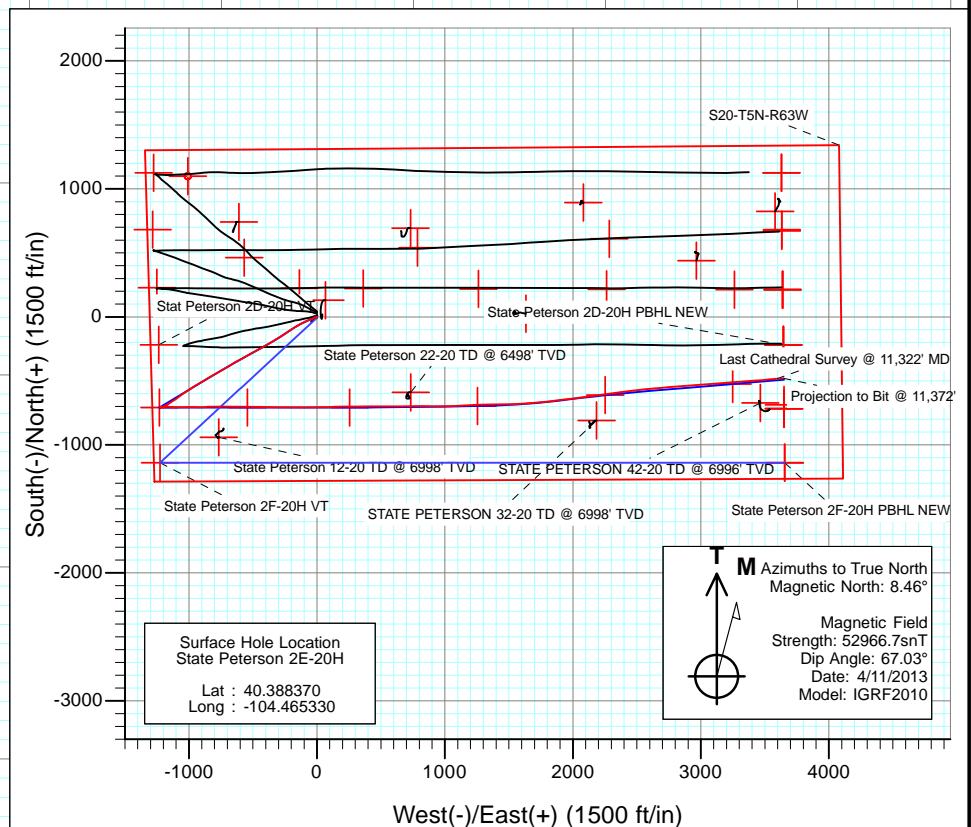
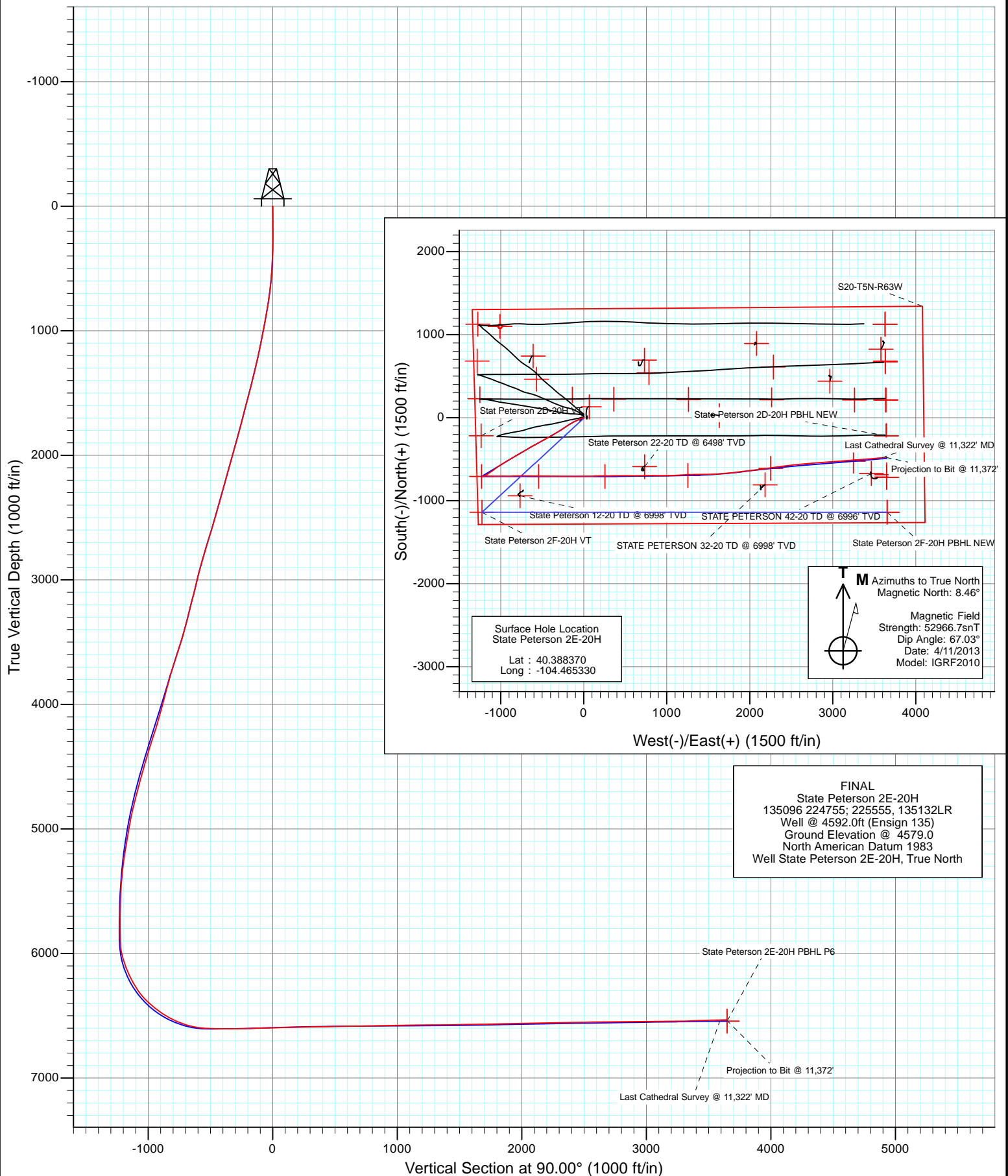




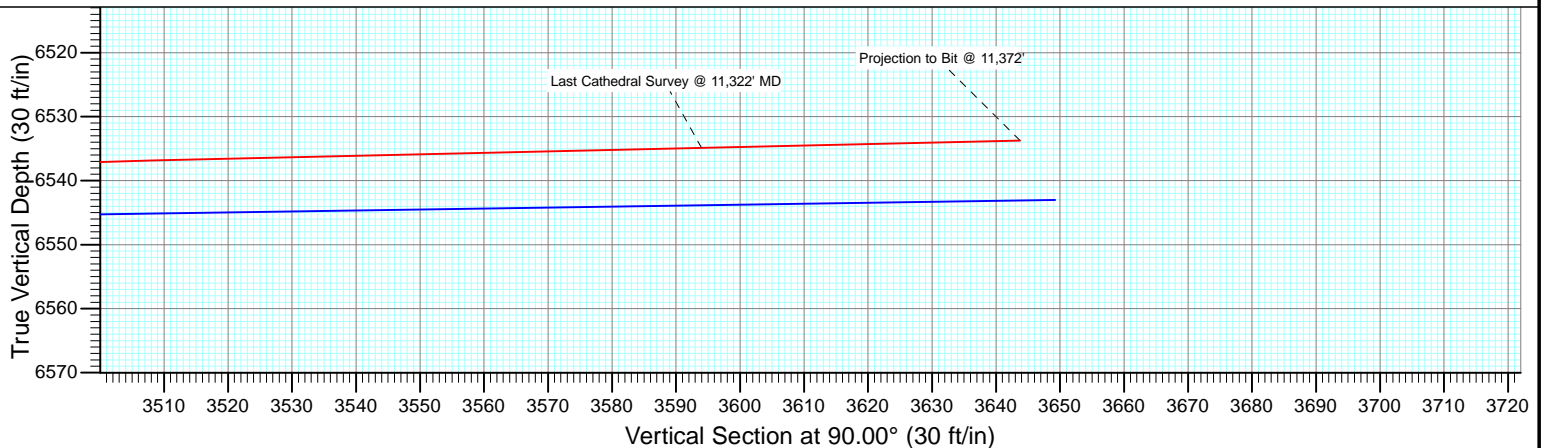
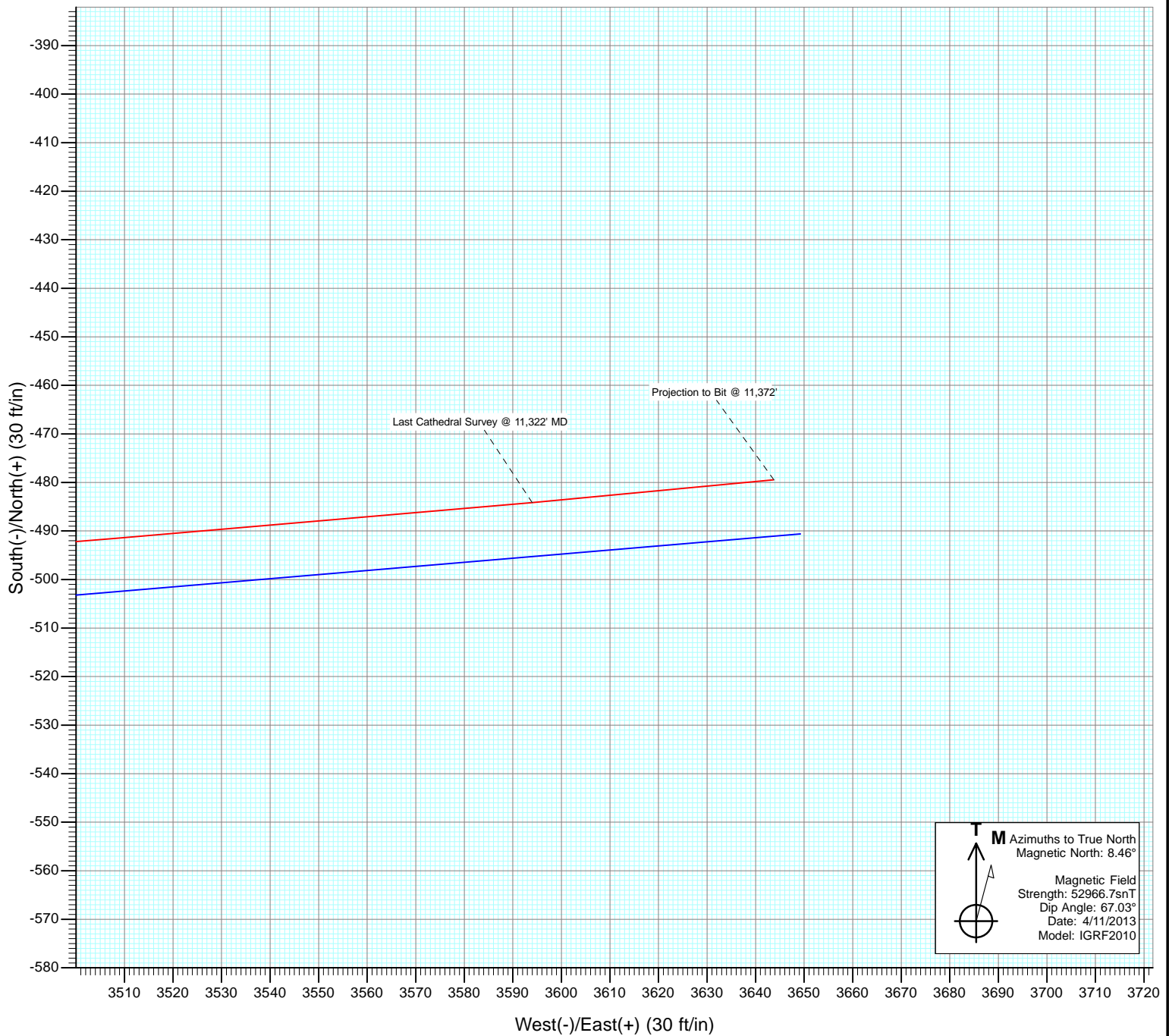
Project: DJ Wattenberg
Site: S20-T5N-R63W (State Peterson)
Well: State Peterson 2E-20H
Wellbore: Hz
Design: FINAL



FINAL
State Peterson 2E-20H
135096 224755; 225555, 135132LR
Well @ 4592.0ft (Ensign 135)
Ground Elevation @ 4579.0
North American Datum 1983
Well State Peterson 2E-20H, True North



Project: DJ Wattenberg
Site: S20-T5N-R63W (State Peterson)
Wellbore: Hz
Design: FINAL



Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well State Peterson 2E-20H
Project:	DJ Wattenberg	TVD Reference:	Well @ 4592.0ft (Ensign 135)
Site:	S20-T5N-R63W (State Peterson)	MD Reference:	Well @ 4592.0ft (Ensign 135)
Well:	State Peterson 2E-20H	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		S20-T5N-R63W (State Peterson)			
Site Position:		Northing:	1,386,047.92 ft	Latitude:	40.388480
From:	Lat/Long	Easting:	3,288,215.31 ft	Longitude:	-104.465330
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	0.67 °

Well	State Peterson 2E-20H					
Well Position	+N/-S	0.0 ft	Northing:	1,386,007.83 ft	Latitude:	40.388370
	+E/-W	0.0 ft	Easting:	3,288,215.78 ft	Longitude:	-104.465330
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	4,579.0 ft

Wellbore	Hz				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	4/11/2013	8.46	67.03	52,967

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	90.00	

Survey Program	Date	4/22/2013			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
259.0	11,372.0	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		
259.0	0.50	97.80	259.0	-0.2	1.1	1.1	0.19	0.19		
350.0	1.20	254.70	350.0	-0.5	0.6	0.6	1.84	0.77		
442.0	2.60	249.30	441.9	-1.5	-2.3	-2.3	1.53	1.52		
534.0	4.30	252.40	533.8	-3.2	-7.5	-7.5	1.86	1.85		
626.0	6.00	252.60	625.4	-5.7	-15.4	-15.4	1.85	1.85		
718.0	8.30	250.20	716.7	-9.4	-26.2	-26.2	2.52	2.50		
