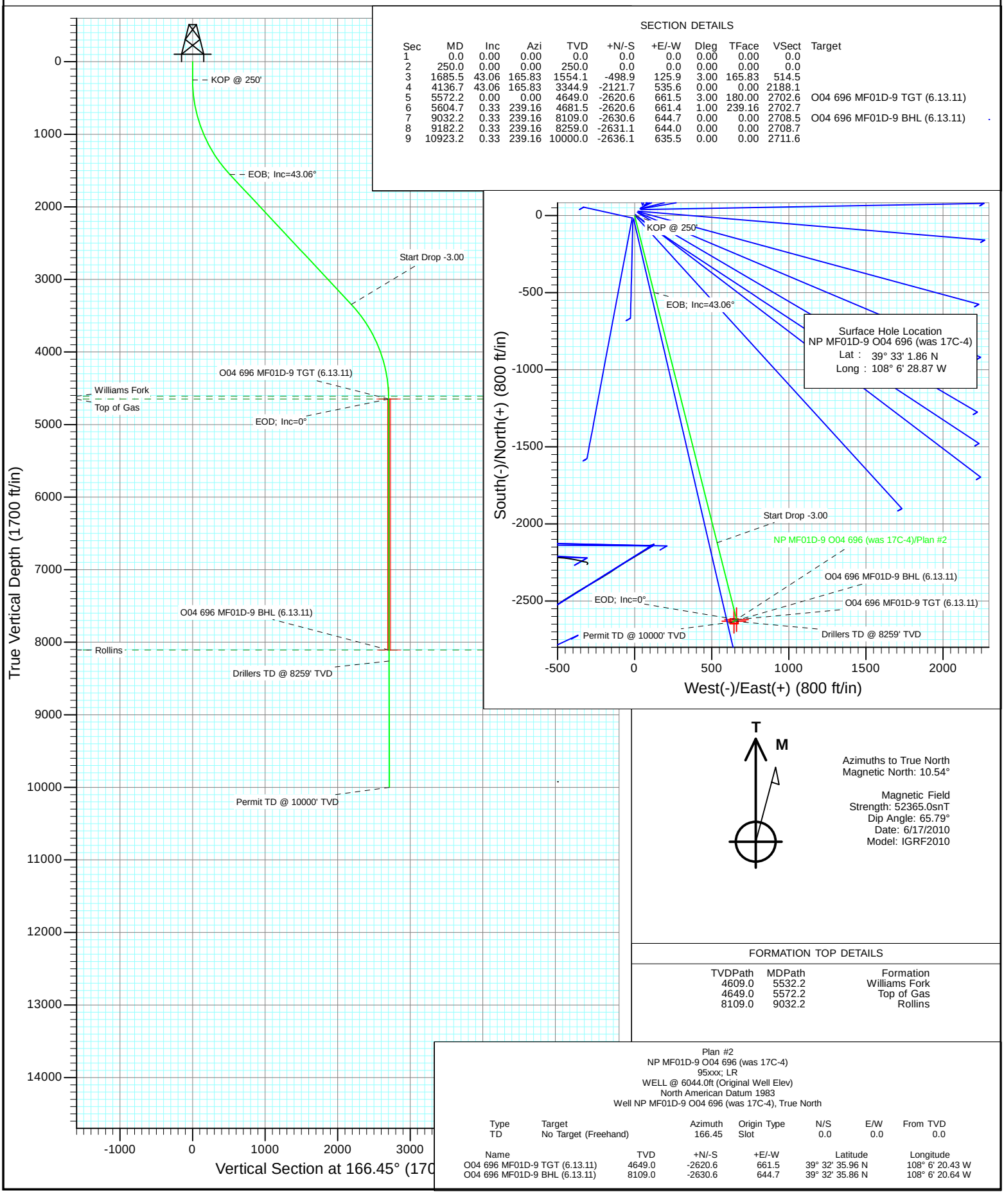
Project: North Piceance
Site: O04 696 (3rd)
Well: NP MF01D-9 O04 696 (was 17C-4)
Wellbore: DD
Design: Plan #2

CATHEDRAL

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	250.0	0.00	0.00	250.0	0.0	0.0	0.00	0.00	0.0	
3	1685.5	43.06	165.83	1554.1	-498.9	125.9	3.00	165.83	514.5	
4	4136.7	43.06	165.83	3344.9	-2121.7	535.6	0.00	0.00	2188.1	
5	5572.2	0.00	0.00	4649.0	-2620.6	661.5	3.00	180.00	2702.6	O04 696 MF01D-9 TGT (6.13.11)
6	5604.7	0.33	239.16	4681.5	-2620.6	661.4	1.00	239.16	2702.7	
7	9032.2	0.33	239.16	8109.0	-2630.6	644.7	0.00	0.00	2708.5	O04 696 MF01D-9 BHL (6.13.11)
8	9182.2	0.33	239.16	8259.0	-2631.1	644.0	0.00	0.00	2708.7	
9	10923.2	0.33	239.16	10000.0	-2636.1	635.5	0.00	0.00	2711.6	



T
M

Azimuths to True North
Magnetic North: 10.54°

Magnetic Field
Strength: 52365.0snT
Dip Angle: 65.79°
Date: 6/17/2010
Model: IGRF2010

