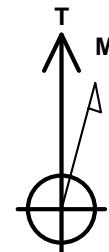
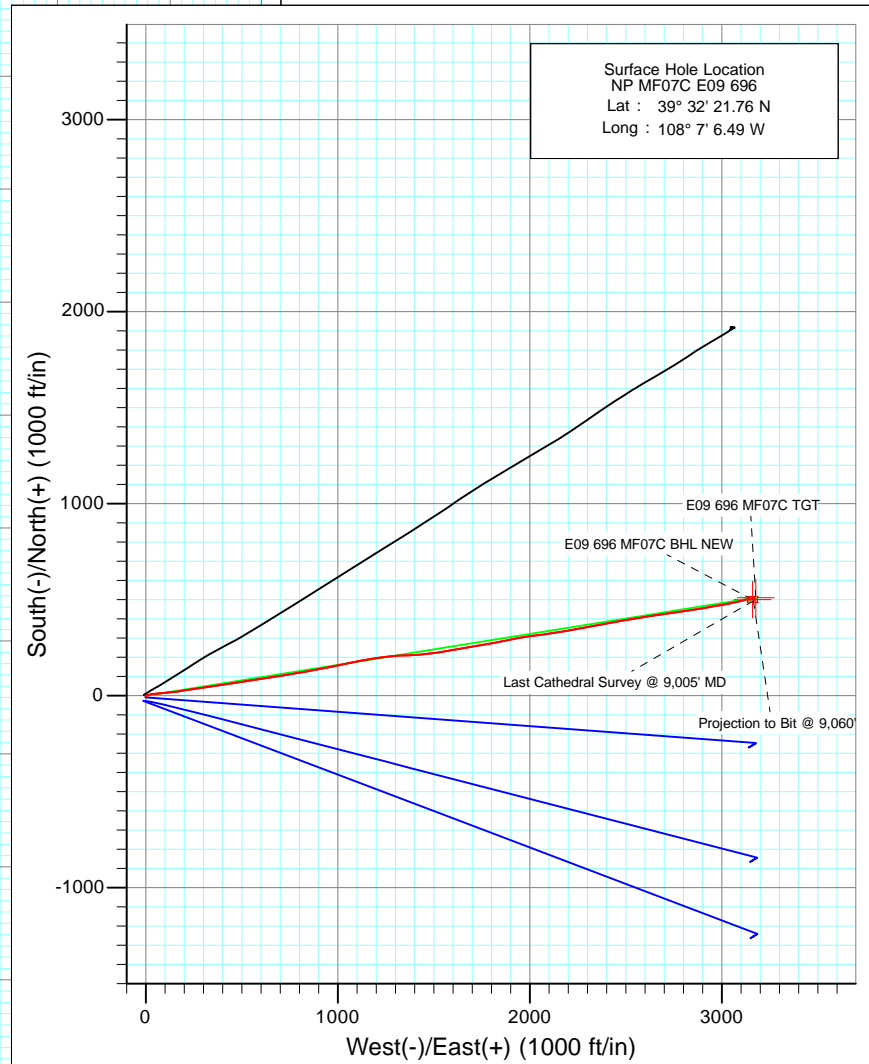
