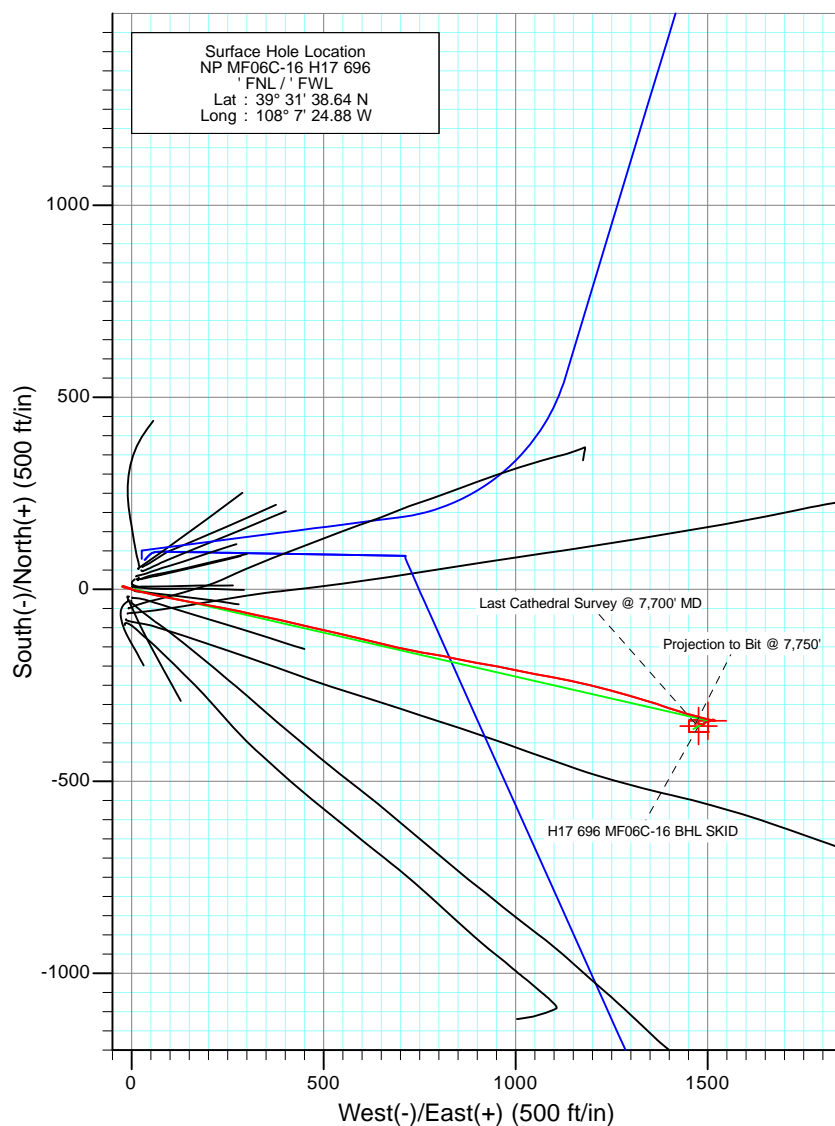