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
4609.0	5532.2	Williams Fork
4649.0	5572.2	Top of Gas
8109.0	9032.2	Rollins

Plan #2
NP MF01D-9 O04 696 (was 17C-4)
95xxx; LR
WELL @ 6044.0ft (Original Well Elev)
North American Datum 1983
Well NP MF01D-9 O04 696 (was 17C-4), True North

Type	Target	Azimuth	Origin Type	N/S	E/W	From TVD
TD	No Target (Freehand)	166.45	Slot	0.0	0.0	0.0

Name	TVD	+N/-S	+E/-W	Latitude	Longitude
O04 696 MF01D-9 TGT (6.13.11)	4649.0	-2620.6	661.5	39° 32' 35.96 N	108° 6' 20.43 W
O04 696 MF01D-9 BHL (6.13.11)	8109.0	-2630.6	644.7	39° 32' 35.86 N	108° 6' 20.64 W

Planning Report

Database:	USA EDM 5000 US Multi Users DB	**Local Co-ordinate Reference:**	Well NP MF01D-9 O04 696 (was 17C-4)
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Project:	North Piceance	**MD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Site:	O04 696 (3rd)	**North Reference:**	True
Well:	NP MF01D-9 O04 696 (was 17C-4)	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	DD		
Design:	Plan #2		

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	O04 696 (3rd)				
Site Position:		**Northing:**	1,635,941.08 ft	**Latitude:**	39° 33' 1.64 N
From:	Lat/Long	**Easting:**	2,264,673.43 ft	**Longitude:**	108° 6' 29.09 W
Position Uncertainty:	0.0 ft	**Slot Radius:**	13.200 in	**Grid Convergence:**	-1.64 °

Well	NP MF01D-9 O04 696 (was 17C-4)					
Well Position	**+N/-S**	0.0 ft	**Northing:**	1,635,962.81 ft	**Latitude:**	39° 33' 1.86 N
	+E/-W	0.0 ft	**Easting:**	2,264,691.29 ft	**Longitude:**	108° 6' 28.87 W
Position Uncertainty		0.0 ft	**Wellhead Elevation:**	ft	**Ground Level:**	6,022.0 ft

Wellbore	DD				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2010	6/17/2010	10.54	65.79	52,365

Design	Plan #2				
Audit Notes:					
Version:		**Phase:**	PLAN	**Tie On Depth:**	0.0
Vertical Section:	**Depth From (TVD) (ft)**	**+N/-S (ft)**	**+E/-W (ft)**	**Direction (°)**	
	0.0	0.0	0.0	166.45	

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
250.0	0.00	0.00	250.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,685.5	43.06	165.83	1,554.1	-498.9	125.9	3.00	3.00	0.00	165.83	
4,136.7	43.06	165.83	3,344.9	-2,121.7	535.6	0.00	0.00	0.00	0.00	
5,572.2	0.00	0.00	4,649.0	-2,620.6	661.5	3.00	-3.00	0.00	180.00	O04 696 MF01D-9 TC
5,604.7	0.33	239.16	4,681.5	-2,620.6	661.4	1.00	1.00	-371.40	239.16	
9,032.2	0.33	239.16	8,109.0	-2,630.6	644.7	0.00	0.00	0.00	0.00	O04 696 MF01D-9 BH
9,182.2	0.33	239.16	8,259.0	-2,631.1	644.0	0.00	0.00	0.00	0.00	
10,923.2	0.33	239.16	10,000.0	-2,636.1	635.5	0.00	0.00	0.00	0.00	