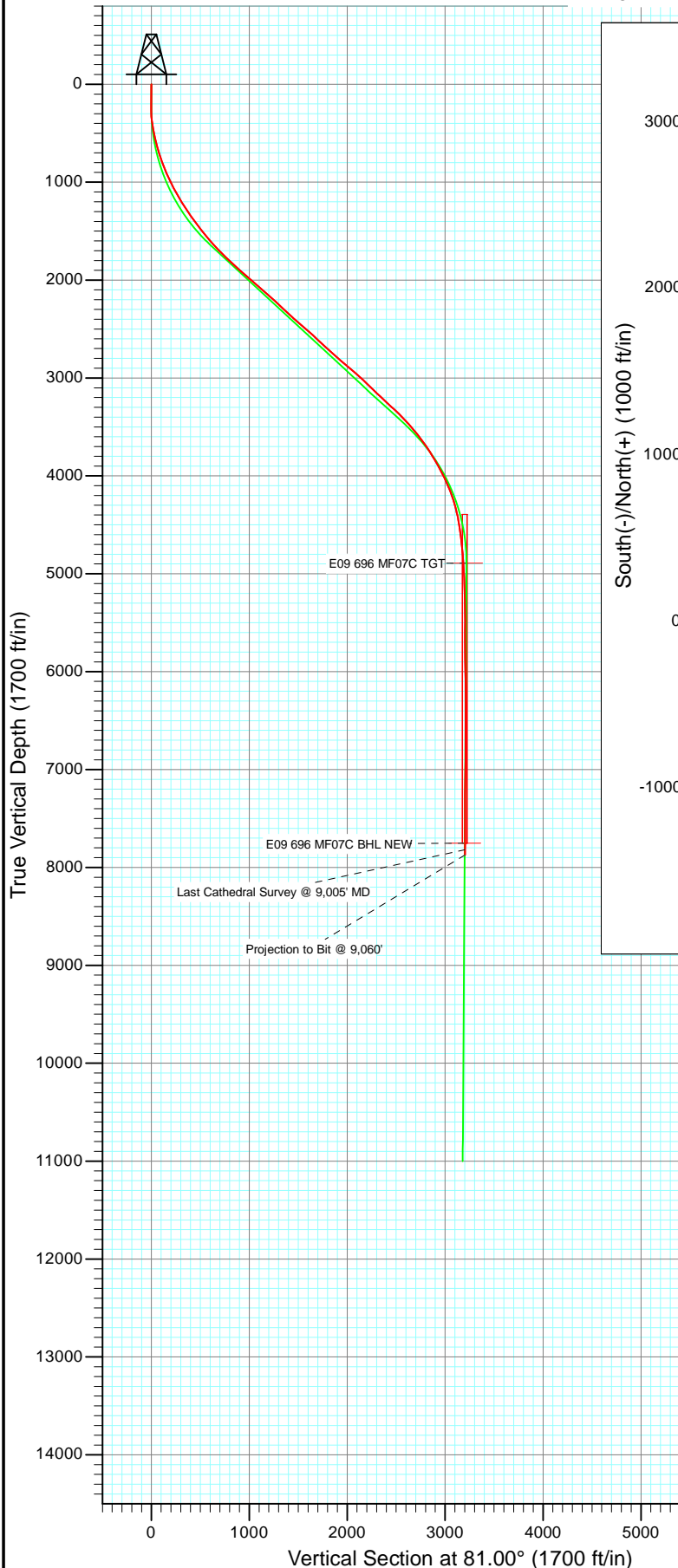




