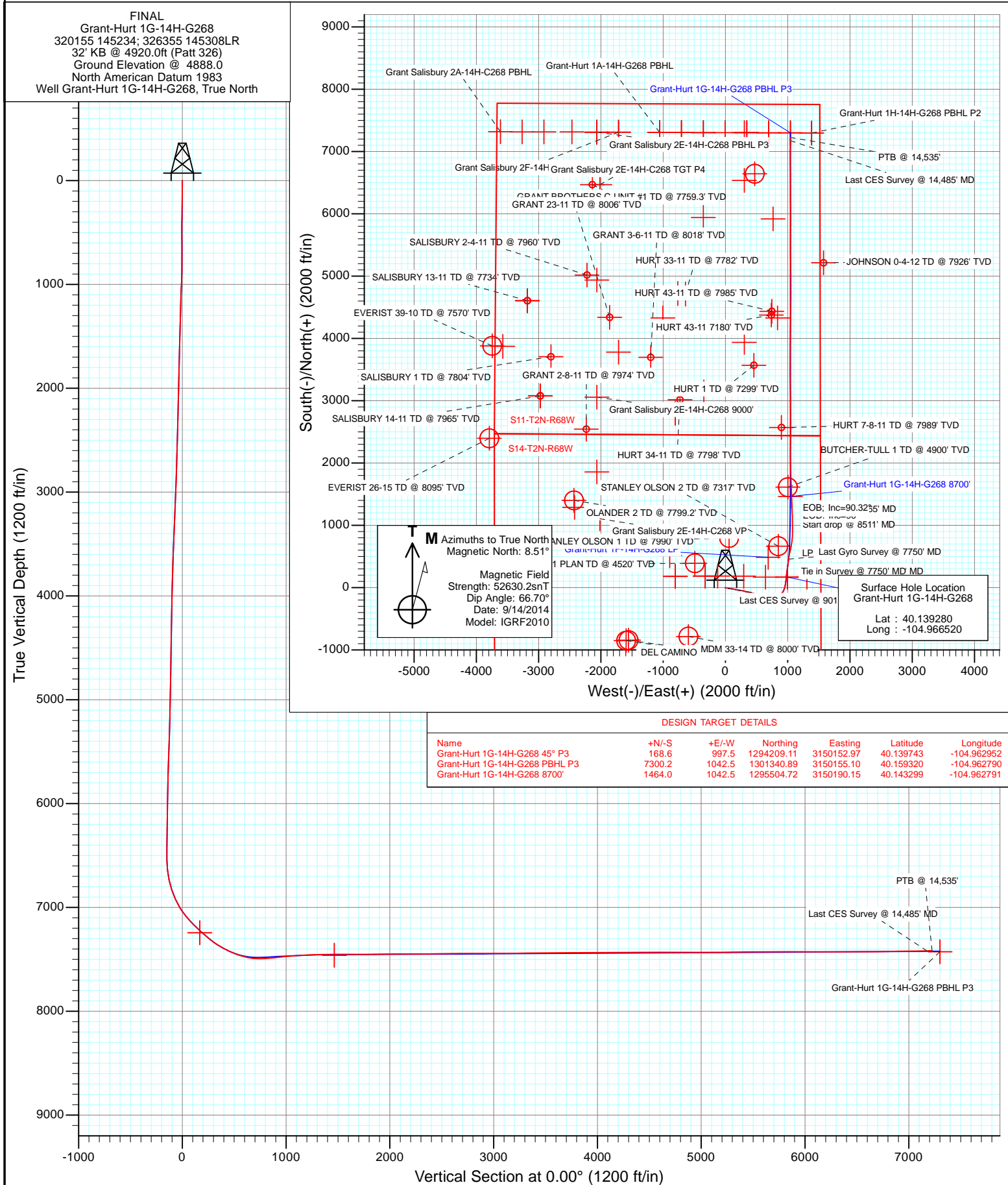


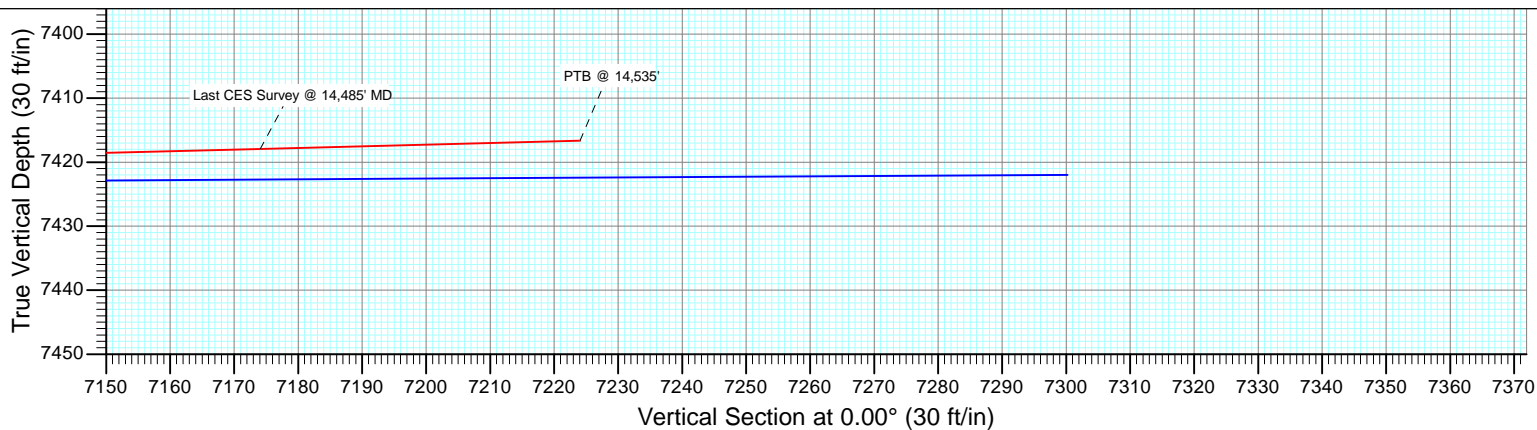
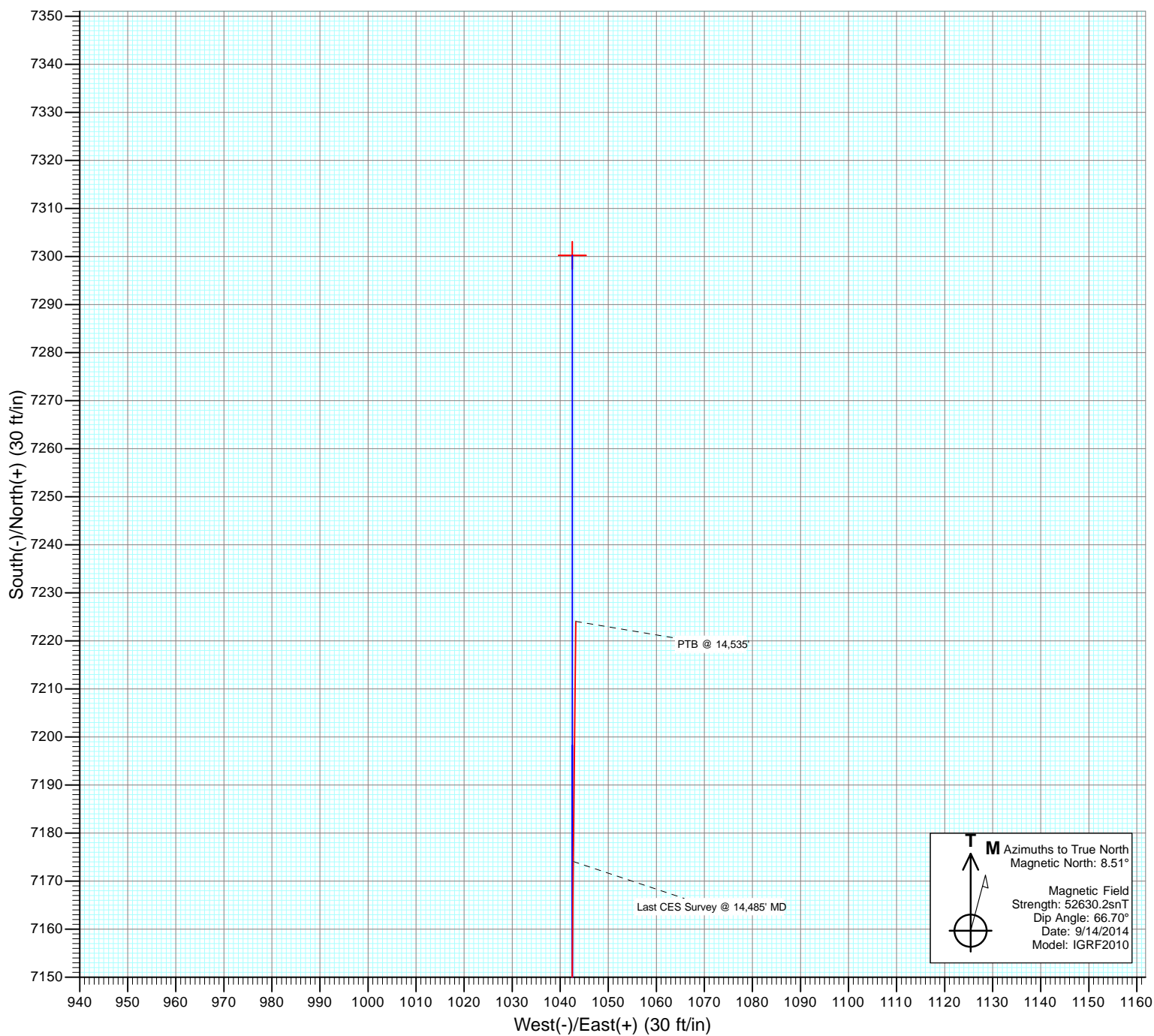


Project: DJ Wattenberg
Site: S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)
Well: Grant-Hurt 1G-14H-G268
Wellbore: Hz
Design: FINAL





Project: DJ Wattenberg
Site: S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)
Well: Grant-Hurt 1G-14H-G268
Wellbore: Hz
Design: FINAL



Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Grant-Hurt 1G-14H-G268
Project:	DJ Wattenberg	TVD Reference:	32' KB @ 4920.0ft (Patt 326)
Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	MD Reference:	32' KB @ 4920.0ft (Patt 326)
Well:	Grant-Hurt 1G-14H-G268	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-Hurt 1G-14H-G268					
Well Position	+N/-S	0.0 ft	Northing:	1,294,034.52 ft	Latitude:	40.139280
	+E/-W	0.0 ft	Easting:	3,149,156.50 ft	Longitude:	-104.966520
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,888.0 ft

Wellbore	Hz				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	9/14/2014	8.51	66.70	52,630