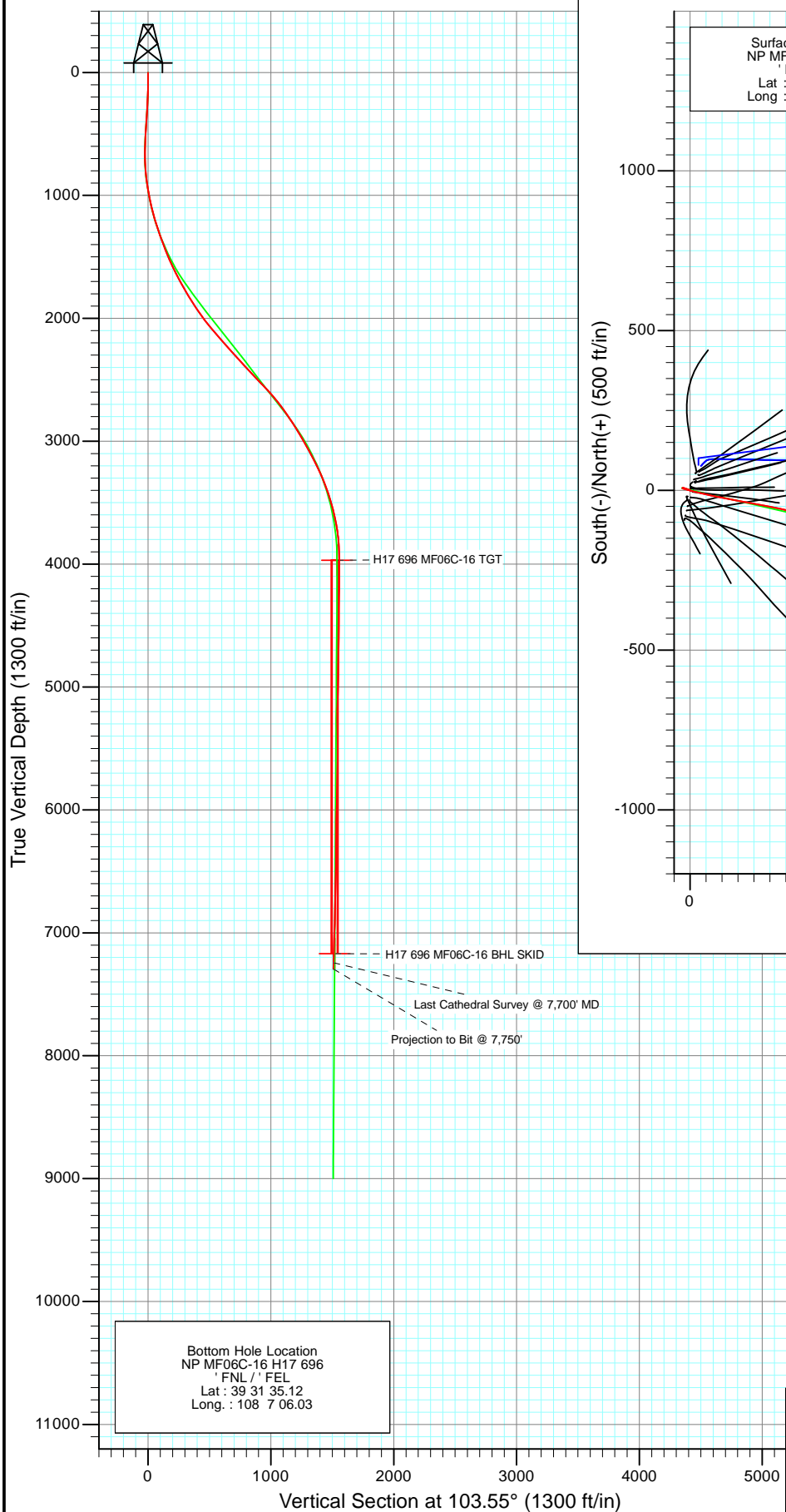