Project: North Piceance
 Site: E09 696 (SWNW S9-T6S-R96W)
 Well: NP MF07C E09 696
 Wellbore: DD
 Design: FINAL



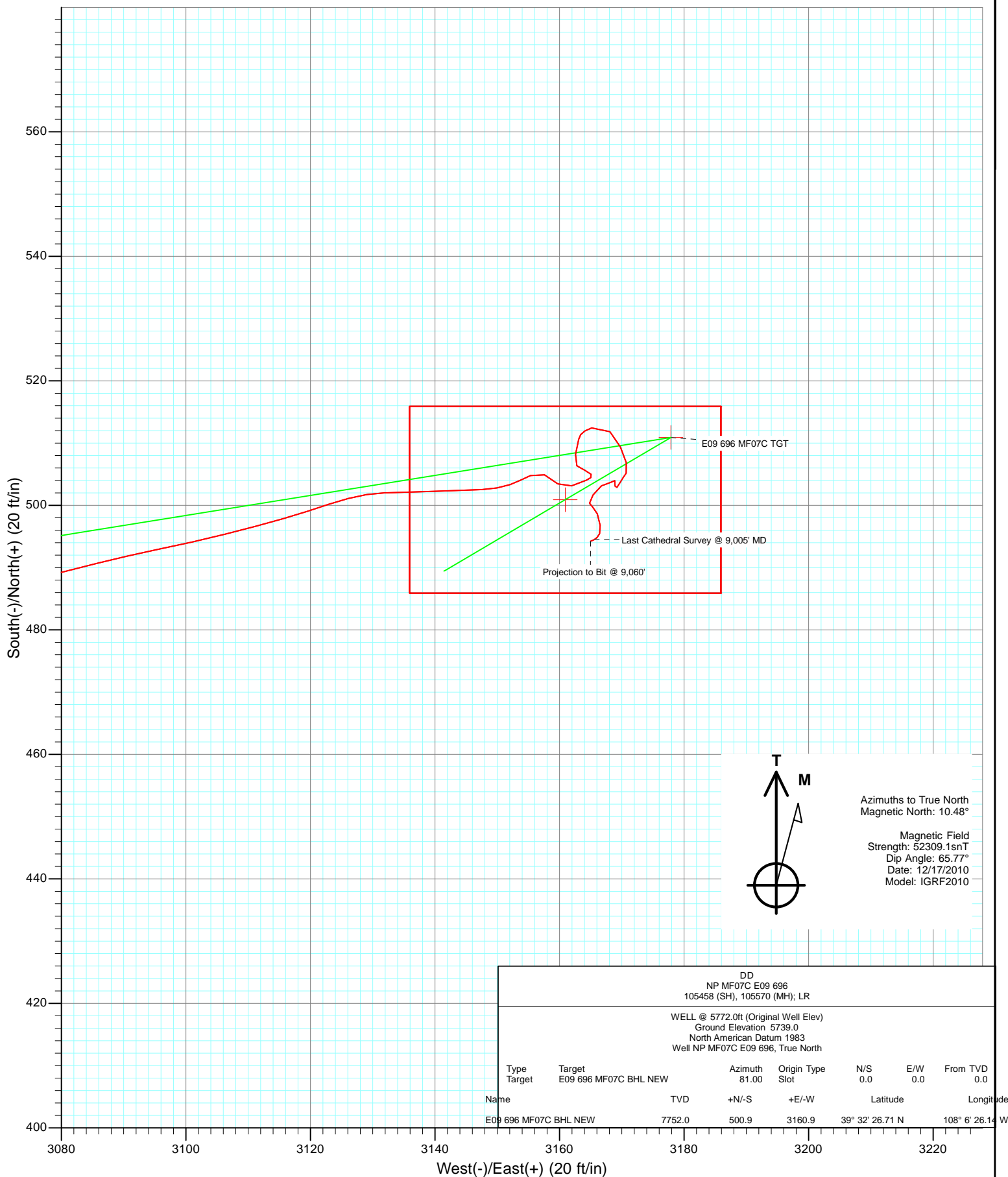
Azimuths to True North
 Magnetic North: 10.48°

Magnetic Field
 Strength: 52309.1snT
 Dip Angle: 65.77°
 Date: 12/17/2010
 Model: IGRF2010

DD						
NP MF07C E09 696						
105458 (SH), 105570 (MH); LR						
WELL @ 5772.0ft (Original Well Elev)						
Ground Elevation: 5739.0						
North American Datum 1983						
Well NP MF07C E09 696, True North						
Type	Target	Azimuth	Origin Type	N/S	E/W	From TVD
Target	E09 696 MF07C BHL NEW	81.00	Slot	0.0	0.0	0.0
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	
E09 696 MF07C BHL NEW	7752.0	500.9	3160.9	39° 32' 26.71 N	108° 6' 26.14 W	



Project: North Piceance
Site: E09 696 (SWNW S9-T6S-R96W)
Well: NP MF07C E09 696
Wellbore: DD
Design: FINAL



Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well NP MF07C 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 MF07C 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 MF07C E09 696					
Well Position	+N/-S	0.0 ft	Northing:	1,631,991.97 ft	Latitude:	39° 32' 21.76 N
	+E/-W	0.0 ft	Easting:	2,261,628.86 ft	Longitude:	108° 7' 6.49 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	12/17/2010	10.48	65.77	52,309

