	-7.6	-77.7	1,295,129.00	3,147,048.09	40.142319	-104.974038
1,555.0	4.40	245.70	1,551.0	-10.6	-84.1	1,295,126.03	3,147,041.69	40.142311	-104.974061
1,649.0	4.50	242.60	1,644.7	-13.7	-90.7	1,295,122.81	3,147,035.15	40.142302	-104.974085
1,742.0	3.90	235.00	1,737.4	-17.2	-96.5	1,295,119.28	3,147,029.34	40.142293	-104.974105
1,836.0	2.80	268.50	1,831.3	-19.1	-101.4	1,295,117.36	3,147,024.44	40.142288	-104.974123
1,930.0	1.10	268.50	1,925.2	-19.2	-104.6	1,295,117.26	3,147,021.24	40.142287	-104.974134
2,023.0	3.40	287.20	2,018.2	-18.4	-108.1	1,295,118.03	3,147,017.71	40.142289	-104.974147
2,117.0	6.30	282.40	2,111.8	-16.5	-115.8	1,295,119.92	3,147,010.00	40.142295	-104.974175
2,210.0	6.20	278.80	2,204.3	-14.6	-125.8	1,295,121.72	3,147,000.04	40.142300	-104.974210
2,305.0	7.20	265.50	2,298.6	-14.3	-136.8	1,295,121.97	3,146,989.03	40.142301	-104.974250
2,400.0	5.40	251.00	2,393.0	-16.2	-147.0	1,295,119.99	3,146,978.88	40.142295	-104.974286
2,494.0	5.90	252.20	2,486.6	-19.2	-155.7	1,295,117.02	3,146,970.12	40.142287	-104.974317
2,588.0	5.70	249.60	2,580.1	-22.3	-164.7	1,295,113.86	3,146,961.16	40.142279	-104.974349
2,684.0	5.40	266.70	2,675.7	-24.2	-173.7	1,295,111.89	3,146,952.19	40.142274	-104.974382
2,779.0	5.50	264.10	2,770.2	-24.9	-182.7	1,295,111.11	3,146,943.21	40.142272	-104.974414
2,873.0	5.30	263.30	2,863.8	-25.9	-191.5	1,295,110.09	3,146,934.42	40.142269	-104.974445
2,967.0	5.40	261.00	2,957.4	-27.1	-200.2	1,295,108.84	3,146,925.75	40.142266	-104.974476
3,062.0	5.40	260.20	3,052.0	-28.5	-209.0	1,295,107.33	3,146,916.94	40.142262	-104.974508
3,157.0	5.10	254.00	3,146.6	-30.5	-217.4	1,295,105.35	3,146,908.48	40.142256	-104.974538
3,251.0	5.00	251.80	3,240.2	-32.9	-225.4	1,295,102.87	3,146,900.59	40.142250	-104.974566
3,345.0	4.40	268.50	3,333.9	-34.3	-232.9	1,295,101.46	3,146,893.10	40.142246	-104.974593
3,440.0	4.70	263.90	3,428.6	-34.8	-240.4	1,295,100.90	3,146,885.59	40.142245	-104.974620
3,534.0	4.40	262.70	3,522.3	-35.6	-247.8	1,295,099.99	3,146,878.19	40.142242	-104.974647
3,629.0	4.30	264.10	3,617.0	-36.5	-254.9	1,295,099.12	3,146,871.04	40.142240	-104.974672
3,723.0	4.40	262.70	3,710.8	-37.3	-262.0	1,295,098.26	3,146,863.96	40.142238	-104.974697
3,818.0	4.40	260.10	3,805.5	-38.4	-269.2	1,295,097.12	3,146,856.76	40.142235	-104.974723