Project: North Piceance  
Site: H17 696 (S17-T6S-R96W)  
Well: NP MF06C-16 H17 696  
Wellbore: DD  
Design: FINAL



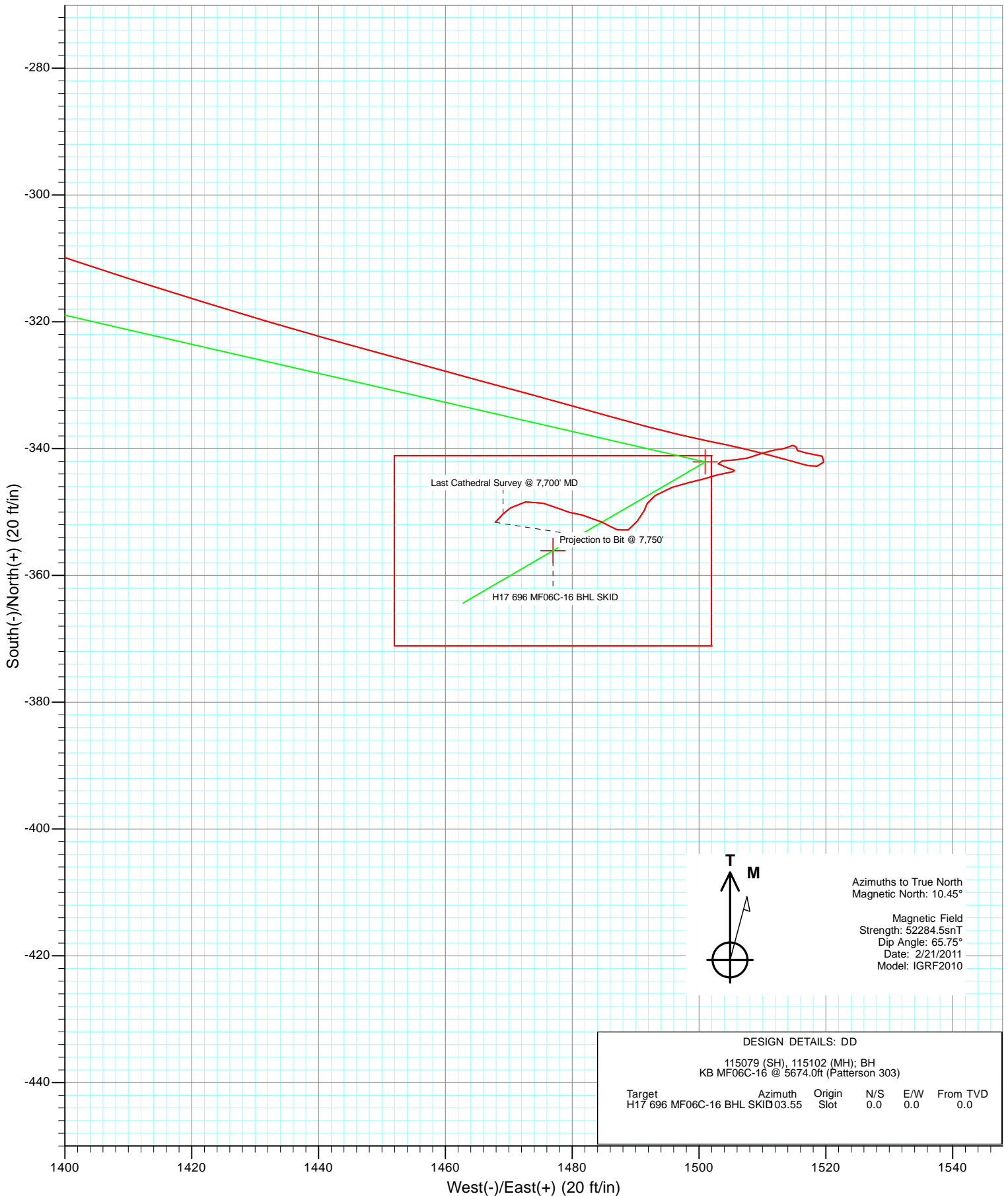
Azimuths to True North  
Magnetic North: 10.45°

Magnetic Field  
Strength: 52284.5nT  
Dip Angle: 65.75°  
Date: 2/21/2011  
Model: IGRF2010

DESIGN DETAILS: DD					
115079 (SH), 115102 (MH); BH KB MF06C-16 @ 5674.0ft (Patterson 303)					
Target	Azimuth	Origin	N/S	E/W	From TVD
H17 696 MF06C-16 BHL SKID	03.55	Slot	0.0	0.0	0.0



Project: North Piceance  
Site: H17 696 (S17-T6S-R96W)  
Well: NP MF06C-16 H17 696  
Wellbore: DD  
Design: FINAL