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	81.00	

Survey Program	Date	12/31/2010			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
206.0	9,060.0	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		
206.0	0.80	248.24	206.0	-0.5	-1.3	-1.4	0.39	0.39		
268.0	0.60	87.80	268.0	-0.7	-1.4	-1.5	2.23	-0.32		
329.0	4.50	75.50	328.9	-0.1	1.2	1.2	6.42	6.39		
391.0	7.80	73.30	390.6	1.7	7.6	7.8	5.34	5.32		
452.0	10.50	75.50	450.8	4.3	17.0	17.4	4.46	4.43		
514.0	12.00	76.30	511.6	7.3	28.7	29.5	2.43	2.42		
608.0	14.40	85.50	603.1	10.5	49.8	50.9	3.39	2.55		
703.0	16.90	85.00	694.6	12.6	75.4	76.4	2.64	2.63		
798.0	19.50	85.10	784.8	15.2	104.9	106.0	2.74	2.74		
892.0	22.40	84.40	872.6	18.3	138.4	139.6	3.10	3.09		
987.0	25.30	81.20	959.5	23.2	176.5	177.9	3.34	3.05		
1,082.0	27.10	81.30	1,044.7	29.5	217.9	219.9	1.90	1.89		

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well NP MF07C E09 696
Project:	North Piceance	TVD Reference:	WELL @ 5772.0ft (Original Well Elev)
Site:	E09 696 (SWNW S9-T6S-R96W)	MVD Reference:	WELL @ 5772.0ft (Original Well Elev)
Well:	NP MF07C 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
1,177.0	29.50	81.40	1,128.3	36.3	262.5	264.9	2.53	2.53	
1,271.0	32.50	81.10	1,208.9	43.7	310.3	313.3	3.20	3.19	
1,366.0	34.20	80.80	1,288.3	51.9	361.9	365.5	1.80	1.79	
1,461.0	35.00	82.70	1,366.5	59.6	415.3	419.5	1.41	0.84	
1,482.0	35.50	82.50	1,383.6	61.2	427.3	431.6	2.44	2.38	
1,557.0	36.70	80.10	1,444.2	67.9	471.0	475.8	2.47	1.60	
1,651.0	38.80	82.30	1,518.5	76.7	527.8	533.3	2.65	2.23	
1,746.0	40.70	81.50	1,591.6	85.2	588.0	594.0	2.07	2.00	
1,841.0	42.70	80.80	1,662.5	95.0	650.4	657.2	2.16	2.11	
1,936.0	45.50	80.00	1,730.7	106.0	715.6	723.3	3.01	2.95	
2,031.0	46.60	81.10	1,796.6	117.2	783.0	791.7	1.43	1.16	
2,126.0	47.30	79.60	1,861.5	128.9	851.5	861.1	1.37	0.74	
2,220.0	49.40	79.00	1,924.0	141.9	920.5	931.3	2.28	2.23	
2,315.0	49.70	77.40	1,985.6	156.7	991.2	1,003.5	1.32	0.32	
2,410.0	48.30	80.30	2,047.9	170.6	1,061.6	1,075.2	2.73	-1.47	
2,504.0	48.70	78.20	2,110.2	183.7	1,130.7	1,145.5	1.73	0.43	
2,599.0	47.50	81.60	2,173.7	196.1	1,200.3	1,216.2	2.95	-1.26	
2,693.0	47.10	84.30	2,237.4	204.6	1,268.9	1,285.2	2.15	-0.43	