3,912.0	4.40	259.70	3,899.2	-39.6	-276.3	1,295,095.82	3,146,849.67	40.142231	-104.974749
4,007.0	3.90	260.30	3,994.0	-40.8	-283.1	1,295,094.58	3,146,842.91	40.142228	-104.974773
4,101.0	4.00	256.00	4,087.7	-42.2	-289.4	1,295,093.21	3,146,836.59	40.142224	-104.974795
4,196.0	4.90	271.20	4,182.5	-42.9	-296.7	1,295,092.45	3,146,829.32	40.142222	-104.974821
4,290.0	5.30	278.00	4,276.1	-42.2	-305.0	1,295,093.09	3,146,821.00	40.142224	-104.974851
4,385.0	5.20	276.50	4,370.7	-41.1	-313.6	1,295,094.14	3,146,812.37	40.142227	-104.974882
4,479.0	5.00	274.60	4,464.3	-40.3	-321.9	1,295,094.90	3,146,804.05	40.142229	-104.974912
4,575.0	6.60	270.10	4,559.8	-39.9	-331.6	1,295,095.19	3,146,794.36	40.142230	-104.974946
4,669.0	6.30	271.40	4,653.2	-39.8	-342.2	1,295,095.26	3,146,783.80	40.142231	-104.974984
4,763.0	5.40	259.00	4,746.7	-40.5	-351.7	1,295,094.49	3,146,774.31	40.142229	-104.975018
4,858.0	5.50	258.20	4,841.3	-42.3	-360.5	1,295,092.65	3,146,765.48	40.142224	-104.975050
4,952.0	5.20	261.20	4,934.9	-43.9	-369.1	1,295,091.03	3,146,756.87	40.142220	-104.975081
5,047.0	4.90	261.00	5,029.5	-45.2	-377.4	1,295,089.68	3,146,748.61	40.142216	-104.975110
5,141.0	4.70	257.50	5,123.2	-46.6	-385.1	1,295,088.18	3,146,740.90	40.142212	-104.975138
5,236.0	5.70	252.70	5,217.8	-48.9	-393.4	1,295,085.88	3,146,732.61	40.142206	-104.975168
5,330.0	5.60	252.60	5,311.4	-51.6	-402.3	1,295,083.07	3,146,723.79	40.142198	-104.975199
5,424.0	5.10	253.10	5,404.9	-54.2	-410.6	1,295,080.43	3,146,715.43	40.142191	-104.975229
5,519.0	4.90	254.10	5,499.6	-56.6	-418.6	1,295,078.05	3,146,707.50	40.142185	-104.975258
5,614.0	4.40	251.50	5,594.3	-58.8	-425.9	1,295,075.74	3,146,700.16	40.142179	-104.975284
5,708.0	5.30	260.90	5,687.9	-60.7	-433.7	1,295,073.86	3,146,692.46	40.142173	-104.975311
5,803.0	5.20	262.60	5,782.5	-61.9	-442.3	1,295,072.56	3,146,683.87	40.142170	-104.975342
5,898.0	4.70	260.30	5,877.2	-63.1	-450.4	1,295,071.30	3,146,675.77	40.142167	-104.975371
5,992.0	4.40	255.90	5,970.9	-64.7	-457.7	1,295,069.73	3,146,668.49	40.142163	-104.975397
6,087.0	4.00	256.00	6,065.6	-66.3	-464.4	1,295,068.00	3,146,661.75	40.142158	-104.975421
6,181.0	5.10	261.50	6,159.3	-67.8	-471.7	1,295,066.55	3,146,654.44	40.142154	-104.975448
6,276.0	4.70	262.70	6,254.0	-68.9	-479.8	1,295,065.38	3,146,646.41	40.142151	-104.975476