## Survey Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well NP MF06C-16 H17 696
<b>Project:</b>	North Piceance	<b>TVD Reference:</b>	KB MF06C-16 @ 5674.0ft (Patterson 303)
<b>Site:</b>	H17 696 (S17-T6S-R96W)	<b>MD Reference:</b>	KB MF06C-16 @ 5674.0ft (Patterson 303)
<b>Well:</b>	NP MF06C-16 H17 696	<b>North Reference:</b>	True
<b>Wellbore:</b>	DD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB

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

Site	H17 696 (S17-T6S-R96W)				
Site Position:		Northing:	1,627,645.46 ft	Latitude:	39° 31' 38.37 N
From:	Lat/Long	Easting:	2,260,053.39 ft	Longitude:	108° 7' 24.99 W
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	-1.65 °

Well	NP MF06C-16 H17 696					
Well Position	+N/-S	0.0 ft	Northing:	1,627,672.50 ft	Latitude:	39° 31' 38.64 N
	+E/-W	0.0 ft	Easting:	2,260,062.80 ft	Longitude:	108° 7' 24.88 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,652.0 ft

<b>Wellbore</b>	DD				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	2/21/2011	10.45	65.75	52,284

<b>Design</b>	DD				
<b>Audit Notes:</b>					
<b>Version:</b>	1.0	<b>Phase:</b>	ACTUAL	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Direction</b>	
	(ft)	(ft)	(ft)	(°)	
	0.0	0.0	0.0	103.55	

<b>Survey Program</b>	<b>Date</b>	2/28/2011			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
30.0	150.0	Survey #1 (DD)	Gyro	Gyro	
201.0	7,750.0	Survey #2 (DD)	MWD	Geolink MWD	

<b>Survey</b>									
<b>Measured Depth (ft)</b>	<b>Inclination (°)</b>	<b>Azimuth (°)</b>	<b>Vertical Depth (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Vertical Section (ft)</b>	<b>Dogleg Rate (°/100ft)</b>	<b>Build Rate (°/100ft)</b>	<b>Formations / Comments</b>
150.0	1.84	296.82	150.0	1.1	-0.7	-0.9	0.00	0.00	
201.0	1.90	287.10	201.0	1.7	-2.2	-2.6	0.63	0.12	
231.0	2.40	288.80	230.9	2.0	-3.3	-3.7	1.68	1.67	
262.0	2.90	285.60	261.9	2.5	-4.7	-5.1	1.68	1.61	
292.0	3.30	290.80	291.9	3.0	-6.2	-6.7	1.63	1.33	
323.0	3.60	287.60	322.8	3.6	-8.0	-8.6	1.15	0.97	
353.0	3.80	291.40	352.7	4.2	-9.8	-10.5	1.05	0.67	
383.0	3.60	290.80	382.7	4.9	-11.6	-12.4	0.68	-0.67	
414.0	3.60	288.80	413.6	5.6	-13.4	-14.4	0.41	0.00	
445.0	3.80	289.70	444.6	6.2	-15.3	-16.4	0.67	0.65	
476.0	3.80	290.90	475.5	7.0	-17.3	-18.4	0.26	0.00	
506.0	3.60	289.80	505.4	7.6	-19.1	-20.3	0.71	-0.67	