2,788.0	47.90	86.90	2,301.6	210.0	1,338.7	1,355.0	2.19	0.84	
2,883.0	47.60	87.90	2,365.5	213.2	1,408.9	1,424.9	0.84	-0.32	
2,978.0	48.60	81.90	2,429.0	219.5	1,479.3	1,495.4	4.82	1.05	
3,072.0	49.10	82.40	2,490.8	229.1	1,549.4	1,566.2	0.67	0.53	
3,167.0	48.60	78.90	2,553.4	240.7	1,620.0	1,637.7	2.82	-0.53	
3,262.0	46.50	80.00	2,617.5	253.6	1,688.9	1,707.8	2.37	-2.21	
3,357.0	47.40	80.00	2,682.3	265.6	1,757.2	1,777.2	0.95	0.95	
3,451.0	47.60	79.80	2,745.8	277.8	1,825.5	1,846.5	0.26	0.21	
3,546.0	49.70	78.20	2,808.6	291.4	1,895.5	1,917.7	2.55	2.21	
3,641.0	49.90	80.80	2,869.9	304.6	1,966.8	1,990.2	2.10	0.21	
3,736.0	49.10	81.90	2,931.6	315.5	2,038.2	2,062.5	1.22	-0.84	
3,831.0	48.40	81.90	2,994.2	325.6	2,108.9	2,133.9	0.74	-0.74	
3,925.0	46.00	82.10	3,058.1	335.2	2,177.2	2,202.8	2.56	-2.55	
4,020.0	45.40	79.30	3,124.5	346.1	2,244.3	2,270.8	2.20	-0.63	
4,115.0	46.50	79.50	3,190.5	358.7	2,311.4	2,339.1	1.17	1.16	
4,210.0	47.00	78.00	3,255.6	372.2	2,379.3	2,408.2	1.26	0.53	
4,304.0	48.10	80.30	3,319.1	385.2	2,447.4	2,477.5	2.15	1.17	
4,399.0	44.50	81.30	3,384.7	396.2	2,515.2	2,546.2	3.87	-3.79	
4,494.0	42.70	79.70	3,453.5	407.0	2,579.8	2,611.7	2.22	-1.89	
4,589.0	40.00	82.40	3,524.8	416.8	2,641.8	2,674.4	3.41	-2.84	
4,683.0	37.50	81.30	3,598.1	425.2	2,700.0	2,733.3	2.76	-2.66	
4,778.0	35.20	81.10	3,674.6	433.8	2,755.6	2,789.6	2.42	-2.42	
4,873.0	32.50	82.00	3,753.5	441.6	2,808.0	2,842.5	2.89	-2.84	
4,968.0	30.70	82.60	3,834.4	448.2	2,857.3	2,892.2	1.92	-1.89	
5,063.0	29.00	79.20	3,916.8	455.7	2,904.0	2,939.5	2.52	-1.79	
5,157.0	26.10	79.30	4,000.1	463.8	2,946.7	2,983.0	3.09	-3.09	
5,252.0	23.90	81.70	4,086.2	470.4	2,986.3	3,023.1	2.55	-2.32	
5,347.0	20.70	77.80	4,174.1	476.8	3,021.7	3,059.1	3.71	-3.37	
5,441.0	16.30	80.10	4,263.2	482.6	3,051.0	3,088.9	4.74	-4.68	
5,536.0	14.00	74.50	4,354.9	487.9	3,075.2	3,113.7	2.87	-2.42	
5,631.0	11.10	78.20	4,447.7	492.9	3,095.2	3,134.2	3.17	-3.05	
5,726.0	8.80	74.90	4,541.2	496.6	3,111.2	3,150.6	2.49	-2.42	
5,820.0	6.20	70.90	4,634.4	500.2	3,122.9	3,162.7	2.82	-2.77	
5,915.0	4.90	87.60	4,729.0	502.0	3,131.8	3,171.8	2.17	-1.37	
6,010.0	4.70	88.90	4,823.6	502.3	3,139.8	3,179.7	0.24	-0.21	