Survey Report - Geographic

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Grant Salisbury 2D-14H-C268
Project:	DJ Wattenberg	TVD Reference:	KB @ 4894.0ft
Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	MD Reference:	KB @ 4894.0ft
Well:	Grant Salisbury 2D-14H-C268	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)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude
6,370.0	4.30	258.30	6,347.7	-70.1	-487.0	1,295,064.13	3,146,639.15	40.142148	-104.975502
6,465.0	4.80	267.00	6,442.4	-71.0	-494.5	1,295,063.16	3,146,631.70	40.142145	-104.975529
6,560.0	4.30	262.00	6,537.1	-71.7	-502.0	1,295,062.41	3,146,624.20	40.142143	-104.975556
6,653.0	4.00	255.50	6,629.9	-73.0	-508.6	1,295,061.07	3,146,617.62	40.142140	-104.975579
6,747.0	4.40	268.90	6,723.6	-73.9	-515.3	1,295,060.14	3,146,610.85	40.142137	-104.975604
6,794.0	8.60	291.20	6,770.3	-72.7	-520.4	1,295,061.35	3,146,605.76	40.142141	-104.975622
6,842.0	11.50	305.20	6,817.6	-68.6	-527.7	1,295,065.36	3,146,598.47	40.142152	-104.975648
6,889.0	14.10	317.80	6,863.4	-61.7	-535.4	1,295,072.26	3,146,590.76	40.142171	-104.975675
6,936.0	17.50	336.40	6,908.6	-50.9	-542.0	1,295,082.95	3,146,584.01	40.142200	-104.975699
6,983.0	21.50	354.30	6,953.0	-35.9	-545.7	1,295,097.99	3,146,580.23	40.142242	-104.975712
7,032.0	23.00	359.60	6,998.3	-17.4	-546.7	1,295,116.50	3,146,579.16	40.142292	-104.975716
7,079.0	25.20	353.60	7,041.2	1.8	-547.9	1,295,135.62	3,146,577.87	40.142345	-104.975720
7,126.0	29.10	354.00	7,083.1	23.1	-550.2	1,295,156.93	3,146,575.43	40.142403	-104.975728
7,173.0	35.40	352.90	7,122.8	48.0	-553.1	1,295,181.81	3,146,572.41	40.142472	-104.975739
7,221.0	38.50	354.90	7,161.1	76.7	-556.1	1,295,210.48	3,146,569.19	40.142551	-104.975749
7,268.0	42.10	354.80	7,197.0	106.9	-558.8	1,295,240.73	3,146,566.28	40.142634	-104.975759
7,315.0	46.90	356.90	7,230.5	139.8	-561.2	1,295,273.56	3,146,563.73	40.142724	-104.975768
7,362.0	50.50	359.00	7,261.5	175.1	-562.4	1,295,308.83	3,146,562.27	40.142821	-104.975772
7,410.0	54.60	1.60	7,290.7	213.2	-562.2	1,295,346.92	3,146,562.27	40.142925	-104.975771
7,457.0	58.10	1.20	7,316.7	252.3	-561.3	1,295,386.03	3,146,562.99	40.143033	-104.975768
7,504.0	60.20	0.70	7,340.8	292.6	-560.6	1,295,426.38	3,146,563.42	40.143143	-104.975766
7,551.0	62.70	0.00	7,363.3	333.9	-560.4	1,295,467.66	3,146,563.42	40.143257	-104.975765
7,599.0	68.70	1.00	7,383.0	377.6	-560.0	1,295,511.39	3,146,563.55	40.143377	-104.975763
7,646.0	75.60	1.30	7,397.4	422.3	-559.1	1,295,556.09	3,146,564.19	40.143499	-104.975760
7,693.0	79.50	0.40	7,407.6	468.2	-558.4	1,295,601.98	3,146,564.59	40.143625	-104.975758