810.0	10.40	246.80	807.4	-14.9	-40.1	-40.1	2.36	2.28		
902.0	11.60	245.80	897.8	-22.0	-56.2	-56.2	1.32	1.30		
939.0	11.60	245.50	934.0	-25.1	-63.0	-63.0	0.16	0.00		
1,007.0	11.40	246.60	1,000.6	-30.6	-75.4	-75.4	0.44	-0.29		
1,098.0	12.90	245.90	1,089.6	-38.3	-92.9	-92.9	1.66	1.65		
1,190.0	13.00	242.60	1,179.3	-47.2	-111.4	-111.4	0.81	0.11		

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well State Peterson 2E-20H
Project:	DJ Wattenberg	TVD Reference:	Well @ 4592.0ft (Ensign 135)
Site:	S20-T5N-R63W (State Peterson)	MD Reference:	Well @ 4592.0ft (Ensign 135)
Well:	State Peterson 2E-20H	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
1,282.0	15.10	241.70	1,268.5	-57.7	-131.2	-131.2	2.29	2.28	
1,374.0	15.60	240.30	1,357.2	-69.5	-152.5	-152.5	0.68	0.54	
1,466.0	16.30	238.30	1,445.7	-82.4	-174.2	-174.2	0.97	0.76	
1,558.0	17.30	237.80	1,533.7	-96.5	-196.8	-196.8	1.10	1.09	
1,650.0	18.00	238.30	1,621.4	-111.2	-220.4	-220.4	0.78	0.76	
1,742.0	17.50	235.10	1,709.0	-126.6	-243.9	-243.9	1.19	-0.54	
1,834.0	17.40	235.70	1,796.8	-142.3	-266.6	-266.6	0.22	-0.11	
1,926.0	17.60	235.70	1,884.5	-157.9	-289.4	-289.4	0.22	0.22	
2,021.0	19.00	239.30	1,974.7	-173.9	-314.6	-314.6	1.89	1.47	
2,116.0	18.30	239.90	2,064.8	-189.2	-340.8	-340.8	0.76	-0.74	
2,210.0	17.90	238.40	2,154.1	-204.2	-365.9	-365.9	0.65	-0.43	
2,305.0	17.40	241.10	2,244.6	-218.7	-390.8	-390.8	1.01	-0.53	
2,400.0	17.10	240.90	2,335.4	-232.4	-415.4	-415.4	0.32	-0.32	
2,494.0	18.30	240.90	2,424.9	-246.3	-440.4	-440.4	1.28	1.28	
2,589.0	18.10	240.60	2,515.2	-260.8	-466.3	-466.3	0.23	-0.21	
2,683.0	19.40	241.90	2,604.2	-275.3	-492.7	-492.7	1.45	1.38	
2,778.0	19.40	241.20	2,693.8	-290.3	-520.5	-520.5	0.24	0.00	
2,873.0	18.20	239.60	2,783.7	-305.4	-547.1	-547.1	1.37	-1.26	
2,967.0	18.30	243.00	2,873.0	-319.6	-572.9	-572.9	1.14	0.11	
3,062.0	15.30	240.70	2,963.9	-332.5	-597.2	-597.2	3.23	-3.16	