## Survey Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well NP MF06C-16 H17 696
<b>Project:</b>	North Piceance	<b>TVD Reference:</b>	KB MF06C-16 @ 5674.0ft (Patterson 303)
<b>Site:</b>	H17 696 (S17-T6S-R96W)	<b>MD Reference:</b>	KB MF06C-16 @ 5674.0ft (Patterson 303)
<b>Well:</b>	NP MF06C-16 H17 696	<b>North Reference:</b>	True
<b>Wellbore:</b>	DD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	DD	<b>Database:</b>	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
555.0	2.30	268.50	554.4	8.1	-21.5	-22.8	3.43	-2.65	
601.0	1.70	255.80	600.3	7.9	-23.1	-24.3	1.61	-1.30	
647.0	0.90	212.30	646.3	7.5	-23.9	-25.0	2.64	-1.74	
693.0	1.20	143.00	692.3	6.8	-23.8	-24.8	2.65	0.65	
738.0	2.60	111.50	737.3	6.0	-22.6	-23.4	3.77	3.11	
784.0	4.00	107.80	783.2	5.1	-20.1	-20.8	3.08	3.04	
830.0	5.70	104.70	829.0	4.1	-16.4	-16.9	3.74	3.70	
876.0	7.30	101.90	874.7	2.9	-11.3	-11.7	3.54	3.48	
922.0	8.60	104.00	920.3	1.5	-5.1	-5.3	2.90	2.83	
968.0	9.80	104.20	965.7	-0.3	2.0	2.0	2.61	2.61	
1,013.0	11.10	103.80	1,010.0	-2.3	9.9	10.2	2.89	2.89	
1,059.0	12.10	105.30	1,055.0	-4.6	18.9	19.5	2.27	2.17	
1,105.0	13.80	104.50	1,099.9	-7.3	28.9	29.8	3.72	3.70	
1,151.0	14.60	105.10	1,144.4	-10.2	39.8	41.0	1.77	1.74	
1,197.0	16.10	103.20	1,188.8	-13.1	51.6	53.2	3.44	3.26	
1,242.0	17.30	103.00	1,231.9	-16.1	64.2	66.1	2.67	2.67	
1,290.0	18.90	101.20	1,277.5	-19.2	78.8	81.1	3.53	3.33	
1,385.0	20.00	98.70	1,367.1	-24.6	109.9	112.6	1.45	1.16	
1,430.0	20.30	101.90	1,409.4	-27.4	125.2	128.1	2.54	0.67	
1,522.0	23.10	100.60	1,494.8	-34.0	158.5	162.1	3.09	3.04	
1,614.0	25.10	99.90	1,578.8	-40.7	195.5	199.6	2.20	2.17	
1,705.0	27.60	101.70	1,660.3	-48.3	235.1	239.9	2.88	2.75	
1,797.0	29.70	100.70	1,741.1	-56.8	278.4	284.0	2.34	2.28	
1,888.0	31.20	103.50	1,819.5	-66.5	323.5	330.1	2.27	1.65	
1,980.0	33.30	101.20	1,897.3	-77.0	371.4	379.1	2.64	2.28	
2,071.0	35.40	103.60	1,972.5	-88.0	421.6	430.5	2.75	2.31	
2,163.0	38.40	102.70	2,046.0	-100.6	475.4	485.7	3.31	3.26	
2,254.0	41.80	102.90	2,115.6	-113.6	532.5	544.3	3.74	3.74	
2,346.0	40.10	103.30	2,185.1	-127.2	591.2	604.6	1.87	-1.85	
2,438.0	41.90	104.60	2,254.5	-141.8	649.8	664.9	2.16	1.96	
2,529.0	43.30	101.30	2,321.5	-155.6	709.8	726.5	2.90	1.54	
2,621.0	42.00	99.10	2,389.2	-166.6	771.1	788.7	2.15	-1.41	
2,712.0	43.00	102.40	2,456.3	-178.1	831.5	850.1	2.68	1.10	
2,804.0	44.70	100.10	2,522.6	-190.5	894.0	913.8	2.53	1.85	
2,896.0	42.50	100.40	2,589.3	-201.8	956.5	977.1	2.40	-2.39	
2,987.0	39.80	102.40	2,657.8	-213.6	1,015.2	1,036.9	3.30	-2.97	
3,078.0	36.20	99.60	2,729.5	-224.4	1,070.1	1,092.9	4.39	-3.96	
3,170.0	34.10	101.50	2,804.7	-234.0	1,122.2	1,145.8	2.57	-2.28	
3,262.0	32.10	102.60	2,881.8	-244.5	1,171.3	1,196.0	2.27	-2.17	
3,353.0	30.50	103.80	2,959.5	-255.3	1,217.3	1,243.3	1.89	-1.76	
3,444.0	29.20	106.50	3,038.5	-267.1	1,261.1	1,288.5	2.05	-1.43	
3,536.0	28.40	105.60	3,119.1	-279.4	1,303.6	1,332.8	0.99	-0.87	
3,627.0	25.90	107.10	3,200.0	-291.0	1,343.5	1,374.3	2.85	-2.75	
3,719.0	23.20	109.40	3,283.7	-303.0	1,379.8	1,412.4	3.11	-2.93	
3,810.0	20.60	107.70	3,368.2	-313.8	1,412.0	1,446.2	2.94	-2.86	
3,902.0	18.10	105.80	3,454.9	-322.6	1,441.1	1,476.6	2.80	-2.72	
3,994.0	14.50	104.90	3,543.2	-329.5	1,466.0	1,502.4	3.92	-3.91	
4,085.0	11.70	105.90	3,631.9	-334.9	1,485.9	1,523.0	3.09	-3.08	
4,177.0	9.00	101.60	3,722.4	-338.9	1,501.9	1,539.5	3.05	-2.93	
4,268.0	4.80	106.30	3,812.7	-341.4	1,512.6	1,550.5	4.65	-4.62	
4,360.0	1.30	100.50	3,904.5	-342.7	1,517.3	1,555.3	3.81	-3.80	
4,452.0	0.40	70.70	3,996.5	-342.8	1,518.6	1,556.7	1.06	-0.98	
4,543.0	1.20	54.80	4,087.5	-342.1	1,519.7	1,557.6	0.90	0.88	

