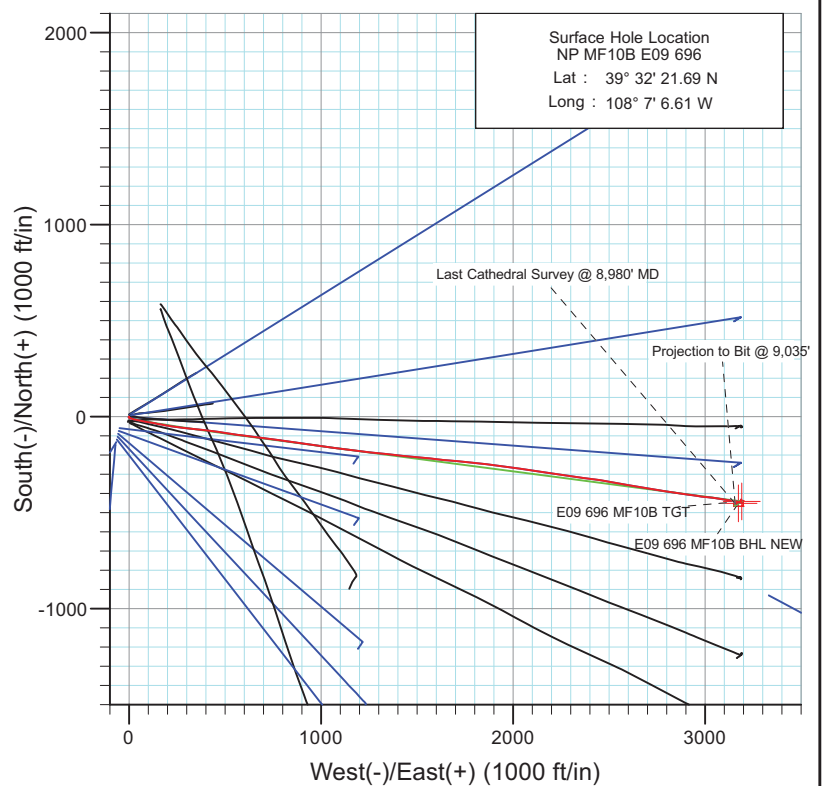
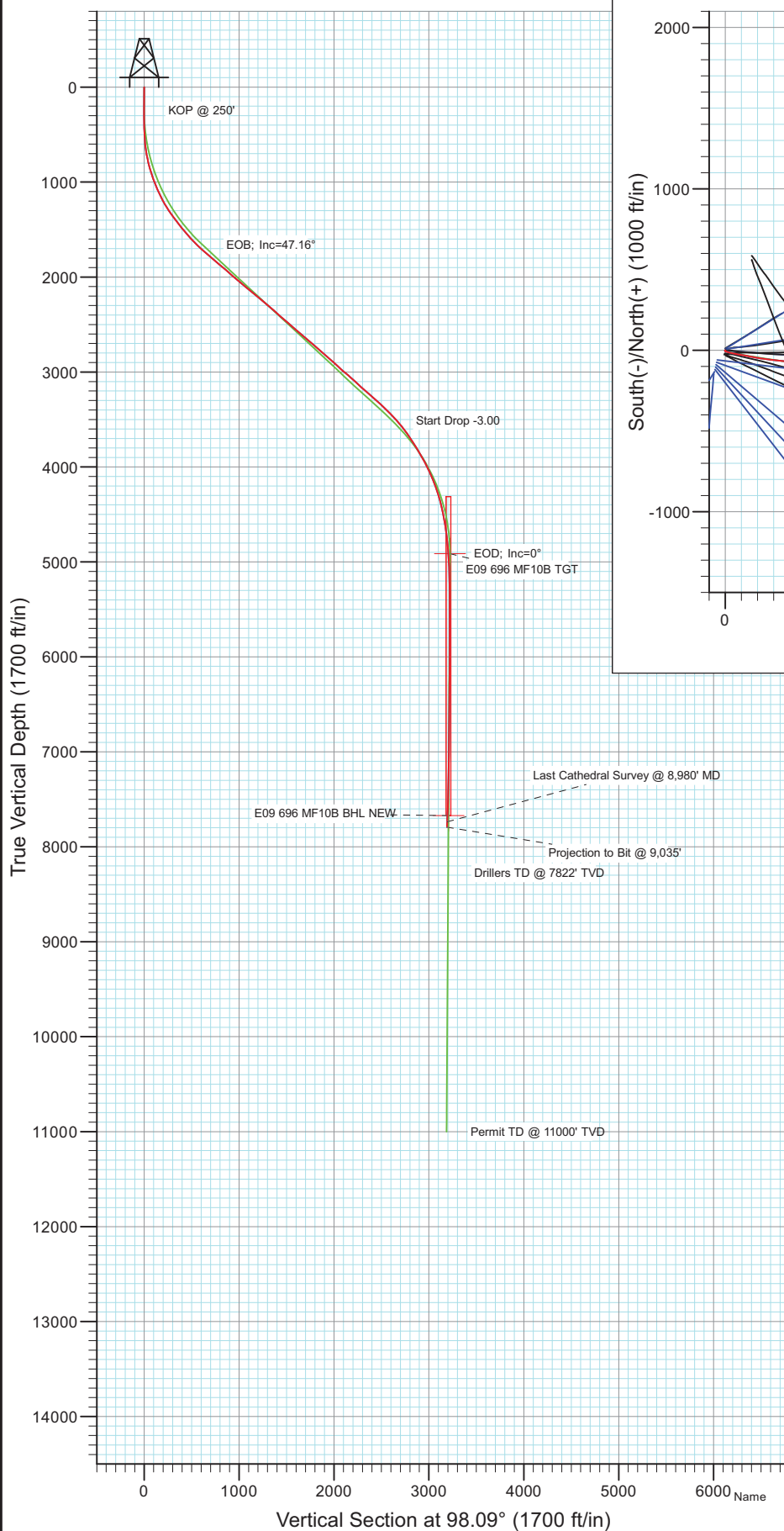