3,125.0	15.20	241.50	3,024.7	-340.5	-611.7	-611.7	0.37	-0.16	
3,188.0	16.40	240.80	3,085.3	-348.8	-626.7	-626.7	1.93	1.90	
3,251.0	17.50	239.10	3,145.6	-358.0	-642.6	-642.6	1.91	1.75	
3,346.0	15.60	238.40	3,236.6	-372.0	-665.7	-665.7	2.01	-2.00	
3,441.0	16.40	239.60	3,328.0	-385.5	-688.2	-688.2	0.91	0.84	
3,535.0	18.50	238.40	3,417.6	-400.0	-712.3	-712.3	2.27	2.23	
3,630.0	20.20	238.90	3,507.3	-416.4	-739.2	-739.2	1.80	1.79	
3,724.0	20.10	242.10	3,595.5	-432.3	-767.4	-767.4	1.18	-0.11	
3,819.0	19.90	241.40	3,684.8	-447.7	-796.0	-796.0	0.33	-0.21	
3,914.0	17.80	241.70	3,774.7	-462.3	-823.0	-823.0	2.21	-2.21	
4,009.0	17.10	239.70	3,865.3	-476.3	-847.8	-847.8	0.97	-0.74	
4,103.0	17.00	239.30	3,955.2	-490.2	-871.6	-871.6	0.16	-0.11	
4,198.0	17.20	239.70	4,046.0	-504.4	-895.6	-895.6	0.24	0.21	
4,261.0	18.30	237.60	4,106.0	-514.4	-912.0	-912.0	2.02	1.75	
4,325.0	19.50	237.60	4,166.5	-525.5	-929.5	-929.5	1.87	1.87	
4,388.0	21.20	239.30	4,225.6	-537.0	-948.2	-948.2	2.86	2.70	
4,483.0	20.10	238.50	4,314.5	-554.3	-976.9	-976.9	1.20	-1.16	
4,577.0	19.60	236.20	4,402.9	-571.5	-1,003.8	-1,003.8	0.99	-0.53	
4,672.0	20.10	235.70	4,492.3	-589.6	-1,030.5	-1,030.5	0.56	0.53	
4,767.0	18.10	232.50	4,582.0	-607.7	-1,055.7	-1,055.7	2.38	-2.11	
4,862.0	17.80	234.00	4,672.4	-625.3	-1,079.1	-1,079.1	0.58	-0.32	
4,956.0	17.80	234.70	4,761.9	-642.0	-1,102.5	-1,102.5	0.23	0.00	
5,051.0	16.10	237.90	4,852.8	-657.4	-1,125.5	-1,125.5	2.04	-1.79	
5,146.0	12.10	232.80	4,944.9	-670.4	-1,144.6	-1,144.6	4.41	-4.21	
5,209.0	11.20	234.70	5,006.6	-677.9	-1,154.9	-1,154.9	1.55	-1.43	
5,272.0	11.70	238.50	5,068.3	-684.8	-1,165.3	-1,165.3	1.44	0.79	
5,335.0	11.00	244.60	5,130.1	-690.7	-1,176.2	-1,176.2	2.20	-1.11	
5,399.0	9.10	251.70	5,193.1	-694.9	-1,186.5	-1,186.5	3.54	-2.97	
5,462.0	8.20	245.60	5,255.4	-698.4	-1,195.3	-1,195.3	2.04	-1.43	
5,525.0	7.50	245.90	5,317.8	-701.9	-1,203.2	-1,203.2	1.11	-1.11	
5,588.0	6.00	247.30	5,380.4	-704.9	-1,210.0	-1,210.0	2.40	-2.38	