7,740.0	81.50	0.90	7,415.3	514.6	-557.9	1,295,648.33	3,146,564.84	40.143753	-104.975756
7,788.0	83.60	1.30	7,421.6	562.1	-556.9	1,295,695.92	3,146,565.48	40.143883	-104.975752
7,805.0	85.10	1.70	7,423.2	579.0	-556.5	1,295,712.83	3,146,565.82	40.143930	-104.975751
7,882.0	87.60	1.00	7,428.1	655.8	-554.7	1,295,789.64	3,146,567.17	40.144140	-104.975744
7,976.0	87.30	0.40	7,432.3	749.7	-553.5	1,295,883.55	3,146,567.76	40.144398	-104.975740
8,070.0	88.10	2.50	7,436.1	843.6	-551.2	1,295,977.45	3,146,569.58	40.144656	-104.975732
8,163.0	86.70	1.80	7,440.3	936.5	-547.7	1,296,070.30	3,146,572.52	40.144911	-104.975719
8,257.0	87.90	2.10	7,444.7	1,030.3	-544.5	1,296,164.16	3,146,575.16	40.145168	-104.975708
8,350.0	89.20	3.00	7,447.1	1,123.2	-540.4	1,296,257.06	3,146,578.74	40.145423	-104.975693
8,444.0	91.20	4.50	7,446.8	1,217.0	-534.2	1,296,350.88	3,146,584.33	40.145681	-104.975671
8,537.0	90.70	3.40	7,445.2	1,309.7	-527.8	1,296,443.68	3,146,590.19	40.145935	-104.975648
8,631.0	90.40	3.20	7,444.3	1,403.6	-522.4	1,296,537.55	3,146,595.04	40.146193	-104.975629
8,724.0	90.90	3.50	7,443.3	1,496.4	-517.0	1,296,630.42	3,146,599.92	40.146448	-104.975609
8,818.0	89.70	2.40	7,442.8	1,590.3	-512.1	1,296,724.32	3,146,604.20	40.146706	-104.975592
8,911.0	90.00	3.50	7,443.0	1,683.2	-507.3	1,296,817.22	3,146,608.44	40.146961	-104.975575
9,005.0	90.40	1.70	7,442.7	1,777.1	-503.1	1,296,911.14	3,146,612.14	40.147218	-104.975560
9,098.0	90.40	1.00	7,442.0	1,870.0	-500.9	1,297,004.12	3,146,613.78	40.147474	-104.975552
9,192.0	90.50	0.90	7,441.3	1,964.0	-499.3	1,297,098.11	3,146,614.78	40.147732	-104.975546
9,287.0	89.10	359.10	7,441.6	2,059.0	-499.3	1,297,193.11	3,146,614.22	40.147992	-104.975546
9,381.0	89.00	0.30	7,443.2	2,153.0	-499.8	1,297,287.09	3,146,613.17	40.148250	-104.975548
9,476.0	90.00	0.90	7,444.0	2,248.0	-498.8	1,297,382.08	3,146,613.60	40.148511	-104.975545
9,570.0	90.10	2.00	7,443.9	2,341.9	-496.4	1,297,476.06	3,146,615.42	40.148769	-104.975536
9,665.0	90.90	2.20	7,443.1	2,436.9	-493.0	1,297,571.01	3,146,618.34	40.149030	-104.975524
9,759.0	90.70	1.00	7,441.8	2,530.8	-490.3	1,297,664.98	3,146,620.41	40.149288	-104.975514
9,854.0	89.10	359.80	7,442.0	2,625.8	-489.7	1,297,759.97	3,146,620.51	40.149548	-104.975512
9,948.0	88.80	0.30	7,443.7	2,719.8	-489.6	1,297,853.95	3,146,620.03	40.149806	-104.975512
10,042.0	89.50	0.80	7,445.1	2,813.8	-488.7	1,297,947.94	3,146,620.37	40.150064	-104.975508
10,137.0	89.90	0.90	7,445.6	2,908.8	-487.3	1,298,042.94	3,146,621.22	40.150325	-104.975503
10,231.0	90.30	1.00	7,445.4	3,002.8	-485.7	1,298,136.93	3,146,622.22	40.150583	-104.975498
10,326.0	89.80	1.50	7,445.3	3,097.7	-483.6	1,298,231.92	3,146,623.73	40.150844	-104.975490