Project: North Piceance
 Site: E09 696 (SWNW S9-T6S-R96W)
 Well: NP MF10B E09 696
 Wellbore: DD
 Design: FINAL



Azimuths to True North
 Magnetic North: 10.48°

Magnetic Field
 Strength: 52312.4snT
 Dip Angle: 65.77°
 Date: 12/5/2010
 Model: IGRF2010

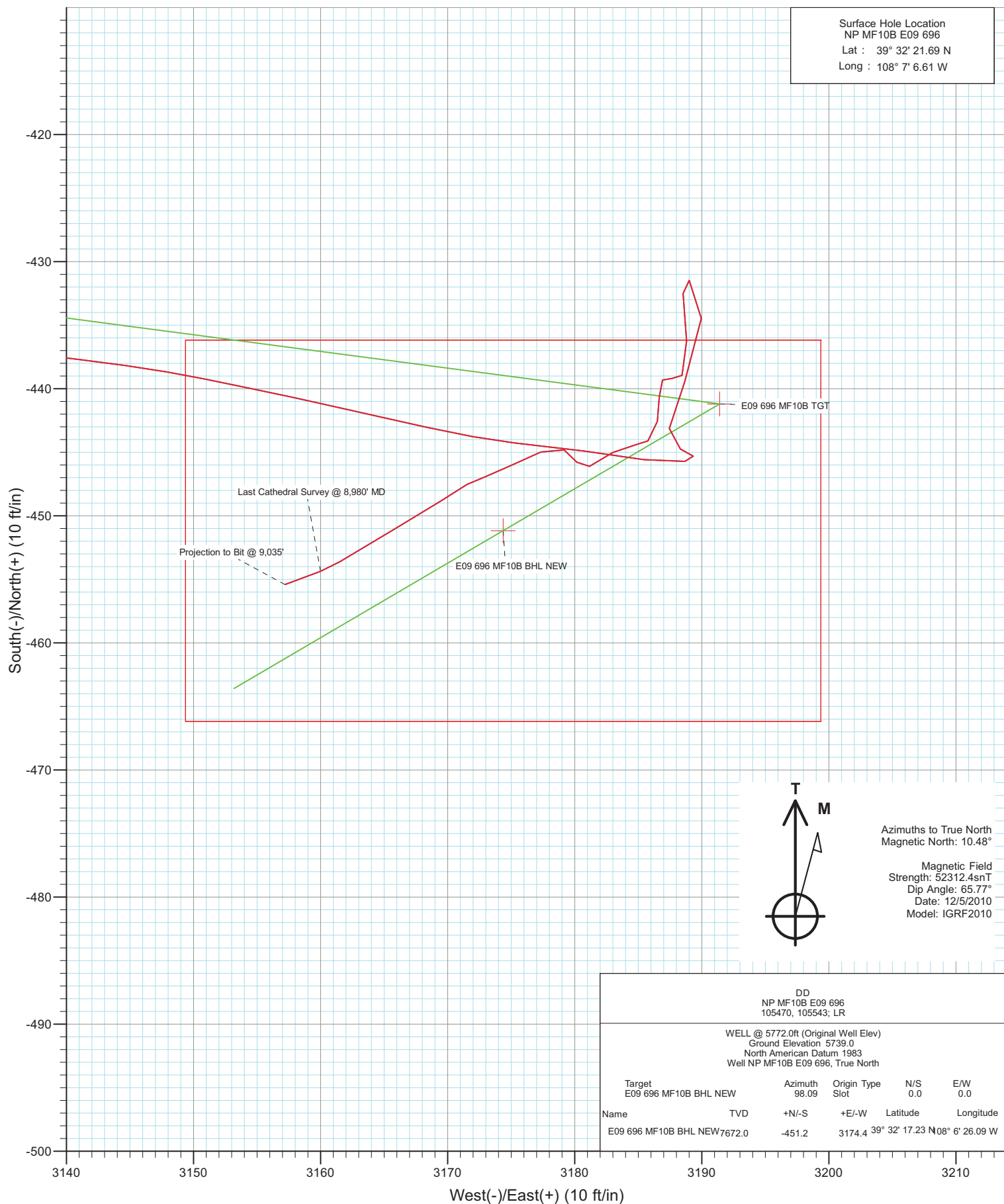
DD
 NP MF10B E09 696
 105470, 105543; LR

WELL @ 5772.0ft (Original Well Elev)
 Ground Elevation 5739.0
 North American Datum 1983
 Well NP MF10B E09 696, True North

Target	Azimuth	Origin Type	N/S	E/W
E09 696 MF10B BHL NEW	98.09	Slot	0.0	0.0
TVD	+N/-S	+E/-W	Latitude	Longitude
E09 696 MF10B BHL NEW	7672.0	-451.2	3174.4	39° 32' 17.23 N 108° 6' 26.09 W



Project: North Piceance
Site: E09 696 (SWNW S9-T6S-R96W)
Well: NP MF10B E09 696
Wellbore: DD
Design: FINAL



Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well NP MF10B E09 696
Project:	North Piceance	TVD Reference:	WELL @ 5772.0ft (Original Well Elev)
Site:	E09 696 (SWNW S9-T6S-R96W)	MD Reference:	WELL @ 5772.0ft (Original Well Elev)
Well:	NP MF10B E09 696	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	EDM 5000.1 US Multi Users DB