5,651.0	4.20	257.80	5,443.1	-706.6	-1,215.2	-1,215.2	3.21	-2.86	
5,714.0	3.40	259.40	5,506.0	-707.4	-1,219.3	-1,219.3	1.28	-1.27	

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well State Peterson 2E-20H
Project:	DJ Wattenberg	TVD Reference:	Well @ 4592.0ft (Ensign 135)
Site:	S20-T5N-R63W (State Peterson)	MD Reference:	Well @ 4592.0ft (Ensign 135)
Well:	State Peterson 2E-20H	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
5,777.0	1.70	250.90	5,568.9	-708.1	-1,222.1	-1,222.1	2.76	-2.70	
5,841.0	0.80	257.20	5,632.9	-708.5	-1,223.4	-1,223.4	1.42	-1.41	
5,904.0	0.40	240.40	5,695.9	-708.7	-1,224.0	-1,224.0	0.69	-0.63	
5,999.0	0.10	33.90	5,790.9	-708.8	-1,224.3	-1,224.3	0.52	-0.32	
6,062.0	0.40	61.90	5,853.9	-708.7	-1,224.0	-1,224.0	0.50	0.48	
6,093.0	0.60	42.40	5,884.9	-708.5	-1,223.8	-1,223.8	0.84	0.65	
6,125.0	2.30	67.80	5,916.9	-708.1	-1,223.1	-1,223.1	5.55	5.31	
6,157.0	6.30	77.10	5,948.8	-707.5	-1,220.8	-1,220.8	12.65	12.50	
6,188.0	10.70	79.30	5,979.4	-706.6	-1,216.3	-1,216.3	14.23	14.19	
6,220.0	14.10	82.70	6,010.7	-705.5	-1,209.5	-1,209.5	10.86	10.62	
6,251.0	16.40	84.60	6,040.6	-704.6	-1,201.4	-1,201.4	7.59	7.42	
6,283.0	18.30	86.60	6,071.1	-703.9	-1,191.9	-1,191.9	6.22	5.94	
6,315.0	20.00	88.20	6,101.4	-703.4	-1,181.4	-1,181.4	5.56	5.31	
6,346.0	21.90	88.50	6,130.3	-703.1	-1,170.3	-1,170.3	6.14	6.13	
6,378.0	23.90	90.60	6,159.8	-703.0	-1,157.9	-1,157.9	6.75	6.25	
6,409.0	26.10	93.60	6,187.9	-703.5	-1,144.8	-1,144.8	8.19	7.10	
6,441.0	28.30	94.20	6,216.4	-704.5	-1,130.2	-1,130.2	6.93	6.87	
6,473.0	30.00	92.60	6,244.3	-705.4	-1,114.7	-1,114.7	5.84	5.31	
6,504.0	31.70	91.40	6,270.9	-706.0	-1,098.8	-1,098.8	5.83	5.48	
6,536.0	34.50	89.50	6,297.7	-706.1	-1,081.3	-1,081.3	9.33	8.75	
6,568.0	37.50	88.50	6,323.6	-705.8	-1,062.5	-1,062.5	9.55	9.37	
6,599.0	41.30	88.70	6,347.6	-705.3	-1,042.8	-1,042.8	12.26	12.26	
6,631.0	44.70	89.30	6,371.0	-704.9	-1,021.0	-1,021.0	10.70	10.62	