Survey Report - Geographic

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Grant Salisbury 2D-14H-C268
Project:	DJ Wattenberg	TVD Reference:	KB @ 4894.0ft
Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	MD Reference:	KB @ 4894.0ft
Well:	Grant Salisbury 2D-14H-C268	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)	Map Northing (ft)	Map Easting (ft)	Latitude	Longitude	
10,420.0	89.90	0.90	7,445.6	3,191.7	-481.7	1,298,325.91	3,146,625.14	40.151102	-104.975483	
10,514.0	90.10	0.30	7,445.6	3,285.7	-480.7	1,298,419.91	3,146,625.57	40.151360	-104.975480	
10,609.0	90.00	2.00	7,445.5	3,380.7	-478.8	1,298,514.89	3,146,626.91	40.151620	-104.975473	
10,703.0	89.90	1.30	7,445.6	3,474.7	-476.1	1,298,608.87	3,146,629.06	40.151878	-104.975463	
10,797.0	92.00	2.70	7,444.0	3,568.6	-472.8	1,298,702.81	3,146,631.78	40.152136	-104.975452	
10,892.0	91.50	1.90	7,441.1	3,663.5	-469.0	1,298,797.71	3,146,635.03	40.152397	-104.975438	
10,986.0	90.90	2.00	7,439.1	3,757.4	-465.8	1,298,891.65	3,146,637.67	40.152655	-104.975427	
11,081.0	90.20	0.70	7,438.2	3,852.3	-463.6	1,298,986.63	3,146,639.34	40.152915	-104.975419	
11,175.0	90.30	1.40	7,437.8	3,946.3	-461.8	1,299,080.62	3,146,640.51	40.153173	-104.975412	
11,270.0	90.40	0.60	7,437.2	4,041.3	-460.2	1,299,175.61	3,146,641.60	40.153434	-104.975407	
11,363.0	90.60	1.70	7,436.4	4,134.3	-458.3	1,299,268.60	3,146,642.92	40.153689	-104.975400	
11,458.0	90.40	1.30	7,435.6	4,229.3	-455.8	1,299,363.57	3,146,644.84	40.153950	-104.975391	
11,553.0	90.30	1.00	7,435.0	4,324.2	-453.9	1,299,458.56	3,146,646.18	40.154211	-104.975384	
11,647.0	90.40	1.80	7,434.4	4,418.2	-451.6	1,299,552.54	3,146,647.92	40.154469	-104.975376	
11,742.0	91.10	2.20	7,433.2	4,513.1	-448.3	1,299,647.49	3,146,650.67	40.154729	-104.975364	
11,836.0	91.00	0.30	7,431.5	4,607.1	-446.2	1,299,741.46	3,146,652.17	40.154987	-104.975357	
11,931.0	90.30	359.90	7,430.4	4,702.1	-446.1	1,299,836.45	3,146,651.77	40.155248	-104.975356	
12,026.0	89.90	359.90	7,430.2	4,797.1	-446.2	1,299,931.45	3,146,651.04	40.155509	-104.975357	
12,120.0	90.10	1.70	7,430.2	4,891.1	-444.9	1,300,025.44	3,146,651.79	40.155767	-104.975352	
12,214.0	91.00	0.90	7,429.3	4,985.0	-442.8	1,300,119.42	3,146,653.37	40.156025	-104.975344	
12,309.0	91.00	0.80	7,427.7	5,080.0	-441.4	1,300,214.41	3,146,654.21	40.156285	-104.975339	
12,404.0	91.10	0.30	7,425.9	5,175.0	-440.5	1,300,309.39	3,146,654.56	40.156546	-104.975336	
12,498.0	91.30	0.60	7,424.0	5,269.0	-439.7	1,300,403.37	3,146,654.74	40.156804	-104.975334	
12,592.0	90.70	359.20	7,422.3	5,363.0	-439.9	1,300,497.35	3,146,654.02	40.157062	-104.975334	
12,687.0	90.80	359.30	7,421.1	5,457.9	-441.2	1,300,592.32	3,146,652.21	40.157323	-104.975339	
12,781.0	90.90	359.20	7,419.7	5,551.9	-442.4	1,300,686.30	3,146,650.43	40.157581	-104.975343	
12,876.0	91.10	359.70	7,418.0	5,646.9	-443.3	1,300,781.27	3,146,648.95	40.157842	-104.975346	
12,970.0	91.10	0.40	7,416.2	5,740.9	-443.2	1,300,875.25	3,146,648.47	40.158100	-104.975346	
13,065.0	90.00	359.30	7,415.3	5,835.9	-443.5	1,300,970.24	3,146,647.66	40.158360	-104.975347	
13,159.0	90.10	359.60	7,415.2	5,929.9	-444.4	1,301,064.23	3,146,646.20	40.158618	-104.975350	
13,254.0	90.10	359.00	7,415.1	6,024.9	-445.5	1,301,159.21	3,146,644.48	40.158879	-104.975354	
13,337.0	90.40	358.90	7,414.7	6,107.8	-447.0	1,301,242.19	3,146,642.46	40.159107	-104.975360	
Last CES Survey @ 13,337' MD										
13,392.0	90.40	358.90	7,414.3	6,162.8	-448.1	1,301,297.17	3,146,641.08	40.159258	-104.975363	
PTB @ 13,392'										

Design Targets										
Target Name										
- hit/miss target	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude	
Grant Salisbury 2D-14H-	0.00	0.00	7,389.5	6,200.1	-441.6	1,301,334.46	3,146,647.35	40.159360	-104.975340	
- actual wellpath misses target center by 45.2ft at 13392.0ft MD (7414.3 TVD, 6162.8 N, -448.1 E)										
- Point										

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
13,337.0	7,414.7	6,107.8	-447.0	Last CES Survey @ 13,337' MD	
13,392.0	7,414.3	6,162.8	-448.1	PTB @ 13,392'	

Survey Report - Geographic

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Grant Salisbury 2D-14H-C268
Project:	DJ Wattenberg	TVD Reference:	KB @ 4894.0ft
Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	MD Reference:	KB @ 4894.0ft
Well:	Grant Salisbury 2D-14H-C268	North Reference:	True
Wellbore:	Hz	Survey Calculation Method:	Minimum Curvature
Design:	FINAL	Database:	USA EDM 5000 Multi Users DB

Checked By: _____ Approved By: _____ Date: _____