Project	North Piceance		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		

Site		E09 696 (SWNW S9-T6S-R96W)			
Site Position:		Northing:	1,632,140.57 ft	Latitude:	39° 32' 23.23 N
From:	Lat/Long	Easting:	2,261,634.68 ft	Longitude:	108° 7' 6.47 W
Position Uncertainty:	0.0 ft	Slot Radius:	0.000 in	Grid Convergence:	-1.65 °

Well	NP MF10B E09 696					
Well Position	+N/-S	0.0 ft	Northing:	1,631,985.16 ft	Latitude:	39° 32' 21.69 N
	+E/-W	0.0 ft	Easting:	2,261,619.26 ft	Longitude:	108° 7' 6.61 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,739.0 ft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/5/2010	10.48	65.77	52,312

Design	DD				
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	98.09	

Survey Program	Date	12/11/2010			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
234.0	9,035.0	Survey #1 (DD)	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		
234.0	0.70	212.00	234.0	-1.2	-0.8	-0.6	0.30	0.30		
265.0	1.30	223.40	265.0	-1.6	-1.1	-0.9	2.03	1.94		
296.0	1.20	200.90	296.0	-2.2	-1.5	-1.1	1.60	-0.32		
326.0	1.10	185.10	326.0	-2.8	-1.6	-1.2	1.10	-0.33		
357.0	1.00	120.30	357.0	-3.2	-1.4	-0.9	3.64	-0.32		
388.0	1.10	111.90	388.0	-3.4	-0.9	-0.4	0.59	0.32		
419.0	1.40	113.10	419.0	-3.7	-0.3	0.3	0.97	0.97		
449.0	1.90	118.00	448.9	-4.1	0.5	1.1	1.73	1.67		
480.0	2.50	116.00	479.9	-4.6	1.6	2.2	1.95	1.94		
511.0	3.50	123.00	510.9	-5.4	3.0	3.7	3.43	3.23		
542.0	3.90	116.70	541.8	-6.4	4.7	5.6	1.84	1.29		
574.0	4.90	118.00	573.7	-7.6	6.9	7.9	3.14	3.12		