6,662.0	47.30	89.60	6,392.5	-704.7	-998.7	-998.7	8.42	8.39	
6,694.0	49.40	90.10	6,413.8	-704.7	-974.8	-974.8	6.67	6.56	
6,726.0	50.90	91.30	6,434.3	-705.0	-950.2	-950.2	5.50	4.69	
6,757.0	52.80	90.80	6,453.4	-705.4	-925.9	-925.9	6.26	6.13	
6,789.0	54.70	89.00	6,472.3	-705.4	-900.1	-900.1	7.47	5.94	
6,820.0	57.50	87.70	6,489.6	-704.6	-874.4	-874.4	9.68	9.03	
6,852.0	59.90	87.30	6,506.2	-703.4	-847.0	-847.0	7.58	7.50	
6,883.0	62.30	87.90	6,521.2	-702.3	-819.9	-819.9	7.93	7.74	
6,915.0	65.10	88.40	6,535.4	-701.4	-791.3	-791.3	8.86	8.75	
6,947.0	67.10	89.20	6,548.4	-700.7	-762.0	-762.0	6.65	6.25	
6,978.0	68.90	89.80	6,560.0	-700.5	-733.3	-733.3	6.08	5.81	
7,010.0	71.30	90.30	6,570.9	-700.5	-703.2	-703.2	7.64	7.50	
7,041.0	74.60	91.10	6,580.0	-700.9	-673.6	-673.6	10.93	10.65	
7,073.0	78.10	91.30	6,587.5	-701.5	-642.5	-642.5	10.95	10.94	
7,104.0	81.00	91.50	6,593.1	-702.3	-612.0	-612.0	9.38	9.35	
7,136.0	83.30	91.20	6,597.5	-703.0	-580.3	-580.3	7.25	7.19	
7,167.0	85.10	91.30	6,600.6	-703.7	-549.5	-549.5	5.82	5.81	
7,175.0	85.60	91.20	6,601.3	-703.9	-541.5	-541.5	6.37	6.25	
7,226.0	88.40	89.00	6,604.0	-704.0	-490.6	-490.6	6.98	5.49	
7,290.0	89.30	90.00	6,605.2	-703.4	-426.6	-426.6	2.10	1.41	
7,353.0	89.80	91.70	6,605.7	-704.3	-363.6	-363.6	2.81	0.79	
7,416.0	90.50	91.00	6,605.6	-705.8	-300.6	-300.6	1.57	1.11	
7,479.0	91.80	91.50	6,604.3	-707.2	-237.7	-237.7	2.21	2.06	
7,542.0	92.30	89.80	6,602.0	-707.9	-174.7	-174.7	2.81	0.79	
7,605.0	92.20	89.60	6,599.6	-707.6	-111.8	-111.8	0.35	-0.16	
7,669.0	90.90	89.60	6,597.8	-707.1	-47.8	-47.8	2.03	-2.03	
7,732.0	91.30	89.10	6,596.6	-706.4	15.2	15.2	1.02	0.63	
7,795.0	91.80	88.70	6,594.9	-705.2	78.2	78.2	1.02	0.79	
7,858.0	90.80	88.10	6,593.5	-703.4	141.1	141.1	1.85	-1.59	
7,922.0	90.90	88.80	6,592.6	-701.7	205.1	205.1	1.10	0.16	

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well State Peterson 2E-20H