Database:	USA EDM 5000 US Multi Users DB	**Local Co-ordinate Reference:**	Well NP MF01D-9 O04 696 (was 17C-4)
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Project:	North Piceance	**MD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Site:	O04 696 (3rd)	**North Reference:**	True
Well:	NP MF01D-9 O04 696 (was 17C-4)	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	DD		
Design:	Plan #2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
30.0	0.00	0.00	30.0	0.0	0.0	0.0	0.00	0.00	
60.0	0.00	0.00	60.0	0.0	0.0	0.0	0.00	0.00	
90.0	0.00	0.00	90.0	0.0	0.0	0.0	0.00	0.00	
120.0	0.00	0.00	120.0	0.0	0.0	0.0	0.00	0.00	
150.0	0.00	0.00	150.0	0.0	0.0	0.0	0.00	0.00	
180.0	0.00	0.00	180.0	0.0	0.0	0.0	0.00	0.00	
210.0	0.00	0.00	210.0	0.0	0.0	0.0	0.00	0.00	
240.0	0.00	0.00	240.0	0.0	0.0	0.0	0.00	0.00	
250.0	0.00	0.00	250.0	0.0	0.0	0.0	0.00	0.00	KOP @ 250'
270.0	0.60	165.83	270.0	-0.1	0.0	0.1	3.00	3.00	
300.0	1.50	165.83	300.0	-0.6	0.2	0.7	3.00	3.00	
330.0	2.40	165.83	330.0	-1.6	0.4	1.7	3.00	3.00	
360.0	3.30	165.83	359.9	-3.1	0.8	3.2	3.00	3.00	
390.0	4.20	165.83	389.9	-5.0	1.3	5.1	3.00	3.00	
420.0	5.10	165.83	419.8	-7.3	1.9	7.6	3.00	3.00	
450.0	6.00	165.83	449.6	-10.1	2.6	10.5	3.00	3.00	
480.0	6.90	165.83	479.4	-13.4	3.4	13.8	3.00	3.00	
510.0	7.80	165.83	509.2	-17.1	4.3	17.7	3.00	3.00	
540.0	8.70	165.83	538.9	-21.3	5.4	22.0	3.00	3.00	
570.0	9.60	165.83	568.5	-25.9	6.5	26.7	3.00	3.00	
600.0	10.50	165.83	598.0	-31.0	7.8	32.0	3.00	3.00	
630.0	11.40	165.83	627.5	-36.5	9.2	37.7	3.00	3.00	
660.0	12.30	165.83	656.9	-42.5	10.7	43.8	3.00	3.00	
690.0	13.20	165.83	686.1	-48.9	12.4	50.5	3.00	3.00	
720.0	14.10	165.83	715.3	-55.8	14.1	57.5	3.00	3.00	
750.0	15.00	165.83	744.3	-63.1	15.9	65.1	3.00	3.00	
780.0	15.90	165.83	773.2	-70.8	17.9	73.1	3.00	3.00	
810.0	16.80	165.83	802.0	-79.0	20.0	81.5	3.00	3.00	
840.0	17.70	165.83	830.7	-87.7	22.1	90.4	3.00	3.00	
870.0	18.60	165.83	859.2	-96.7	24.4	99.7	3.00	3.00	
900.0	19.50	165.83	887.5	-106.2	26.8	109.5	3.00	3.00	
930.0	20.40	165.83	915.7	-116.1	29.3	119.8	3.00	3.00	
960.0	21.30	165.83	943.8	-126.5	31.9	130.5	3.00	3.00	
990.0	22.20	165.83	971.6	-137.3	34.7	141.6	3.00	3.00	
1,020.0	23.10	165.83	999.3	-148.5	37.5	153.1	3.00	3.00	
1,050.0	24.00	165.83	1,026.8	-160.1	40.4	165.1	3.00	3.00	
1,080.0	24.90	165.83	1,054.1	-172.1	43.5	177.5	3.00	3.00	
1,110.0	25.80	165.83	1,081.2	-184.6	46.6	190.4	3.00	3.00	
1,140.0	26.70	165.83	1,108.1	-197.5	49.8	203.6	3.00	3.00	
1,170.0	27.60	165.83	1,134.8	-210.7	53.2	217.3	3.00	3.00	
1,200.0	28.50	165.83	1,161.3	-224.4	56.6	231.4	3.00	3.00	
1,230.0	29.40	165.83	1,187.6	-238.5	60.2	245.9	3.00	3.00	
1,260.0	30.30	165.83	1,213.6	-253.0	63.9	260.9	3.00	3.00	
1,290.0	31.20	165.83	1,239.4	-267.8	67.6	276.2	3.00	3.00	
1,320.0	32.10	165.83	1,264.9	-283.1	71.5	292.0	3.00	3.00	
1,350.0	33.00	165.83	1,290.2	-298.7	75.4	308.1	3.00	3.00	
1,380.0	33.90	165.83	1,315.2	-314.8	79.5	324.6	3.00	3.00	
1,410.0	34.80	165.83	1,340.0	-331.2	83.6	341.6	3.00	3.00	
1,440.0	35.70	165.83	1,364.5	-348.0	87.8	358.9	3.00	3.00	
1,470.0	36.60	165.83	1,388.7	-365.1	92.2	376.6	3.00	3.00	
1,500.0	37.50	165.83	1,412.6	-382.7	96.6	394.6	3.00	3.00	