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well NP MF10B E09 696
Project:	North Piceance	TVD Reference:	WELL @ 5772.0ft (Original Well Elev)
Site:	E09 696 (SWNW S9-T6S-R96W)	MD Reference:	WELL @ 5772.0ft (Original Well Elev)
Well:	NP MF10B E09 696	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	EDM 5000.1 US 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
606.0	5.70	110.10	605.6	-8.7	9.6	10.7	3.38	2.50	
636.0	7.20	106.50	635.4	-9.8	12.8	14.1	5.18	5.00	
666.0	8.50	107.30	665.1	-11.0	16.7	18.1	4.35	4.33	
700.0	9.80	106.40	698.7	-12.5	21.9	23.4	3.85	3.82	
732.0	11.50	104.40	730.1	-14.1	27.6	29.3	5.44	5.31	
763.0	12.70	103.40	760.4	-15.7	33.9	35.8	3.93	3.87	
795.0	14.00	101.10	791.6	-17.2	41.1	43.1	4.39	4.06	
858.0	15.50	102.10	852.5	-20.5	56.8	59.2	2.41	2.38	
921.0	17.80	101.00	912.8	-24.1	74.5	77.2	3.68	3.65	
984.0	19.90	99.80	972.5	-27.7	94.5	97.5	3.39	3.33	
1,048.0	22.30	98.50	1,032.2	-31.4	117.3	120.5	3.82	3.75	
1,111.0	24.30	101.60	1,090.0	-35.7	141.8	145.4	3.72	3.17	
1,174.0	26.10	100.50	1,147.0	-40.9	168.1	172.2	2.95	2.86	
1,237.0	29.00	99.90	1,202.9	-46.0	196.8	201.3	4.62	4.60	
1,300.0	31.20	98.60	1,257.4	-51.1	228.0	232.9	3.64	3.49	
1,363.0	33.60	96.10	1,310.6	-55.4	261.5	266.7	4.36	3.81	
1,426.0	35.90	96.40	1,362.3	-59.3	297.2	302.6	3.66	3.65	
1,505.0	38.30	97.10	1,425.3	-64.9	344.5	350.2	3.08	3.04	
1,558.0	39.00	95.00	1,466.7	-68.4	377.4	383.3	2.80	1.32	
1,653.0	40.30	98.50	1,539.9	-75.5	437.6	443.8	2.72	1.37	
1,748.0	43.00	98.50	1,610.9	-84.9	500.0	507.0	2.84	2.84	
1,843.0	47.20	98.10	1,677.9	-94.6	566.6	574.3	4.43	4.42	
1,938.0	49.10	96.90	1,741.3	-103.8	636.7	645.0	2.21	2.00	
2,032.0	48.90	97.80	1,803.0	-112.9	707.1	715.9	0.75	-0.21	
2,127.0	49.80	97.80	1,864.9	-122.7	778.5	788.0	0.95	0.95	