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	9/23/2014			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
146.0	901.0	Survey #2 HTR (Hz)	Geolink MWD	Geolink MWD	
1,000.0	7,750.0	Survey #3 (Hz)	Gyro	Gyro	
7,895.0	14,535.0	Survey #4 (Hz)	Geolink MWD	Geolink MWD	

Survey									
Measured			Vertical			Vertical	Dogleg	Build	Formations / Comments
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Section	Rate	Rate	
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
146.0	0.60	210.00	146.0	-0.7	-0.4	-0.7	0.41	0.41	
241.0	0.70	204.00	241.0	-1.6	-0.9	-1.6	0.13	0.11	
335.0	1.00	154.50	335.0	-2.9	-0.7	-2.9	0.81	0.32	
430.0	1.50	121.70	430.0	-4.3	0.7	-4.3	0.90	0.53	
525.0	1.90	88.50	524.9	-4.9	3.3	-4.9	1.10	0.42	
620.0	3.40	81.00	619.8	-4.4	7.7	-4.4	1.62	1.58	
714.0	4.30	82.30	713.6	-3.5	13.9	-3.5	0.96	0.96	
809.0	4.60	97.60	808.3	-3.5	21.2	-3.5	1.28	0.32	
901.0	6.40	103.30	899.9	-5.2	29.9	-5.2	2.04	1.96	Last CES Survey @ 901' MD
1,000.0	8.32	106.86	998.1	-8.6	42.1	-8.6	1.99	1.94	