## Survey Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well NP MF06C-16 H17 696
<b>Project:</b>	North Piceance	<b>TVD Reference:</b>	KB MF06C-16 @ 5674.0ft (Patterson 303)
<b>Site:</b>	H17 696 (S17-T6S-R96W)	<b>MD Reference:</b>	KB MF06C-16 @ 5674.0ft (Patterson 303)
<b>Well:</b>	NP MF06C-16 H17 696	<b>North Reference:</b>	True
<b>Wellbore:</b>	DD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	DD	<b>Database:</b>	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
4,635.0	1.40	289.00	4,179.5	-341.2	1,519.4	1,557.1	2.52	0.22	
4,726.0	1.80	276.10	4,270.5	-340.7	1,517.0	1,554.5	0.59	0.44	
4,818.0	0.30	359.30	4,362.5	-340.3	1,515.5	1,553.1	1.95	-1.63	
4,909.0	0.40	331.60	4,453.4	-339.8	1,515.4	1,552.8	0.21	0.11	
5,001.0	0.50	269.10	4,545.4	-339.5	1,514.8	1,552.2	0.52	0.11	
5,092.0	0.40	230.00	4,636.4	-339.7	1,514.2	1,551.6	0.35	-0.11	
5,184.0	0.70	261.60	4,728.4	-340.0	1,513.4	1,550.9	0.45	0.33	
5,275.0	1.10	261.50	4,819.4	-340.2	1,511.9	1,549.6	0.44	0.44	
5,367.0	1.50	251.10	4,911.4	-340.7	1,509.9	1,547.7	0.50	0.43	
5,458.0	1.40	251.30	5,002.4	-341.5	1,507.8	1,545.8	0.11	-0.11	
5,549.0	1.10	273.40	5,093.4	-341.8	1,505.8	1,544.0	0.62	-0.33	
5,641.0	1.60	259.40	5,185.3	-342.0	1,503.7	1,541.9	0.65	0.54	
5,733.0	0.80	109.10	5,277.3	-342.4	1,503.0	1,541.4	2.53	-0.87	
5,824.0	1.10	115.70	5,368.3	-343.0	1,504.4	1,542.9	0.35	0.33	
5,915.0	0.50	100.40	5,459.3	-343.4	1,505.6	1,544.2	0.69	-0.66	
6,007.0	0.80	258.30	5,551.3	-343.6	1,505.4	1,544.0	1.39	0.33	
6,098.0	0.80	259.70	5,642.3	-343.9	1,504.1	1,542.8	0.02	0.00	
6,190.0	1.00	255.80	5,734.3	-344.2	1,502.7	1,541.5	0.23	0.22	
6,281.0	1.50	251.10	5,825.3	-344.8	1,500.8	1,539.8	0.56	0.55	
6,373.0	1.50	261.60	5,917.2	-345.3	1,498.5	1,537.7	0.30	0.00	
6,464.0	2.10	249.10	6,008.2	-346.1	1,495.7	1,535.2	0.78	0.66	
6,556.0	1.60	236.60	6,100.1	-347.4	1,493.1	1,532.9	0.70	-0.54	
6,647.0	0.70	198.90	6,191.1	-348.6	1,491.9	1,532.0	1.24	-0.99	
6,739.0	0.90	207.00	6,283.1	-349.8	1,491.3	1,531.8	0.25	0.22	
6,831.0	1.50	217.10	6,375.1	-351.4	1,490.3	1,531.1	0.69	0.65	
6,922.0	1.10	237.80	6,466.1	-352.8	1,488.8	1,530.1	0.67	-0.44	
7,014.0	1.40	297.20	6,558.0	-352.8	1,487.1	1,528.3	1.38	0.33	
7,106.0	2.10	296.00	6,650.0	-351.5	1,484.6	1,525.6	0.76	0.76	
7,197.0	2.00	282.60	6,740.9	-350.5	1,481.5	1,522.4	0.54	-0.11	
7,289.0	0.60	280.40	6,832.9	-350.0	1,479.5	1,520.3	1.52	-1.52	
7,380.0	1.30	295.00	6,923.9	-349.5	1,478.1	1,518.8	0.81	0.77	
7,472.0	2.20	285.00	7,015.9	-348.6	1,475.4	1,516.0	1.03	0.98	
7,564.0	1.40	257.10	7,107.8	-348.4	1,472.6	1,513.3	1.27	-0.87	
7,655.0	1.80	240.60	7,198.8	-349.4	1,470.3	1,511.2	0.67	0.44	
7,700.0	2.10	223.10	7,243.7	-350.3	1,469.1	1,510.3	1.47	0.67	Last Cathedral Survey @ 7,700' MD
7,750.0	2.10	223.10	7,293.7	-351.6	1,467.9	1,509.4	0.00	0.00	Projection to Bit @ 7,750'