2,222.0	49.50	97.30	1,926.4	-132.2	850.3	860.4	0.51	-0.32	
2,317.0	49.20	98.20	1,988.2	-141.9	921.7	932.5	0.79	-0.32	
2,411.0	49.70	98.50	2,049.4	-152.3	992.4	1,003.9	0.58	0.53	
2,506.0	50.70	97.40	2,110.2	-162.4	1,064.6	1,076.9	1.38	1.05	
2,601.0	50.40	97.30	2,170.5	-171.7	1,137.4	1,150.2	0.33	-0.32	
2,695.0	49.80	96.40	2,230.8	-180.3	1,209.0	1,222.3	0.97	-0.64	
2,790.0	49.70	96.30	2,292.2	-188.4	1,281.1	1,294.8	0.13	-0.11	
2,884.0	49.00	95.70	2,353.4	-195.8	1,352.0	1,366.1	0.89	-0.74	
2,979.0	49.40	95.80	2,415.5	-203.0	1,423.5	1,437.9	0.43	0.42	
3,074.0	48.80	95.80	2,477.7	-210.3	1,495.0	1,509.7	0.63	-0.63	
3,169.0	49.50	96.20	2,539.9	-217.8	1,566.4	1,581.5	0.80	0.74	
3,263.0	48.30	95.70	2,601.6	-225.1	1,636.9	1,652.3	1.34	-1.28	
3,358.0	49.40	95.20	2,664.2	-231.9	1,708.1	1,723.7	1.22	1.16	
3,453.0	50.20	95.30	2,725.5	-238.6	1,780.4	1,796.2	0.85	0.84	
3,548.0	49.60	96.70	2,786.7	-246.2	1,852.6	1,868.8	1.29	-0.63	
3,643.0	48.00	97.40	2,849.2	-254.9	1,923.6	1,940.3	1.77	-1.68	
3,737.0	47.30	98.10	2,912.6	-264.3	1,992.4	2,009.8	0.93	-0.74	
3,832.0	49.00	99.10	2,976.0	-274.9	2,062.4	2,080.5	1.95	1.79	
3,927.0	49.80	98.60	3,037.8	-286.0	2,133.6	2,152.6	0.93	0.84	
4,022.0	47.00	98.40	3,100.8	-296.5	2,203.9	2,223.7	2.95	-2.95	
4,116.0	47.30	97.10	3,164.8	-305.8	2,272.2	2,292.6	1.06	0.32	
4,211.0	48.20	97.40	3,228.6	-314.6	2,341.9	2,362.9	0.98	0.95	
4,306.0	49.70	98.10	3,291.0	-324.3	2,412.9	2,434.5	1.67	1.58	
4,401.0	48.10	99.40	3,353.5	-335.2	2,483.7	2,506.1	1.97	-1.68	
4,496.0	44.90	100.50	3,418.9	-347.1	2,551.5	2,575.0	3.47	-3.37	
4,590.0	41.70	99.80	3,487.3	-358.4	2,615.0	2,639.4	3.44	-3.40	
4,685.0	38.90	100.00	3,559.7	-369.0	2,675.5	2,700.8	2.95	-2.95	
4,780.0	36.60	99.20	3,634.8	-378.7	2,732.8	2,758.9	2.48	-2.42	