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well NP MF07C 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 MF07C 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
6,105.0	4.70	86.90	4,918.3	502.5	3,147.6	3,187.4	0.17	0.00	
6,199.0	3.40	61.00	5,012.1	504.1	3,153.8	3,193.9	2.35	-1.38	
6,294.0	1.70	113.50	5,107.0	504.9	3,157.6	3,197.7	2.87	-1.79	
6,388.0	1.50	136.70	5,201.0	503.5	3,159.7	3,199.6	0.72	-0.21	
6,483.0	1.80	66.90	5,295.9	503.1	3,161.9	3,201.7	2.00	0.32	
6,578.0	1.30	71.90	5,390.9	504.1	3,164.3	3,204.2	0.54	-0.53	
6,673.0	0.80	334.10	5,485.9	505.0	3,165.1	3,205.1	1.70	-0.53	
6,768.0	0.90	275.70	5,580.9	505.7	3,164.0	3,204.2	0.88	0.11	
6,862.0	1.00	319.90	5,674.9	506.4	3,162.8	3,203.1	0.77	0.11	
6,957.0	1.50	14.80	5,769.9	508.2	3,162.6	3,203.1	1.30	0.53	
7,052.0	1.50	9.50	5,864.8	510.6	3,163.1	3,204.0	0.15	0.00	
7,146.0	2.40	72.50	5,958.8	512.4	3,165.2	3,206.4	2.32	0.96	
7,241.0	1.90	139.10	6,053.7	511.8	3,168.1	3,209.2	2.52	-0.53	
7,336.0	1.70	152.60	6,148.7	509.4	3,169.8	3,210.4	0.49	-0.21	
7,431.0	1.60	167.00	6,243.6	506.8	3,170.7	3,211.0	0.45	-0.11	
7,526.0	0.60	219.60	6,338.6	505.2	3,170.7	3,210.7	1.39	-1.05	
7,620.0	0.50	206.50	6,432.6	504.4	3,170.2	3,210.1	0.17	-0.11	
7,715.0	0.40	218.60	6,527.6	503.8	3,169.8	3,209.6	0.14	-0.11	
7,810.0	0.90	211.00	6,622.6	502.9	3,169.2	3,208.9	0.53	0.53	
7,904.0	1.00	5.80	6,716.6	503.1	3,168.9	3,208.6	1.97	0.11	
7,999.0	0.20	296.00	6,811.6	504.0	3,168.9	3,208.7	1.00	-0.84	
8,094.0	0.60	229.30	6,906.6	503.7	3,168.3	3,208.1	0.58	0.42	
8,189.0	0.30	294.00	7,001.6	503.5	3,167.7	3,207.5	0.57	-0.32	
8,283.0	1.10	238.20	7,095.6	503.1	3,166.7	3,206.5	1.03	0.85	
8,378.0	1.40	211.20	7,190.6	501.7	3,165.4	3,204.9	0.69	0.32	
8,473.0	0.40	169.00	7,285.5	500.3	3,164.8	3,204.1	1.20	-1.05	
8,567.0	0.60	122.50	7,379.5	499.8	3,165.3	3,204.5	0.46	0.21	
8,662.0	1.10	158.30	7,474.5	498.6	3,166.1	3,205.1	0.74	0.53	
8,757.0	1.20	172.60	7,569.5	496.8	3,166.5	3,205.3	0.32	0.11	
8,852.0	0.50	210.00	7,664.5	495.5	3,166.4	3,205.0	0.90	-0.74	
8,946.0	0.40	217.30	7,758.5	494.8	3,166.0	3,204.5	0.12	-0.11	
9,005.0	0.70	243.90	7,817.5	494.5	3,165.6	3,204.0	0.65	0.51	Last Cathedral Survey @ 9,005' MD Projection to Bit @ 9,060'
9,060.0	0.70	243.90	7,872.5	494.2	3,165.0	3,203.3	0.00	0.00	

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well NP MF07C 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 MF07C 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	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
- Shape									
E09 696 MF07C TGT	0.00	0.00	4,892.0	510.9	3,177.9	1,632,411.08	2,264,820.17	39° 32' 26.81 N	108° 6' 25.92 W
- survey misses target center by 33.5ft at 6081.3ft MD (4894.7 TVD, 502.4 N, 3145.6 E)									
- Point									
E09 696 MF07C BHL NE	0.00	0.00	7,752.0	500.9	3,160.9	1,632,401.58	2,264,802.92	39° 32' 26.71 N	108° 6' 26.14 W
- survey misses target center by 7.9ft at 8939.5ft MD (7752.0 TVD, 494.9 N, 3166.1 E)									
- Rectangle (sides W30.0 H50.0 D0.0)									

Survey Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	
9,005.0	7,817.5	494.5	3,165.6	Last Cathedral Survey @ 9,005' MD
9,060.0	7,872.5	494.2	3,165.0	Projection to Bit @ 9,060'

Checked By: _____ Approved By: _____ Date: _____