Database:	USA EDM 5000 US Multi Users DB	**Local Co-ordinate Reference:**	Well NP MF01D-9 O04 696 (was 17C-4)
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Project:	North Piceance	**MD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Site:	O04 696 (3rd)	**North Reference:**	True
Well:	NP MF01D-9 O04 696 (was 17C-4)	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	DD		
Design:	Plan #2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
1,530.0	38.40	165.83	1,436.3	-400.6	101.1	413.1	3.00	3.00	
1,560.0	39.30	165.83	1,459.7	-418.8	105.7	431.9	3.00	3.00	
1,590.0	40.20	165.83	1,482.7	-437.4	110.4	451.1	3.00	3.00	
1,620.0	41.10	165.83	1,505.5	-456.3	115.2	470.6	3.00	3.00	
1,650.0	42.00	165.83	1,527.9	-475.6	120.1	490.5	3.00	3.00	
1,680.0	42.90	165.83	1,550.1	-495.3	125.0	510.8	3.00	3.00	
1,685.5	43.06	165.83	1,554.1	-498.9	125.9	514.5	3.00	3.00	EOB; Inc=43.06°
1,710.0	43.06	165.83	1,572.0	-515.1	130.0	531.3	0.00	0.00	
1,740.0	43.06	165.83	1,593.9	-535.0	135.0	551.7	0.00	0.00	
1,770.0	43.06	165.83	1,615.8	-554.8	140.1	572.2	0.00	0.00	
1,800.0	43.06	165.83	1,637.8	-574.7	145.1	592.7	0.00	0.00	
1,830.0	43.06	165.83	1,659.7	-594.6	150.1	613.2	0.00	0.00	
1,860.0	43.06	165.83	1,681.6	-614.4	155.1	633.7	0.00	0.00	
1,890.0	43.06	165.83	1,703.5	-634.3	160.1	654.2	0.00	0.00	
1,920.0	43.06	165.83	1,725.4	-654.2	165.1	674.6	0.00	0.00	
1,950.0	43.06	165.83	1,747.3	-674.0	170.1	695.1	0.00	0.00	
1,980.0	43.06	165.83	1,769.3	-693.9	175.2	715.6	0.00	0.00	
2,010.0	43.06	165.83	1,791.2	-713.7	180.2	736.1	0.00	0.00	
2,040.0	43.06	165.83	1,813.1	-733.6	185.2	756.6	0.00	0.00	
2,070.0	43.06	165.83	1,835.0	-753.5	190.2	777.1	0.00	0.00	
2,100.0	43.06	165.83	1,856.9	-773.3	195.2	797.5	0.00	0.00	
2,130.0	43.06	165.83	1,878.9	-793.2	200.2	818.0	0.00	0.00	
2,160.0	43.06	165.83	1,900.8	-813.0	205.2	838.5	0.00	0.00	
2,190.0	43.06	165.83	1,922.7	-832.9	210.2	859.0	0.00	0.00	
2,220.0	43.06	165.83	1,944.6	-852.8	215.3	879.5	0.00	0.00	
2,250.0	43.06	165.83	1,966.5	-872.6	220.3	900.0	0.00	0.00	
2,280.0	43.06	165.83	1,988.4	-892.5	225.3	920.4	0.00	0.00	
2,310.0	43.06	165.83	2,010.4	-912.4	230.3	940.9	0.00	0.00	
2,340.0	43.06	165.83	2,032.3	-932.2	235.3	961.4	0.00	0.00	
2,370.0	43.06	165.83	2,054.2	-952.1	240.3	981.9	0.00	0.00	
2,400.0	43.06	165.83	2,076.1	-971.9	245.3	1,002.4	0.00	0.00	
2,430.0	43.06	165.83	2,098.0	-991.8	250.4	1,022.9	0.00	0.00	
2,460.0	43.06	165.83	2,119.9	-1,011.7	255.4	1,043.3	0.00	0.00	
2,490.0	43.06	165.83	2,141.9	-1,031.5	260.4	1,063.8	0.00	0.00	

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
O04 696 MF01D-9 TGT	0.00	0.00	4,649.0	-2,620.6	661.5	1,633,324.30	2,265,277.29	39° 32' 35.96 N	108° 6' 20.43 W
- plan misses target center by 2995.3ft at 2490.0ft MD (2141.9 TVD, -1031.5 N, 260.4 E)									
- Point									
O04 696 MF01D-9 BHL	0.00	0.00	8,109.0	-2,630.6	644.7	1,633,314.76	2,265,260.22	39° 32' 35.86 N	108° 6' 20.64 W
- plan misses target center by 6189.6ft at 2490.0ft MD (2141.9 TVD, -1031.5 N, 260.4 E)									
- Rectangle (sides W30.0 H50.0 D0.0)									