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well NP MF10B E09 696
Project:	North Piceance	TVD Reference:	WELL @ 5772.0ft (Original Well Elev)
Site:	E09 696 (SWNW S9-T6S-R96W)	MD Reference:	WELL @ 5772.0ft (Original Well Elev)
Well:	NP MF10B E09 696	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	EDM 5000.1 US 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
4,875.0	34.10	98.40	3,712.3	-387.1	2,787.1	2,813.9	2.68	-2.63	
4,969.0	31.60	99.00	3,791.3	-394.8	2,837.5	2,864.9	2.68	-2.66	
5,064.0	29.50	99.20	3,873.1	-402.5	2,885.2	2,913.1	2.21	-2.21	
5,159.0	27.90	97.10	3,956.4	-409.0	2,930.4	2,958.8	1.99	-1.68	
5,254.0	25.60	98.30	4,041.2	-414.7	2,972.7	3,001.5	2.49	-2.42	
5,348.0	22.00	94.90	4,127.2	-419.1	3,010.4	3,039.4	4.10	-3.83	
5,443.0	19.20	96.60	4,216.1	-422.4	3,043.6	3,072.8	3.01	-2.95	
5,538.0	17.30	99.70	4,306.4	-426.6	3,073.1	3,102.5	2.25	-2.00	
5,633.0	14.20	100.90	4,397.8	-431.2	3,098.5	3,128.3	3.28	-3.26	
5,727.0	11.90	99.10	4,489.4	-434.9	3,119.4	3,149.5	2.48	-2.45	
5,822.0	9.90	95.80	4,582.6	-437.3	3,137.2	3,167.5	2.20	-2.11	
5,917.0	6.90	101.50	4,676.6	-439.2	3,150.9	3,181.3	3.27	-3.16	
6,012.0	4.90	102.50	4,771.1	-441.3	3,160.4	3,191.1	2.11	-2.11	
6,106.0	4.90	102.80	4,864.8	-443.0	3,168.3	3,199.1	0.03	0.00	
6,201.0	3.70	96.60	4,959.5	-444.3	3,175.3	3,206.2	1.35	-1.26	
6,296.0	3.00	96.80	5,054.3	-444.9	3,180.8	3,211.7	0.74	-0.74	
6,391.0	2.70	99.80	5,149.2	-445.6	3,185.5	3,216.5	0.35	-0.32	
6,485.0	1.30	76.50	5,243.2	-445.7	3,188.7	3,219.7	1.69	-1.49	
6,580.0	0.50	291.70	5,338.1	-445.3	3,189.3	3,220.3	1.82	-0.84	
6,675.0	0.90	303.30	5,433.1	-444.7	3,188.3	3,219.2	0.44	0.42	
6,769.0	1.50	347.50	5,527.1	-443.1	3,187.4	3,218.1	1.13	0.64	
6,864.0	3.50	30.90	5,622.0	-439.4	3,188.7	3,218.8	2.76	2.11	
6,959.0	3.00	355.60	5,716.9	-434.5	3,190.0	3,219.4	2.13	-0.53	
7,054.0	1.10	304.40	5,811.8	-431.5	3,189.0	3,218.0	2.59	-2.00	
7,148.0	1.90	170.40	5,905.8	-432.5	3,188.5	3,217.7	2.96	0.85	
7,244.0	2.60	179.70	6,001.7	-436.2	3,188.8	3,218.5	0.82	0.73	
7,339.0	0.80	214.60	6,096.7	-438.9	3,188.4	3,218.5	2.10	-1.89	
7,433.0	0.60	308.30	6,190.7	-439.2	3,187.7	3,217.8	1.10	-0.21	
7,528.0	0.70	221.00	6,285.7	-439.3	3,186.9	3,217.0	0.95	0.11	
7,623.0	1.10	172.10	6,380.7	-440.7	3,186.7	3,217.0	0.87	0.42	
7,717.0	1.30	195.20	6,474.7	-442.6	3,186.5	3,217.1	0.55	0.21	
7,812.0	0.80	223.10	6,569.6	-444.1	3,185.8	3,216.6	0.74	-0.53	
7,907.0	0.70	285.80	6,664.6	-444.4	3,184.8	3,215.6	0.83	-0.11	
8,002.0	1.70	238.00	6,759.6	-445.0	3,183.0	3,214.0	1.40	1.05	
8,096.0	0.90	241.80	6,853.6	-446.1	3,181.2	3,212.3	0.86	-0.85	
8,191.0	0.90	333.50	6,948.6	-445.8	3,180.2	3,211.3	1.36	0.00	
8,286.0	0.90	294.40	7,043.6	-444.8	3,179.2	3,210.1	0.63	0.00	
8,381.0	1.50	247.40	7,138.5	-445.0	3,177.3	3,208.3	1.16	0.63	
8,475.0	1.60	244.20	7,232.5	-446.0	3,175.0	3,206.2	0.14	0.11	
8,570.0	1.10	249.50	7,327.5	-446.9	3,173.0	3,204.3	0.54	-0.53	
8,665.0	0.80	244.00	7,422.5	-447.5	3,171.5	3,202.9	0.33	-0.32	
8,760.0	2.10	235.50	7,517.4	-448.8	3,169.5	3,201.1	1.38	1.37	
8,854.0	3.00	240.70	7,611.3	-451.0	3,165.9	3,197.9	0.99	0.96	
8,949.0	3.20	238.00	7,706.2	-453.6	3,161.5	3,193.9	0.26	0.21	
8,980.0	3.10	249.50	7,737.2	-454.4	3,160.0	3,192.5	2.06	-0.32	Last Cathedral Survey @ 8,980' MD Projection to Bit @ 9,035'
9,035.0	3.10	249.50	7,792.1	-455.4	3,157.2	3,189.9	0.00	0.00	