## Survey Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well NP MF06C-16 H17 696
<b>Project:</b>	North Piceance	<b>TVD Reference:</b>	KB MF06C-16 @ 5674.0ft (Patterson 303)
<b>Site:</b>	H17 696 (S17-T6S-R96W)	<b>MD Reference:</b>	KB MF06C-16 @ 5674.0ft (Patterson 303)
<b>Well:</b>	NP MF06C-16 H17 696	<b>North Reference:</b>	True
<b>Wellbore:</b>	DD	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Design:</b>	DD	<b>Database:</b>	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									
H17 696 MF06C-16 TG1	0.00	0.00	3,969.0	-342.1	1,501.0	1,627,287.21	2,261,553.29	39° 31' 35.26 N	108° 7' 5.72 W
- survey misses target center by 17.4ft at 4424.2ft MD (3968.7 TVD, -342.8 N, 1518.4 E)									
- Point									
H17 696 MF06C-16 BHL	0.00	0.00	7,169.0	-356.1	1,477.0	1,627,273.91	2,261,528.90	39° 31' 35.12 N	108° 7' 6.03 W
- survey misses target center by 9.3ft at 7625.1ft MD (7168.9 TVD, -348.9 N, 1471.1 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)	
7,700.0	7,243.7	-350.3	1,469.1	Last Cathedral Survey @ 7,700' MD
7,750.0	7,293.7	-351.6	1,467.9	Projection to Bit @ 7,750'

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_