Project:	DJ Wattenberg	TVD Reference:	Well @ 4592.0ft (Ensign 135)
Site:	S20-T5N-R63W (State Peterson)	MD Reference:	Well @ 4592.0ft (Ensign 135)
Well:	State Peterson 2E-20H	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
7,985.0	90.90	89.80	6,591.6	-700.9	268.1	268.1	1.59	0.00	
8,016.0	91.00	89.60	6,591.0	-700.8	299.1	299.1	0.72	0.32	
8,048.0	91.20	89.10	6,590.4	-700.4	331.1	331.1	1.68	0.62	
8,079.0	91.20	89.80	6,589.8	-700.1	362.1	362.1	2.26	0.00	
8,143.0	91.20	89.80	6,588.4	-699.9	426.0	426.0	0.00	0.00	
8,206.0	91.60	90.10	6,586.9	-699.8	489.0	489.0	0.79	0.63	
8,269.0	90.80	89.70	6,585.6	-699.7	552.0	552.0	1.42	-1.27	
8,332.0	91.00	89.80	6,584.6	-699.5	615.0	615.0	0.35	0.32	
8,395.0	91.30	89.20	6,583.3	-698.9	678.0	678.0	1.06	0.48	
8,490.0	90.20	88.90	6,582.1	-697.3	773.0	773.0	1.20	-1.16	
8,553.0	90.10	90.60	6,581.9	-697.1	836.0	836.0	2.70	-0.16	
8,616.0	91.40	90.40	6,581.1	-697.6	899.0	899.0	2.09	2.06	
8,679.0	91.90	90.30	6,579.3	-698.0	961.9	961.9	0.81	0.79	
8,774.0	91.30	87.90	6,576.6	-696.5	1,056.9	1,056.9	2.60	-0.63	
8,869.0	90.40	87.50	6,575.2	-692.7	1,151.8	1,151.8	1.04	-0.95	
8,964.0	89.90	86.80	6,575.0	-688.0	1,246.7	1,246.7	0.91	-0.53	
9,059.0	90.20	88.80	6,574.9	-684.3	1,341.6	1,341.6	2.13	0.32	
9,153.0	90.90	89.60	6,574.0	-683.0	1,435.6	1,435.6	1.13	0.74	
9,248.0	91.60	88.30	6,571.9	-681.3	1,530.5	1,530.5	1.55	0.74	
9,343.0	91.00	86.80	6,569.8	-677.2	1,625.4	1,625.4	1.70	-0.63	
9,438.0	91.90	84.50	6,567.4	-670.0	1,720.1	1,720.1	2.60	0.95	
9,532.0	90.40	83.40	6,565.5	-660.1	1,813.6	1,813.6	1.98	-1.60	
9,627.0	91.00	83.00	6,564.3	-648.9	1,907.9	1,907.9	0.76	0.63	
9,722.0	91.10	83.30	6,562.6	-637.5	2,002.2	2,002.2	0.33	0.11	
9,817.0	91.20	82.40	6,560.7	-625.7	2,096.4	2,096.4	0.95	0.11	
9,911.0	91.60	82.10	6,558.4	-613.0	2,189.5	2,189.5	0.53	0.43	
10,006.0	90.90	82.40	6,556.3	-600.2	2,283.7	2,283.7	0.80	-0.74	
10,101.0	91.30	82.20	6,554.5	-587.5	2,377.8	2,377.8	0.47	0.42	