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Grant-Hurt 1G-14H-G268
Project:	DJ Wattenberg	TVD Reference:	32' KB @ 4920.0ft (Patt 326)
Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	MD Reference:	32' KB @ 4920.0ft (Patt 326)
Well:	Grant-Hurt 1G-14H-G268	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
1,100.0	9.32	104.96	1,096.9	-12.7	56.8	-12.7	1.04	1.00	
1,400.0	8.50	94.65	1,393.3	-20.8	102.4	-20.8	0.60	-0.27	
1,700.0	8.34	103.21	1,690.1	-27.6	145.7	-27.6	0.42	-0.05	
2,000.0	8.16	103.11	1,987.0	-37.4	187.6	-37.4	0.06	-0.06	
2,300.0	8.53	95.05	2,283.8	-44.2	230.5	-44.2	0.41	0.12	
2,600.0	7.74	99.38	2,580.8	-49.4	272.6	-49.4	0.33	-0.26	
2,900.0	8.55	106.41	2,877.8	-59.0	313.9	-59.0	0.43	0.27	
3,200.0	8.03	104.10	3,174.6	-70.4	355.6	-70.4	0.21	-0.17	
3,500.0	9.65	106.27	3,471.0	-82.6	400.1	-82.6	0.55	0.54	
3,800.0	8.14	100.98	3,767.4	-93.7	445.1	-93.7	0.57	-0.50	
4,100.0	8.89	98.43	4,064.1	-101.1	488.9	-101.1	0.28	0.25	
4,400.0	8.03	94.64	4,360.9	-106.2	532.7	-106.2	0.34	-0.29	
4,700.0	8.48	96.17	4,657.7	-110.3	575.6	-110.3	0.17	0.15	
5,000.0	8.09	98.31	4,954.6	-115.7	618.5	-115.7	0.17	-0.13	
5,300.0	7.22	101.52	5,251.9	-122.5	657.8	-122.5	0.32	-0.29	
5,600.0	8.90	103.82	5,549.0	-131.8	698.9	-131.8	0.57	0.56	
5,900.0	6.27	99.02	5,846.3	-140.0	737.6	-140.0	0.90	-0.88	
6,200.0	7.56	97.46	6,144.1	-145.1	773.3	-145.1	0.43	0.43	
6,500.0	8.27	93.61	6,441.3	-149.0	814.4	-149.0	0.29	0.24	
6,600.0	9.96	81.74	6,540.0	-148.2	830.2	-148.2	2.52	1.69	
6,700.0	12.75	69.53	6,638.1	-143.1	849.1	-143.1	3.67	2.79	
6,800.0	20.42	49.10	6,733.9	-127.8	872.6	-127.8	9.53	7.67	
6,900.0	21.81	43.13	6,827.2	-102.8	898.5	-102.8	2.56	1.39	
7,000.0	28.50	30.88	6,917.7	-68.7	923.5	-68.7	8.44	6.68	
7,100.0	32.94	20.12	7,003.7	-22.6	945.2	-22.6	7.05	4.44	
7,200.0	39.72	9.87	7,084.3	34.5	960.0	34.5	9.08	6.78	
7,300.0	45.37	7.76	7,158.0	101.3	970.3	101.3	5.83	5.65	
7,400.0	48.06	6.24	7,226.5	173.5	979.2	173.5	2.91	2.69	
7,500.0	49.32	7.85	7,292.6	248.0	988.4	248.0	1.75	1.26	
7,600.0	56.94	7.46	7,352.5	327.3	999.0	327.3	7.62	7.62	
7,700.0	63.15	6.54	7,402.4	413.2	1,009.5	413.2	6.26	6.21	
7,750.0	65.73	6.92	7,424.0	458.0	1,014.8	458.0	5.21	5.16	Last Gyro Survey @ 7750' MD
7,895.0	74.80	14.20	7,473.0	591.9	1,040.0	591.9	7.84	6.26	
7,941.0	78.80	11.70	7,483.5	635.5	1,050.1	635.5	10.18	8.70	
7,987.0	83.80	10.30	7,490.4	680.2	1,058.7	680.2	11.28	10.87	
8,079.0	93.50	6.20	7,492.6	771.1	1,071.9	771.1	11.44	10.54	
8,171.0	95.20	359.80	7,485.6	862.6	1,076.7	862.6	7.18	1.85	
8,263.0	95.60	0.30	7,477.0	954.2	1,076.8	954.2	0.69	0.43	
8,355.0	94.20	358.70	7,469.1	1,045.9	1,076.0	1,045.9	2.31	-1.52	
8,447.0	94.20	358.90	7,462.4	1,137.6	1,074.1	1,137.6	0.22	0.00	
8,539.0	92.80	357.90	7,456.8	1,229.4	1,071.5	1,229.4	1.87	-1.52	
8,634.0	91.20	357.90	7,453.4	1,324.3	1,068.0	1,324.3	1.68	-1.68	
8,729.0	90.10	357.70	7,452.4	1,419.2	1,064.4	1,419.2	1.18	-1.16	
8,824.0	90.10	358.00	7,452.2	1,514.1	1,060.8	1,514.1	0.32	0.00	
8,919.0	89.90	358.00	7,452.2	1,609.1	1,057.5	1,609.1	0.21	-0.21	
9,013.0	89.80	358.10	7,452.4	1,703.0	1,054.3	1,703.0	0.15	-0.11	
9,108.0	90.80	357.30	7,451.9	1,797.9	1,050.5	1,797.9	1.35	1.05	
9,202.0	91.00	358.20	7,450.5	1,891.8	1,046.8	1,891.8	0.98	0.21	
9,297.0	90.80	359.40	7,449.0	1,986.8	1,044.8	1,986.8	1.28	-0.21	
9,392.0	90.40	358.50	7,448.0	2,081.8	1,043.1	2,081.8	1.04	-0.42	
9,487.0	90.10	1.00	7,447.6	2,176.8	1,042.6	2,176.8	2.65	-0.32	
9,582.0	90.20	1.20	7,447.3	2,271.8	1,044.5	2,271.8	0.24	0.11	
9,677.0	90.20	1.70	7,447.0	2,366.7	1,046.9	2,366.7	0.53	0.00	