Database:	USA EDM 5000 US Multi Users DB	**Local Co-ordinate Reference:**	Well NP MF01D-9 O04 696 (was 17C-4)
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Project:	North Piceance	**MD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Site:	O04 696 (3rd)	**North Reference:**	True
Well:	NP MF01D-9 O04 696 (was 17C-4)	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	DD		
Design:	Plan #2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
2,500.0	43.06	165.83	2,149.2	-1,038.1	262.1	1,070.6	0.00	0.00	
2,600.0	43.06	165.83	2,222.2	-1,104.4	278.8	1,138.9	0.00	0.00	
2,700.0	43.06	165.83	2,295.3	-1,170.6	295.5	1,207.2	0.00	0.00	
2,800.0	43.06	165.83	2,368.3	-1,236.8	312.2	1,275.5	0.00	0.00	
2,900.0	43.06	165.83	2,441.4	-1,303.0	328.9	1,343.8	0.00	0.00	
3,000.0	43.06	165.83	2,514.5	-1,369.2	345.6	1,412.0	0.00	0.00	
3,100.0	43.06	165.83	2,587.5	-1,435.4	362.3	1,480.3	0.00	0.00	
3,200.0	43.06	165.83	2,660.6	-1,501.6	379.0	1,548.6	0.00	0.00	
3,300.0	43.06	165.83	2,733.6	-1,567.8	395.7	1,616.9	0.00	0.00	
3,400.0	43.06	165.83	2,806.7	-1,634.0	412.5	1,685.1	0.00	0.00	
3,500.0	43.06	165.83	2,879.8	-1,700.2	429.2	1,753.4	0.00	0.00	
3,600.0	43.06	165.83	2,952.8	-1,766.4	445.9	1,821.7	0.00	0.00	
3,700.0	43.06	165.83	3,025.9	-1,832.6	462.6	1,890.0	0.00	0.00	
3,800.0	43.06	165.83	3,098.9	-1,898.8	479.3	1,958.3	0.00	0.00	
3,900.0	43.06	165.83	3,172.0	-1,965.0	496.0	2,026.5	0.00	0.00	
4,000.0	43.06	165.83	3,245.1	-2,031.2	512.7	2,094.8	0.00	0.00	
4,100.0	43.06	165.83	3,318.1	-2,097.4	529.4	2,163.1	0.00	0.00	
4,136.7	43.06	165.83	3,344.9	-2,121.7	535.6	2,188.1	0.00	0.00	Start Drop -3.00
4,200.0	41.16	165.83	3,391.9	-2,162.9	546.0	2,230.6	3.00	-3.00	
4,300.0	38.16	165.83	3,468.9	-2,224.8	561.6	2,294.4	3.00	-3.00	
4,400.0	35.16	165.83	3,549.1	-2,282.7	576.2	2,354.1	3.00	-3.00	
4,500.0	32.16	165.83	3,632.3	-2,336.4	589.8	2,409.5	3.00	-3.00	
4,600.0	29.16	165.83	3,718.3	-2,385.8	602.2	2,460.5	3.00	-3.00	
4,700.0	26.16	165.83	3,806.8	-2,430.8	613.6	2,507.0	3.00	-3.00	
4,800.0	23.16	165.83	3,897.7	-2,471.3	623.8	2,548.7	3.00	-3.00	
4,900.0	20.16	165.83	3,990.6	-2,507.1	632.8	2,585.6	3.00	-3.00	
5,000.0	17.16	165.83	4,085.4	-2,538.1	640.7	2,617.6	3.00	-3.00	
5,100.0	14.16	165.83	4,181.6	-2,564.3	647.3	2,644.6	3.00	-3.00	
5,200.0	11.16	165.83	4,279.2	-2,585.6	652.7	2,666.5	3.00	-3.00	
5,300.0	8.16	165.83	4,377.8	-2,601.8	656.8	2,683.3	3.00	-3.00	
5,400.0	5.16	165.83	4,477.1	-2,613.1	659.6	2,694.9	3.00	-3.00	
5,500.0	2.16	165.83	4,576.9	-2,619.3	661.2	2,701.3	3.00	-3.00	
5,532.2	1.20	165.83	4,609.0	-2,620.2	661.4	2,702.2	3.00	-3.00	Williams Fork
5,572.2	0.00	0.00	4,649.0	-2,620.6	661.5	2,702.6	3.00	-3.00	EOD; Inc=0° - Top of Gas - O04 696 MF01D-9
5,600.0	0.28	239.16	4,676.8	-2,620.6	661.4	2,702.7	1.00	1.00	
5,604.7	0.33	239.16	4,681.5	-2,620.6	661.4	2,702.7	1.00	1.00	
5,700.0	0.33	239.16	4,776.8	-2,620.9	661.0	2,702.8	0.00	0.00	
5,800.0	0.33	239.16	4,876.8	-2,621.2	660.5	2,703.0	0.00	0.00	
5,900.0	0.33	239.16	4,976.8	-2,621.5	660.0	2,703.2	0.00	0.00	
6,000.0	0.33	239.16	5,076.8	-2,621.8	659.5	2,703.3	0.00	0.00	
6,100.0	0.33	239.16	5,176.8	-2,622.1	659.0	2,703.5	0.00	0.00	
6,200.0	0.33	239.16	5,276.8	-2,622.4	658.5	2,703.7	0.00	0.00	
6,300.0	0.33	239.16	5,376.8	-2,622.7	658.0	2,703.8	0.00	0.00	
6,400.0	0.33	239.16	5,476.8	-2,623.0	657.5	2,704.0	0.00	0.00	
6,500.0	0.33	239.16	5,576.8	-2,623.3	657.1	2,704.2	0.00	0.00	
6,600.0	0.33	239.16	5,676.8	-2,623.5	656.6	2,704.4	0.00	0.00	
6,700.0	0.33	239.16	5,776.8	-2,623.8	656.1	2,704.5	0.00	0.00	
6,800.0	0.33	239.16	5,876.8	-2,624.1	655.6	2,704.7	0.00	0.00	
6,900.0	0.33	239.16	5,976.8	-2,624.4	655.1	2,704.9	0.00	0.00	
7,000.0	0.33	239.16	6,076.8	-2,624.7	654.6	2,705.0	0.00	0.00	
7,100.0	0.33	239.16	6,176.8	-2,625.0	654.1	2,705.2	0.00	0.00	
7,200.0	0.33	239.16	6,276.8	-2,625.3	653.6	2,705.4	0.00	0.00	