10,164.0	90.70	82.60	6,553.4	-579.2	2,440.2	2,440.2	1.14	-0.95	
10,227.0	90.50	84.00	6,552.7	-571.8	2,502.8	2,502.8	2.24	-0.32	
10,290.0	91.60	84.60	6,551.6	-565.6	2,565.5	2,565.5	1.99	1.75	
10,353.0	91.50	84.50	6,549.9	-559.6	2,628.2	2,628.2	0.22	-0.16	
10,416.0	89.20	84.80	6,549.5	-553.7	2,690.9	2,690.9	3.68	-3.65	
10,479.0	89.90	85.80	6,550.0	-548.5	2,753.7	2,753.7	1.94	1.11	
10,542.0	91.60	86.20	6,549.1	-544.2	2,816.5	2,816.5	2.77	2.70	
10,606.0	90.90	85.50	6,547.7	-539.5	2,880.3	2,880.3	1.55	-1.09	
10,669.0	90.20	85.70	6,547.1	-534.7	2,943.1	2,943.1	1.16	-1.11	
10,763.0	90.60	85.10	6,546.5	-527.2	3,036.8	3,036.8	0.77	0.43	
10,858.0	89.60	85.60	6,546.3	-519.4	3,131.5	3,131.5	1.18	-1.05	
10,952.0	90.90	86.20	6,545.9	-512.7	3,225.3	3,225.3	1.52	1.38	
11,047.0	92.20	85.80	6,543.3	-506.1	3,320.0	3,320.0	1.43	1.37	
11,141.0	92.00	85.40	6,539.9	-498.9	3,413.7	3,413.7	0.48	-0.21	
11,205.0	91.90	85.60	6,537.7	-493.9	3,477.4	3,477.4	0.35	-0.16	
11,236.0	91.30	85.60	6,536.8	-491.5	3,508.3	3,508.3	1.94	-1.94	
11,322.0	91.30	84.60	6,534.9	-484.2	3,594.0	3,594.0	1.16	0.00	Last Cathedral Survey @ 11,322' MD
11,372.0	91.30	84.60	6,533.8	-479.5	3,643.7	3,643.7	0.00	0.00	Projection to Bit @ 11,372'

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well State Peterson 2E-20H
Project:	DJ Wattenberg	TVD Reference:	Well @ 4592.0ft (Ensign 135)
Site:	S20-T5N-R63W (State Peterson)	MD Reference:	Well @ 4592.0ft (Ensign 135)
Well:	State Peterson 2E-20H	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)		
State Peterson 2E-20H I - actual wellpath misses target center by 260.5ft at 11352.6ft MD (6534.2 TVD, -481.3 N, 3624.4 E) - Point	0.00	0.00	6,640.0	-718.0	3,649.2	1,385,332.46	3,291,873.13	40.386398	-104.452230
State Peterson 2E-20H \ - actual wellpath misses target center by 5.8ft at 5948.1ft MD (5740.0 TVD, -708.8 N, -1224.2 E) - Point	0.00	0.00	5,740.0	-709.2	-1,230.0	1,385,284.33	3,286,994.14	40.386423	-104.469745