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Grant-Hurt 1G-14H-G268
Project:	DJ Wattenberg	TVD Reference:	32' KB @ 4920.0ft (Patt 326)
Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	MD Reference:	32' KB @ 4920.0ft (Patt 326)
Well:	Grant-Hurt 1G-14H-G268	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
9,771.0	90.40	1.10	7,446.5	2,460.7	1,049.2	2,460.7	0.67	0.21	
9,866.0	90.90	359.70	7,445.4	2,555.7	1,049.8	2,555.7	1.56	0.53	
9,961.0	90.70	359.80	7,444.1	2,650.7	1,049.4	2,650.7	0.24	-0.21	
10,055.0	90.70	359.90	7,442.9	2,744.7	1,049.2	2,744.7	0.11	0.00	
10,149.0	89.80	358.60	7,442.5	2,838.7	1,047.9	2,838.7	1.68	-0.96	
10,244.0	89.90	359.00	7,442.8	2,933.6	1,046.0	2,933.6	0.43	0.11	
10,339.0	90.10	358.80	7,442.8	3,028.6	1,044.1	3,028.6	0.30	0.21	
10,434.0	90.50	359.10	7,442.3	3,123.6	1,042.4	3,123.6	0.53	0.42	
10,529.0	90.70	358.80	7,441.3	3,218.6	1,040.7	3,218.6	0.38	0.21	
10,623.0	90.80	359.20	7,440.1	3,312.6	1,039.0	3,312.6	0.44	0.11	
10,718.0	91.00	359.70	7,438.6	3,407.5	1,038.1	3,407.5	0.57	0.21	
10,813.0	90.30	0.10	7,437.5	3,502.5	1,037.9	3,502.5	0.85	-0.74	
10,908.0	90.30	0.10	7,437.0	3,597.5	1,038.1	3,597.5	0.00	0.00	
11,002.0	90.40	0.30	7,436.4	3,691.5	1,038.4	3,691.5	0.24	0.11	
11,097.0	90.50	0.50	7,435.7	3,786.5	1,039.1	3,786.5	0.24	0.11	
11,191.0	90.50	0.60	7,434.8	3,880.5	1,040.0	3,880.5	0.11	0.00	
11,286.0	90.20	0.90	7,434.3	3,975.5	1,041.2	3,975.5	0.45	-0.32	
11,380.0	90.20	0.90	7,433.9	4,069.5	1,042.7	4,069.5	0.00	0.00	
11,474.0	90.20	1.00	7,433.6	4,163.5	1,044.3	4,163.5	0.11	0.00	
11,569.0	90.30	1.00	7,433.2	4,258.5	1,045.9	4,258.5	0.11	0.11	
11,663.0	90.50	1.30	7,432.5	4,352.4	1,047.8	4,352.4	0.38	0.21	
11,758.0	90.30	0.60	7,431.9	4,447.4	1,049.4	4,447.4	0.77	-0.21	
11,852.0	89.90	0.60	7,431.7	4,541.4	1,050.4	4,541.4	0.43	-0.43	
11,946.0	89.50	0.20	7,432.2	4,635.4	1,051.0	4,635.4	0.60	-0.43	
12,041.0	89.60	0.20	7,433.0	4,730.4	1,051.4	4,730.4	0.11	0.11	
12,135.0	89.80	0.60	7,433.4	4,824.4	1,052.0	4,824.4	0.48	0.21	
12,230.0	90.10	359.00	7,433.5	4,919.4	1,051.7	4,919.4	1.71	0.32	
12,325.0	90.10	359.20	7,433.4	5,014.4	1,050.2	5,014.4	0.21	0.00	
12,420.0	90.10	359.60	7,433.2	5,109.4	1,049.2	5,109.4	0.42	0.00	
12,515.0	90.60	359.50	7,432.6	5,204.4	1,048.5	5,204.4	0.54	0.53	
12,609.0	91.30	358.80	7,431.1	5,298.4	1,047.1	5,298.4	1.05	0.74	
12,704.0	91.90	358.60	7,428.4	5,393.3	1,044.9	5,393.3	0.67	0.63	
12,799.0	90.20	0.20	7,426.7	5,488.3	1,043.9	5,488.3	2.46	-1.79	
12,893.0	90.70	0.80	7,425.9	5,582.3	1,044.7	5,582.3	0.83	0.53	
12,988.0	89.10	0.80	7,426.1	5,677.3	1,046.1	5,677.3	1.68	-1.68	
13,083.0	89.10	0.90	7,427.6	5,772.2	1,047.5	5,772.2	0.11	0.00	
13,177.0	89.90	0.10	7,428.4	5,866.2	1,048.3	5,866.2	1.20	0.85	
13,272.0	90.00	0.50	7,428.5	5,961.2	1,048.8	5,961.2	0.43	0.11	
13,367.0	90.10	358.80	7,428.4	6,056.2	1,048.2	6,056.2	1.79	0.11	
13,461.0	90.10	359.10	7,428.2	6,150.2	1,046.5	6,150.2	0.32	0.00	
13,556.0	90.20	359.50	7,428.0	6,245.2	1,045.3	6,245.2	0.43	0.11	
13,650.0	90.10	359.50	7,427.7	6,339.2	1,044.5	6,339.2	0.11	-0.11	
13,746.0	90.50	359.70	7,427.2	6,435.2	1,043.8	6,435.2	0.47	0.42	
13,840.0	90.60	359.70	7,426.3	6,529.2	1,043.3	6,529.2	0.11	0.11	
13,935.0	90.60	359.70	7,425.3	6,624.2	1,042.8	6,624.2	0.00	0.00	
14,030.0	90.50	359.60	7,424.4	6,719.2	1,042.3	6,719.2	0.15	-0.11	
14,125.0	90.60	359.90	7,423.5	6,814.2	1,041.8	6,814.2	0.33	0.11	
14,220.0	90.60	359.90	7,422.5	6,909.2	1,041.7	6,909.2	0.00	0.00	
14,315.0	90.70	0.00	7,421.4	7,004.2	1,041.6	7,004.2	0.15	0.11	
14,410.0	91.30	0.50	7,419.8	7,099.1	1,042.0	7,099.1	0.82	0.63	
14,485.0	91.50	0.60	7,418.0	7,174.1	1,042.7	7,174.1	0.30	0.27	Last CES Survey @ 14,485' MD
14,535.0	91.50	0.60	7,416.6	7,224.1	1,043.3	7,224.1	0.00	0.00	PTB @ 14,535'