Database:	USA EDM 5000 US Multi Users DB	**Local Co-ordinate Reference:**	Well NP MF01D-9 O04 696 (was 17C-4)
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Project:	North Piceance	**MD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Site:	O04 696 (3rd)	**North Reference:**	True
Well:	NP MF01D-9 O04 696 (was 17C-4)	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	DD		
Design:	Plan #2		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
7,300.0	0.33	239.16	6,376.8	-2,625.6	653.2	2,705.5	0.00	0.00	
7,400.0	0.33	239.16	6,476.8	-2,625.9	652.7	2,705.7	0.00	0.00	
7,500.0	0.33	239.16	6,576.8	-2,626.2	652.2	2,705.9	0.00	0.00	
7,600.0	0.33	239.16	6,676.8	-2,626.5	651.7	2,706.0	0.00	0.00	
7,700.0	0.33	239.16	6,776.8	-2,626.7	651.2	2,706.2	0.00	0.00	
7,800.0	0.33	239.16	6,876.8	-2,627.0	650.7	2,706.4	0.00	0.00	
7,900.0	0.33	239.16	6,976.8	-2,627.3	650.2	2,706.5	0.00	0.00	
8,000.0	0.33	239.16	7,076.8	-2,627.6	649.7	2,706.7	0.00	0.00	
8,100.0	0.33	239.16	7,176.8	-2,627.9	649.3	2,706.9	0.00	0.00	
8,200.0	0.33	239.16	7,276.8	-2,628.2	648.8	2,707.1	0.00	0.00	
8,300.0	0.33	239.16	7,376.8	-2,628.5	648.3	2,707.2	0.00	0.00	
8,400.0	0.33	239.16	7,476.8	-2,628.8	647.8	2,707.4	0.00	0.00	
8,500.0	0.33	239.16	7,576.8	-2,629.1	647.3	2,707.6	0.00	0.00	
8,600.0	0.33	239.16	7,676.8	-2,629.4	646.8	2,707.7	0.00	0.00	
8,700.0	0.33	239.16	7,776.8	-2,629.7	646.3	2,707.9	0.00	0.00	
8,800.0	0.33	239.16	7,876.8	-2,630.0	645.8	2,708.1	0.00	0.00	
8,900.0	0.33	239.16	7,976.8	-2,630.2	645.4	2,708.2	0.00	0.00	
9,000.0	0.33	239.16	8,076.8	-2,630.5	644.9	2,708.4	0.00	0.00	
9,032.2	0.33	239.16	8,109.0	-2,630.6	644.7	2,708.5	0.00	0.00	Rollins - O04 696 MF01D-9 BHL (6.13.11)
9,100.0	0.33	239.16	8,176.8	-2,630.8	644.4	2,708.6	0.00	0.00	
9,182.2	0.33	239.16	8,259.0	-2,631.1	644.0	2,708.7	0.00	0.00	Drillers TD @ 8259' TVD
9,200.0	0.33	239.16	8,276.8	-2,631.1	643.9	2,708.7	0.00	0.00	
9,300.0	0.33	239.16	8,376.8	-2,631.4	643.4	2,708.9	0.00	0.00	
9,400.0	0.33	239.16	8,476.8	-2,631.7	642.9	2,709.1	0.00	0.00	
9,500.0	0.33	239.16	8,576.8	-2,632.0	642.4	2,709.2	0.00	0.00	
9,600.0	0.33	239.16	8,676.8	-2,632.3	641.9	2,709.4	0.00	0.00	
9,700.0	0.33	239.16	8,776.8	-2,632.6	641.5	2,709.6	0.00	0.00	
9,800.0	0.33	239.16	8,876.8	-2,632.9	641.0	2,709.8	0.00	0.00	
9,900.0	0.33	239.16	8,976.8	-2,633.2	640.5	2,709.9	0.00	0.00	
10,000.0	0.33	239.16	9,076.8	-2,633.4	640.0	2,710.1	0.00	0.00	
10,100.0	0.33	239.16	9,176.8	-2,633.7	639.5	2,710.3	0.00	0.00	
10,200.0	0.33	239.16	9,276.8	-2,634.0	639.0	2,710.4	0.00	0.00	
10,300.0	0.33	239.16	9,376.8	-2,634.3	638.5	2,710.6	0.00	0.00	
10,400.0	0.33	239.16	9,476.8	-2,634.6	638.0	2,710.8	0.00	0.00	
10,500.0	0.33	239.16	9,576.8	-2,634.9	637.6	2,710.9	0.00	0.00	
10,600.0	0.33	239.16	9,676.8	-2,635.2	637.1	2,711.1	0.00	0.00	
10,700.0	0.33	239.16	9,776.8	-2,635.5	636.6	2,711.3	0.00	0.00	
10,800.0	0.33	239.16	9,876.8	-2,635.8	636.1	2,711.4	0.00	0.00	
10,900.0	0.33	239.16	9,976.8	-2,636.1	635.6	2,711.6	0.00	0.00	
10,923.2	0.33	239.16	10,000.0	-2,636.1	635.5	2,711.6	0.00	0.00	Permit TD @ 10000' TVD

Database:	USA EDM 5000 US Multi Users DB	**Local Co-ordinate Reference:**	Well NP MF01D-9 O04 696 (was 17C-4)
Company:	EnCana Oil & Gas (USA) Inc	**TVD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Project:	North Piceance	**MD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Site:	O04 696 (3rd)	**North Reference:**	True
Well:	NP MF01D-9 O04 696 (was 17C-4)	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	DD		
Design:	Plan #2		

Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
O04 696 MF01D-9 TGT - plan hits target center - Point	0.00	0.00	4,649.0	-2,620.6	661.5	1,633,324.30	2,265,277.29	39° 32' 35.96 N	108° 6' 20.43 W
O04 696 MF01D-9 BHL - plan hits target center - Rectangle (sides W30.0 H50.0 D0.0)	0.00	0.00	8,109.0	-2,630.6	644.7	1,633,314.76	2,265,260.22	39° 32' 35.86 N	108° 6' 20.64 W

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
5,532.2	4,609.0	Williams Fork		0.00	
5,572.2	4,649.0	Top of Gas		0.00	
9,032.2	8,109.0	Rollins		0.00	

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
250.0	250.0	0.0	0.0	KOP @ 250'
1,685.5	1,554.1	-498.9	125.9	EOB; Inc=43.06°
4,136.7	3,344.9	-2,121.7	535.6	Start Drop -3.00
5,572.2	4,649.0	-2,620.6	661.5	EOD; Inc=0°
9,182.2	8,259.0	-2,620.6	661.4	Drillers TD @ 8259' TVD
10,923.2	10,000.0	-2,630.6	644.7	Permit TD @ 10000' TVD

EnCana Oil & Gas (USA) Inc

North Piceance
O04 696 (3rd)
NP MF01D-9 O04 696 (was 17C-4)
DD
Plan #2

Anticollision Report

14 June, 2011

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well NP MF01D-9 O04 696 (was 17C-4)
Project:	North Piceance	**TVD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Reference Site:	O04 696 (3rd)	**MD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	NP MF01D-9 O04 696 (was 17C-4)	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Reference	Plan #2

Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	MD Interval 100.0ft	**Error Model:**	Systematic Ellipse
Depth Range:	Unlimited	**Scan Method:**	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 100.0ft	**Error Surface:**	Elliptical Conic
Warning Levels Evaluated at:	2.00 **Sigma**		

Survey Tool Program **Date** 6/14/2011

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	10,923.2	Plan #2 (DD)	MWD	Geolink MWD

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well NP MF01D-9 O04 696 (was 17C-4)
Project:	North Piceance	**TVD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Reference Site:	O04 696 (3rd)	**MD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	NP MF01D-9 O04 696 (was 17C-4)	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
D09A 696 (NWNW S9-T6S-R96W)						
N.P MF02C-9 D09A 696 - DD - Plan #1						Out of range
N.P MF02C-9 D09A 696 - DD - Plan #2						Out of range
N.P MF02C-9 D09A 696 - DD - Plan #3						Out of range
NP MF02C D09A 696 - DD - DD						Out of range
NP MF02C D09A 696 - DD - Plan #1						Out of range
NP MF02C D09A 696 - DD - Plan #2						Out of range
NP MF07A D09A 696 - DD - DD						Out of range
NP MF07A D09A 696 - DD - Plan #1						Out of range
E09 696 (SWNW S9-T6S-R96W)						
NP MF02C-9 E09 696 - DD - DD						Out of range
NP MF02C-9 E09 696 - DD - Plan #1						Out of range
NP MF02C-9 E09 696 - DD - Plan #2						Out of range
NP MF02C-9 E09 696 - DD - Plan #3						Out of range
NP MF07A E09 696(Moved off Pad) - DD - Plan #1						Out of range
NP MF07C E09 696 - DD - DD						Out of range
NP MF07C E09 696 - DD - Plan #2						Out of range
NP MF07C E09 696 - DD - Plan #3						Out of range
NP MF07C E09 696 - DD - Plan #4						Out of range
O04 696 (3rd)						
NP MF02A-9 O04 696 (was 18C-4) - DD - Plan #2	200.0	200.0	28.1	27.5	45.278	CC, ES
NP MF02A-9 O04 696 (was 18C-4) - DD - Plan #2	1,000.0	980.9	92.0	85.7	14.802	SF
NP MF06A-3 O04 696 (was 11C-3) - DD - Plan #2	200.0	200.0	91.3	90.7	147.001	CC, ES
NP MF06A-3 O04 696 (was 11C-3) - DD - Plan #2	300.0	296.3	93.7	92.8	96.932	SF
NP MF06B-3 O04 696 (was 15A-4) - DD - Plan #2						Out of range
NP MF06C-3 O04 696 (was 09C-4) - DD - Plan #2						Out of range
NP MF06E-3 O04 696 (was 11B-3) - DD - Plan #2						Out of range
NP MF08B-9 O04 696 (was 01B-9) - DD - Plan #2	200.0	200.0	22.1	21.5	35.633	CC, ES
NP MF08B-9 O04 696 (was 01B-9) - DD - Plan #2	2,700.0	2,670.3	96.0	77.4	5.175	SF
NP MF11A-3 O04 696 (was 12C-3) - DD - Plan #2						Out of range
NP MF11B-3 O04 696 (was 14A-3) - DD - Plan #2	200.0	200.0	91.6	91.0	147.399	CC, ES
NP MF11B-3 O04 696 (was 14A-3) - DD - Plan #2	300.0	295.4	94.4	93.4	98.014	SF
NP MF11D-3 O04 696 (was 14B-3) - DD - Plan #2	200.0	200.0	83.9	83.3	135.103	CC, ES
NP MF11D-3 O04 696 (was 14B-3) - DD - Plan #2	400.0	391.0	96.7	95.4	73.180	SF
NP MF11E-3 O04 696 (was 13A-3) - DD - Plan #2	200.0	200.0	63.2	62.6	101.702	CC, ES
NP MF11E-3 O04 696 (was 13A-3) - DD - Plan #2	500.0	488.1	93.4	91.6	53.898	SF
NP MF11G-3 O04 696 (was 14C-3) - DD - Plan #2	200.0	200.0	55.5	54.9	89.346	CC
NP MF11G-3 O04 696 (was 14C-3) - DD - Plan #2	228.2	228.2	55.6	54.9	77.216	ES
NP MF11G-3 O04 696 (was 14C-3) - DD - Plan #2	500.0	494.1	73.8	72.1	42.867	SF
NP MF14A-3 O04 696 (was 13B-3) - DD - Plan #2	200.0	200.0	63.6	63.0	102.386	CC, ES
NP MF14A-3 O04 696 (was 13B-3) - DD - Plan #2	500.0	489.3	90.5	88.8	51.318	SF
NP MF14C-3 O04 696 (was 14D-3) - DD - Plan #2	200.0	200.0	56.0	55.4	90.161	CC, ES
NP MF14C-3 O04 696 (was 14D-3) - DD - Plan #2	500.0	491.2	80.9	79.1	45.250	SF
NP MF14D-3 O04 696 (was 19A-3) - DD - Plan #2	200.0	200.0	35.8	35.2	57.679	CC
NP MF14D-3 O04 696 (was 19A-3) - DD - Plan #2	228.4	228.4	35.9	35.2	49.837	ES
NP MF14D-3 O04 696 (was 19A-3) - DD - Plan #2	500.0	497.1	51.7	50.0	29.701	SF
NP MF14E-3 O04 696 (was 19B-3) - DD - Plan #2	200.0	200.0	36.6	35.9	58.856	CC, ES
NP MF14E-3 O04 696 (was 19B-3) - DD - Plan #2	600.0	591.3	74.0	71.6	30.778	SF
NP MF15A-4 O04 696 (was 11D-3) - DD - Plan #2	200.0	200.0	83.7	83.0	134.650	CC, ES
NP MF15A-4 O04 696 (was 11D-3) - DD - Plan #2	400.0	393.6	94.1	92.7	69.968	SF
NP MF15D-4 O04 696 (was 01B-9) - DD - Plan #2	401.2	400.6	18.6	17.3	13.886	CC, ES
NP MF15D-4 O04 696 (was 01B-9) - DD - Plan #2	500.0	497.9	23.3	21.5	13.349	SF