State Peterson 2E-20H ` - actual wellpath misses target center by 10.0ft at 9972.7ft MD (6556.9 TVD, -604.7 N, 2250.7 E) - Point	0.00	0.00	6,564.0	-611.6	2,251.8	1,385,422.54	3,290,474.58	40.386691	-104.457246
State Peterson 2E-20H I - actual wellpath misses target center by 238.2ft at 11354.8ft MD (6534.1 TVD, -481.1 N, 3626.6 E) - Point	0.00	0.00	6,543.0	-718.0	3,649.2	1,385,332.46	3,291,873.13	40.386398	-104.452230
State Peterson 2E-20H ` - actual wellpath misses target center by 13.7ft at 10973.8ft MD (6545.5 TVD, -511.3 N, 3247.0 E) - Point	0.00	0.00	6,549.0	-524.5	3,248.0	1,385,521.31	3,291,469.69	40.386930	-104.453670
State Peterson 2E-20H I - actual wellpath misses target center by 252.7ft at 11353.1ft MD (6534.2 TVD, -481.2 N, 3624.9 E) - Point	0.00	0.00	6,619.0	-718.0	3,649.2	1,385,332.46	3,291,873.13	40.386398	-104.452230
State Peterson 2E-20H { - actual wellpath misses target center by 11.0ft at 8972.5ft MD (6575.0 TVD, -687.5 N, 1255.1 E) - Point	0.00	0.00	6,580.0	-697.3	1,255.5	1,385,325.25	3,289,479.33	40.386456	-104.460823
State Peterson 2E-20H { - actual wellpath misses target center by 8.6ft at 7972.6ft MD (6591.8 TVD, -701.0 N, 255.7 E) - Point	0.00	0.00	6,589.0	-709.2	255.8	1,385,301.67	3,288,479.79	40.386423	-104.464412
State Peterson 2E-20H I - actual wellpath misses target center by 233.7ft at 11355.4ft MD (6534.1 TVD, -481.0 N, 3627.2 E) - Point	0.00	0.00	6,640.0	-688.2	3,649.2	1,385,362.22	3,291,872.78	40.386480	-104.452230
State Peterson 2E-20H I - actual wellpath misses target center by 8.0ft at 7172.9ft MD (6601.1 TVD, -703.8 N, -543.6 E) - Point	0.00	0.00	6,607.0	-709.2	-544.2	1,385,292.33	3,287,679.86	40.386423	-104.467284

Design Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
11,322.0	6,534.9	-484.2	3,594.0	Last Cathedral Survey @ 11,322' MD
11,372.0	6,533.8	-479.5	3,643.7	Projection to Bit @ 11,372'

Checked By: _____ Approved By: _____ Date: _____