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Grant-Hurt 1G-14H-G268
Project:	DJ Wattenberg	TVD Reference:	32' KB @ 4920.0ft (Patt 326)
Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	MD Reference:	32' KB @ 4920.0ft (Patt 326)
Well:	Grant-Hurt 1G-14H-G268	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)		
Grant-Hurt 1G-14H-G26	0.00	0.00	7,400.0	7,300.2	1,042.5	1,301,340.89	3,150,155.10	40.159320	-104.962790
- actual wellpath misses target center by 78.0ft at 14535.0ft MD (7416.6 TVD, 7224.1 N, 1043.3 E)									
- Point									
Grant-Hurt 1G-14H-G26	0.00	0.00	7,427.0	7,300.2	1,042.5	1,301,340.89	3,150,155.10	40.159320	-104.962790
- actual wellpath misses target center by 76.9ft at 14535.0ft MD (7416.6 TVD, 7224.1 N, 1043.3 E)									
- Point									
Grant-Hurt 1G-14H-G26	0.00	0.00	7,460.0	1,464.0	1,042.5	1,295,504.72	3,150,190.15	40.143299	-104.962791
- actual wellpath misses target center by 21.6ft at 8774.6ft MD (7452.3 TVD, 1464.7 N, 1062.6 E)									
- Point									
Grant-Hurt 1G-14H-G26	0.00	0.00	7,243.8	168.6	997.5	1,294,209.11	3,150,152.97	40.139743	-104.962952
- actual wellpath misses target center by 23.9ft at 7409.4ft MD (7232.8 TVD, 180.5 N, 979.9 E)									
- Point									
Grant-Hurt 1G-14H-G26	0.00	0.00	7,183.8	168.6	997.5	1,294,209.11	3,150,152.97	40.139743	-104.962952
- actual wellpath misses target center by 35.1ft at 7368.8ft MD (7205.5 TVD, 150.6 N, 976.6 E)									
- Point									

Design Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	
901.0	899.9	-5.2	29.9	Last CES Survey @ 901' MD
7,750.0	7,424.0	458.0	1,014.8	Last Gyro Survey @ 7750' MD
14,485.0	7,418.0	7,174.1	1,042.7	Last CES Survey @ 14,485' MD
14,535.0	7,416.6	7,224.1	1,043.3	PTB @ 14,535'

Checked By: _____ Approved By: _____ Date: _____

EnCana Oil & Gas (USA) Inc

DJ Wattenberg

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

Grant-Hurt 1G-14H-G268

Hz

Design: FINAL

Survey Report - Geographic

23 September, 2014

Cathedral Energy Services

Survey Report - Geographic

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Grant-Hurt 1G-14H-G268
Project:	DJ Wattenberg	TVD Reference:	32' KB @ 4920.0ft (Patt 326)
Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	MD Reference:	32' KB @ 4920.0ft (Patt 326)
Well:	Grant-Hurt 1G-14H-G268	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-Hurt 1G-14H-G268					
Well Position	+N/-S	0.0 ft	Northing:	1,294,034.51 ft	Latitude:	40.139280
	+E/-W	0.0 ft	Easting:	3,149,156.50 ft	Longitude:	-104.966520
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,888.0 ft

Wellbore	Hz				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	9/14/2014	8.51	66.70	52,630

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	9/23/2014			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
146.0	901.0	Survey #2 HTR (Hz)	Geolink MWD	Geolink MWD	
1,000.0	7,750.0	Survey #3 (Hz)	Gyro	Gyro	
7,895.0	14,535.0	Survey #4 (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	1,294,034.51	3,149,156.50	40.139280	-104.966520	
146.0	0.60	210.00	146.0	-0.7	-0.4	1,294,033.85	3,149,156.12	40.139278	-104.966522	
241.0	0.70	204.00	241.0	-1.6	-0.9	1,294,032.89	3,149,155.64	40.139276	-104.966523	
335.0	1.00	154.50	335.0	-2.9	-0.7	1,294,031.62	3,149,155.77	40.139272	-104.966523	
430.0	1.50	121.70	430.0	-4.3	0.7	1,294,030.23	3,149,157.19	40.139268	-104.966518	
525.0	1.90	88.50	524.9	-4.9	3.3	1,294,029.63	3,149,159.83	40.139267	-104.966508	
620.0	3.40	81.00	619.8	-4.4	7.7	1,294,030.14	3,149,164.18	40.139268	-104.966493	
714.0	4.30	82.30	713.6	-3.5	13.9	1,294,031.09	3,149,170.42	40.139270	-104.966471	
809.0	4.60	97.60	808.3	-3.5	21.2	1,294,031.10	3,149,177.73	40.139270	-104.966444	