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well NP MF10B E09 696
Project:	North Piceance	TVD Reference:	WELL @ 5772.0ft (Original Well Elev)
Site:	E09 696 (SWNW S9-T6S-R96W)	MD Reference:	WELL @ 5772.0ft (Original Well Elev)
Well:	NP MF10B E09 696	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	EDM 5000.1 US 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)		
E09 696 MF10B TGT	0.00	0.00	4,912.0	-441.2	3,191.4	1,631,452.17	2,264,796.62	39° 32' 17.33 N	108° 6' 25.87 W
- survey misses target center by 19.5ft at 6154.8ft MD (4913.4 TVD, -443.8 N, 3172.1 E)									
- Point									
E09 696 MF10B BHL NE	0.00	0.00	7,672.0	-451.2	3,174.4	1,631,442.69	2,264,779.31	39° 32' 17.23 N	108° 6' 26.09 W
- survey misses target center by 11.3ft at 8914.2ft MD (7671.4 TVD, -452.6 N, 3163.1 E)									
- Rectangle (sides W30.0 H50.0 D0.0)									

Survey Annotations					
Measured Depth	Vertical Depth	Local Coordinates			
(ft)	(ft)	+N/-S	+E/-W	Comment	
(ft)	(ft)	(ft)	(ft)		
8,980.0	7,737.2	-454.4	3,160.0	Last Cathedral Survey @ 8,980' MD	
9,035.0	7,792.1	-455.4	3,157.2	Projection to Bit @ 9,035'	

Checked By: _____ Approved By: _____ Date: _____