Cathedral Energy Services

Survey Report - Geographic

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Grant-Hurt 1G-14H-G268
Project:	DJ Wattenberg	TVD Reference:	32' KB @ 4920.0ft (Patt 326)
Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	MD Reference:	32' KB @ 4920.0ft (Patt 326)
Well:	Grant-Hurt 1G-14H-G268	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
901.0	6.40	103.30	899.9	-5.2	29.9	1,294,029.49	3,149,186.39	40.139266	-104.966413
Last CES Survey @ 901' MD									
1,000.0	8.32	106.86	998.1	-8.6	42.1	1,294,026.21	3,149,198.63	40.139257	-104.966370
1,100.0	9.32	104.96	1,096.9	-12.7	56.8	1,294,022.11	3,149,213.40	40.139245	-104.966317
1,400.0	8.50	94.65	1,393.3	-20.8	102.4	1,294,014.32	3,149,259.02	40.139223	-104.966154
1,700.0	8.34	103.21	1,690.1	-27.6	145.7	1,294,007.81	3,149,302.33	40.139204	-104.965999
2,000.0	8.17	103.11	1,987.0	-37.4	187.6	1,293,998.26	3,149,344.32	40.139177	-104.965849
2,300.0	8.53	95.05	2,283.8	-44.2	230.5	1,293,991.72	3,149,387.27	40.139159	-104.965696
2,600.0	7.74	99.38	2,580.8	-49.4	272.6	1,293,986.72	3,149,429.38	40.139144	-104.965545
2,900.0	8.55	106.41	2,877.8	-59.0	313.9	1,293,977.38	3,149,470.75	40.139118	-104.965398
3,200.0	8.03	104.10	3,174.6	-70.4	355.6	1,293,966.23	3,149,512.53	40.139087	-104.965248
3,500.0	9.65	106.27	3,471.0	-82.6	400.1	1,293,954.34	3,149,557.07	40.139053	-104.965089
3,800.0	8.14	100.98	3,767.4	-93.7	445.1	1,293,943.52	3,149,602.14	40.139023	-104.964928
4,100.0	8.89	98.43	4,064.1	-101.1	488.9	1,293,936.34	3,149,645.97	40.139002	-104.964772
4,400.0	8.03	94.64	4,360.9	-106.2	532.7	1,293,931.51	3,149,689.82	40.138988	-104.964615
4,700.0	8.49	96.17	4,657.7	-110.3	575.6	1,293,927.70	3,149,732.73	40.138977	-104.964462
5,000.0	8.09	98.31	4,954.6	-115.7	618.5	1,293,922.53	3,149,775.65	40.138962	-104.964308
5,300.0	7.23	101.52	5,251.9	-122.5	657.8	1,293,915.95	3,149,815.05	40.138944	-104.964167
5,600.0	8.90	103.82	5,549.0	-131.8	698.9	1,293,906.88	3,149,856.13	40.138918	-104.964021
5,900.0	6.27	99.02	5,846.3	-140.0	737.6	1,293,899.00	3,149,894.91	40.138896	-104.963882
6,200.0	7.56	97.46	6,144.1	-145.1	773.3	1,293,894.09	3,149,930.69	40.138882	-104.963754
6,500.0	8.27	93.61	6,441.3	-149.0	814.4	1,293,890.42	3,149,971.81	40.138871	-104.963607
6,600.0	9.96	81.74	6,540.0	-148.2	830.2	1,293,891.30	3,149,987.54	40.138873	-104.963551
6,700.0	12.75	69.53	6,638.1	-143.1	849.1	1,293,896.52	3,150,006.41	40.138887	-104.963483
6,800.0	20.42	49.10	6,733.9	-127.8	872.6	1,293,911.98	3,150,029.90	40.138929	-104.963399
6,900.0	21.81	43.13	6,827.2	-102.8	898.5	1,293,937.13	3,150,055.64	40.138998	-104.963306
7,000.0	28.50	30.88	6,917.7	-68.7	923.5	1,293,971.37	3,150,080.43	40.139091	-104.963217
7,100.0	32.94	20.12	7,003.7	-22.6	945.2	1,294,017.56	3,150,101.77	40.139218	-104.963140
7,200.0	39.72	9.88	7,084.3	34.5	960.0	1,294,074.77	3,150,116.29	40.139375	-104.963087
7,300.0	45.37	7.76	7,158.0	101.3	970.3	1,294,141.62	3,150,126.18	40.139558	-104.963050
7,400.0	48.06	6.24	7,226.5	173.5	979.2	1,294,213.91	3,150,134.60	40.139756	-104.963018
7,500.0	49.32	7.85	7,292.6	248.0	988.4	1,294,288.50	3,150,143.37	40.139961	-104.962985
7,600.0	56.94	7.46	7,352.5	327.3	999.0	1,294,367.80	3,150,153.52	40.140178	-104.962947
7,700.0	63.15	6.54	7,402.4	413.2	1,009.5	1,294,453.81	3,150,163.54	40.140414	-104.962909
7,750.0	65.73	6.92	7,424.0	458.0	1,014.8	1,294,498.63	3,150,168.55	40.140537	-104.962890
Last Gyro Survey @ 7750' MD									
7,895.0	74.80	14.20	7,473.0	591.9	1,040.0	1,294,632.67	3,150,192.95	40.140905	-104.962800
7,941.0	78.80	11.70	7,483.5	635.5	1,050.1	1,294,676.37	3,150,202.72	40.141025	-104.962764
7,987.0	83.80	10.30	7,490.4	680.2	1,058.7	1,294,721.04	3,150,211.12	40.141147	-104.962733
8,079.0	93.50	6.20	7,492.6	771.1	1,071.9	1,294,812.01	3,150,223.74	40.141397	-104.962686
8,171.0	95.20	359.80	7,485.6	862.6	1,076.7	1,294,903.60	3,150,228.00	40.141648	-104.962669
8,263.0	95.60	0.30	7,477.0	954.2	1,076.8	1,294,995.19	3,150,227.53	40.141899	-104.962669
8,355.0	94.20	358.70	7,469.1	1,045.9	1,076.0	1,295,086.84	3,150,226.17	40.142151	-104.962672
8,447.0	94.20	358.90	7,462.4	1,137.6	1,074.1	1,295,178.56	3,150,223.70	40.142403	-104.962678
8,539.0	92.80	357.90	7,456.8	1,229.4	1,071.5	1,295,270.33	3,150,220.58	40.142655	-104.962688
8,634.0	91.20	357.90	7,453.4	1,324.3	1,068.0	1,295,365.18	3,150,216.53	40.142915	-104.962700
8,729.0	90.10	357.70	7,452.4	1,419.2	1,064.4	1,295,460.08	3,150,212.32	40.143176	-104.962713
8,824.0	90.10	358.00	7,452.2	1,514.1	1,060.8	1,295,554.99	3,150,208.18	40.143436	-104.962726
8,919.0	89.90	358.00	7,452.2	1,609.1	1,057.5	1,295,649.91	3,150,204.29	40.143697	-104.962738
9,013.0	89.80	358.10	7,452.4	1,703.0	1,054.3	1,295,743.83	3,150,200.53	40.143955	-104.962749
9,108.0	90.80	357.30	7,451.9	1,797.9	1,050.5	1,295,838.73	3,150,196.15	40.144216	-104.962763
9,202.0	91.00	358.20	7,450.5	1,891.8	1,046.8	1,295,932.62	3,150,191.89	40.144473	-104.962776
9,297.0	90.80	359.40	7,449.0	1,986.8	1,044.8	1,296,027.57	3,150,189.33	40.144734	-104.962783
9,392.0	90.40	358.50	7,448.0	2,081.8	1,043.1	1,296,122.54	3,150,187.02	40.144995	-104.962789
9,487.0	90.10	1.00	7,447.6	2,176.8	1,042.6	1,296,217.53	3,150,186.03	40.145256	-104.962791

Cathedral Energy Services

Survey Report - Geographic

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Grant-Hurt 1G-14H-G268
Project:	DJ Wattenberg	TVD Reference:	32' KB @ 4920.0ft (Patt 326)
Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	MD Reference:	32' KB @ 4920.0ft (Patt 326)
Well:	Grant-Hurt 1G-14H-G268	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
9,582.0	90.20	1.20	7,447.3	2,271.8	1,044.5	1,296,312.52	3,150,187.29	40.145516	-104.962784
9,677.0	90.20	1.70	7,447.0	2,366.7	1,046.9	1,296,407.50	3,150,189.12	40.145777	-104.962775
9,771.0	90.40	1.10	7,446.5	2,460.7	1,049.2	1,296,501.48	3,150,190.85	40.146035	-104.962767
9,866.0	90.90	359.70	7,445.4	2,555.7	1,049.8	1,296,596.47	3,150,190.94	40.146296	-104.962765
9,961.0	90.70	359.80	7,444.1	2,650.7	1,049.4	1,296,691.46	3,150,189.96	40.146556	-104.962766
10,055.0	90.70	359.90	7,442.9	2,744.7	1,049.2	1,296,785.45	3,150,189.14	40.146814	-104.962767
10,149.0	89.80	358.60	7,442.5	2,838.7	1,047.9	1,296,879.43	3,150,187.35	40.147072	-104.962772
10,244.0	89.90	359.00	7,442.8	2,933.6	1,046.0	1,296,974.39	3,150,184.79	40.147333	-104.962779
10,339.0	90.10	358.80	7,442.8	3,028.6	1,044.1	1,297,069.36	3,150,182.39	40.147594	-104.962785
10,434.0	90.50	359.10	7,442.3	3,123.6	1,042.4	1,297,164.33	3,150,180.08	40.147855	-104.962791
10,529.0	90.70	358.80	7,441.3	3,218.6	1,040.7	1,297,259.30	3,150,177.77	40.148115	-104.962798
10,623.0	90.80	359.20	7,440.1	3,312.6	1,039.0	1,297,353.27	3,150,175.56	40.148373	-104.962803
10,718.0	91.00	359.70	7,438.6	3,407.5	1,038.1	1,297,448.24	3,150,174.08	40.148634	-104.962807
10,813.0	90.30	0.10	7,437.5	3,502.5	1,037.9	1,297,543.23	3,150,173.34	40.148895	-104.962807
10,908.0	90.30	0.10	7,437.0	3,597.5	1,038.1	1,297,638.23	3,150,172.94	40.149156	-104.962807
11,002.0	90.40	0.30	7,436.4	3,691.5	1,038.4	1,297,732.23	3,150,172.70	40.149414	-104.962806
11,097.0	90.50	0.50	7,435.7	3,786.5	1,039.1	1,297,827.23	3,150,172.79	40.149675	-104.962803
11,191.0	90.50	0.60	7,434.8	3,880.5	1,040.0	1,297,921.22	3,150,173.13	40.149933	-104.962800
11,286.0	90.20	0.90	7,434.3	3,975.5	1,041.2	1,298,016.22	3,150,173.80	40.150193	-104.962795
11,380.0	90.20	0.90	7,433.9	4,069.5	1,042.7	1,298,110.21	3,150,174.71	40.150451	-104.962790
11,474.0	90.20	1.00	7,433.6	4,163.5	1,044.3	1,298,204.21	3,150,175.70	40.150709	-104.962785
11,569.0	90.30	1.00	7,433.2	4,258.5	1,045.9	1,298,299.20	3,150,176.79	40.150970	-104.962779
11,663.0	90.50	1.30	7,432.5	4,352.4	1,047.8	1,298,393.19	3,150,178.11	40.151228	-104.962772
11,758.0	90.30	0.60	7,431.9	4,447.4	1,049.4	1,298,488.18	3,150,179.11	40.151489	-104.962766
11,852.0	89.90	0.60	7,431.7	4,541.4	1,050.4	1,298,582.18	3,150,179.53	40.151747	-104.962763
11,946.0	89.50	0.20	7,432.2	4,635.4	1,051.0	1,298,676.18	3,150,179.62	40.152005	-104.962760
12,041.0	89.60	0.20	7,433.0	4,730.4	1,051.4	1,298,771.17	3,150,179.38	40.152266	-104.962759
12,135.0	89.80	0.60	7,433.4	4,824.4	1,052.0	1,298,865.17	3,150,179.47	40.152524	-104.962757
12,230.0	90.10	359.00	7,433.5	4,919.4	1,051.7	1,298,960.17	3,150,178.57	40.152784	-104.962758
12,325.0	90.10	359.20	7,433.4	5,014.4	1,050.2	1,299,055.14	3,150,176.51	40.153045	-104.962763
12,420.0	90.10	359.60	7,433.2	5,109.4	1,049.2	1,299,150.13	3,150,174.94	40.153306	-104.962767
12,515.0	90.60	359.50	7,432.6	5,204.4	1,048.5	1,299,245.12	3,150,173.62	40.153567	-104.962769
12,609.0	91.30	358.80	7,431.1	5,298.4	1,047.1	1,299,339.09	3,150,171.66	40.153825	-104.962774
12,704.0	91.90	358.60	7,428.4	5,393.3	1,044.9	1,299,434.01	3,150,168.94	40.154085	-104.962782
12,799.0	90.20	0.20	7,426.7	5,488.3	1,043.9	1,299,528.97	3,150,167.37	40.154346	-104.962786
12,893.0	90.70	0.80	7,425.9	5,582.3	1,044.7	1,299,622.97	3,150,167.63	40.154604	-104.962783
12,988.0	89.10	0.80	7,426.1	5,677.3	1,046.1	1,299,717.96	3,150,168.38	40.154865	-104.962778
13,083.0	89.10	0.90	7,427.6	5,772.2	1,047.5	1,299,812.95	3,150,169.22	40.155126	-104.962773
13,177.0	89.90	0.10	7,428.4	5,866.2	1,048.3	1,299,906.94	3,150,169.48	40.155384	-104.962770
13,272.0	90.00	0.50	7,428.5	5,961.2	1,048.8	1,300,001.94	3,150,169.40	40.155644	-104.962768
13,367.0	90.10	358.80	7,428.4	6,056.2	1,048.2	1,300,096.93	3,150,168.25	40.155905	-104.962770
13,461.0	90.10	359.10	7,428.2	6,150.2	1,046.5	1,300,190.91	3,150,165.96	40.156163	-104.962776
13,556.0	90.20	359.50	7,428.0	6,245.2	1,045.3	1,300,285.89	3,150,164.23	40.156424	-104.962780
13,650.0	90.10	359.50	7,427.7	6,339.2	1,044.5	1,300,379.88	3,150,162.84	40.156682	-104.962783
13,746.0	90.50	359.70	7,427.2	6,435.2	1,043.8	1,300,475.87	3,150,161.60	40.156945	-104.962786
13,840.0	90.60	359.70	7,426.3	6,529.2	1,043.3	1,300,569.86	3,150,160.54	40.157203	-104.962788
13,935.0	90.60	359.70	7,425.3	6,624.2	1,042.8	1,300,664.85	3,150,159.47	40.157464	-104.962789
14,030.0	90.50	359.60	7,424.4	6,719.2	1,042.3	1,300,759.84	3,150,158.32	40.157725	-104.962791
14,125.0	90.60	359.90	7,423.5	6,814.2	1,041.8	1,300,854.83	3,150,157.33	40.157986	-104.962793
14,220.0	90.60	359.90	7,422.5	6,909.2	1,041.7	1,300,949.82	3,150,156.59	40.158247	-104.962793
14,315.0	90.70	0.00	7,421.4	7,004.2	1,041.6	1,301,044.81	3,150,155.94	40.158507	-104.962794
14,410.0	91.30	0.50	7,419.8	7,099.1	1,042.0	1,301,139.80	3,150,155.78	40.158768	-104.962792
14,485.0	91.50	0.60	7,418.0	7,174.1	1,042.7	1,301,214.74	3,150,156.05	40.158974	-104.962790
Last CES Survey @ 14,485' MD									

Cathedral Energy Services

Survey Report - Geographic

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Grant-Hurt 1G-14H-G268
Project:	DJ Wattenberg	TVD Reference:	32' KB @ 4920.0ft (Patt 326)
Site:	S14-T2N-R68W (Grant Elmquist/Salisbury/Hurt)	MD Reference:	32' KB @ 4920.0ft (Patt 326)
Well:	Grant-Hurt 1G-14H-G268	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
14,535.0	91.50	0.60	7,416.6	7,224.1	1,043.3	1,301,264.73	3,150,156.27	40.159111	-104.962788
PTB @ 14,535'									

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
Grant-Hurt 1G-14H-G26	0.00	0.00	7,243.8	168.6	997.5	1,294,209.11	3,150,152.97	40.139743	-104.962952
- actual wellpath misses target center by 23.9ft at 7409.4ft MD (7232.8 TVD, 180.5 N, 979.9 E)									
- Point									
Grant-Hurt 1G-14H-G26	0.00	0.00	7,427.0	7,300.2	1,042.5	1,301,340.89	3,150,155.10	40.159320	-104.962790
- actual wellpath misses target center by 76.9ft at 14535.0ft MD (7416.6 TVD, 7224.1 N, 1043.3 E)									
- Point									
Grant-Hurt 1G-14H-G26	0.00	0.00	7,460.0	1,464.0	1,042.5	1,295,504.72	3,150,190.15	40.143299	-104.962791
- actual wellpath misses target center by 21.6ft at 8774.6ft MD (7452.3 TVD, 1464.7 N, 1062.6 E)									
- Point									

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
901.0	899.9	-5.2	29.9	Last CES Survey @ 901' MD	
7,750.0	7,424.0	458.0	1,014.8	Last Gyro Survey @ 7750' MD	
14,485.0	7,418.0	7,174.1	1,042.7	Last CES Survey @ 14,485' MD	
14,535.0	7,416.6	7,224.1	1,043.3	PTB @ 14,535'	

Checked By: _____ Approved By: _____ Date: _____