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well NP MF01D-9 O04 696 (was 17C-4)
Project:	North Piceance	**TVD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Reference Site:	O04 696 (3rd)	**MD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	NP MF01D-9 O04 696 (was 17C-4)	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
O04 696 (3rd)						
NP MF18B-4 O04 696 (was 01A-9) - DD - Plan #2	200.0	200.0	29.4	28.8	47.358	CC, ES
NP MF18B-4 O04 696 (was 01A-9) - DD - Plan #2	900.0	892.5	39.9	35.2	8.606	SF
NP MF19A-3 O04 696 (was 17B-4) - DD - Plan #2	200.0	200.0	27.4	26.7	44.046	CC
NP MF19A-3 O04 696 (was 17B-4) - DD - Plan #2	227.8	227.8	27.4	26.7	38.176	ES
NP MF19A-3 O04 696 (was 17B-4) - DD - Plan #2	500.0	498.2	41.7	39.9	23.201	SF
NP MF19C-3 O04 696 (was 20B-3) - DD - Plan #2	200.0	200.0	28.5	27.9	45.937	CC, ES
NP MF19C-3 O04 696 (was 20B-3) - DD - Plan #2	800.0	786.9	95.2	91.1	23.095	SF
NP MF19D-3 O04 696 (was 19C-3) - DD - Plan #2	200.0	200.0	7.7	7.1	12.373	CC
NP MF19D-3 O04 696 (was 19C-3) - DD - Plan #2	230.1	230.1	7.8	7.0	10.685	ES
NP MF19D-3 O04 696 (was 19C-3) - DD - Plan #2	300.0	300.0	8.1	7.1	8.354	SF
NP MF19E-3 O04 696 (was 19D-3) - DD - Plan #2	200.0	200.0	11.0	10.4	17.726	CC, ES
NP MF19E-3 O04 696 (was 19D-3) - DD - Plan #2	400.0	398.8	17.8	16.5	13.129	SF
NP MF20F-3 O04 696 (was 20D-3) - DD - Plan #2	200.0	200.0	8.0	7.4	12.948	CC, ES
NP MF20F-3 O04 696 (was 20D-3) - DD - Plan #2	400.0	398.8	13.8	12.4	10.344	SF

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well NP MF01D-9 O04 696 (was 17C-4)
Project:	North Piceance	**TVD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Reference Site:	O04 696 (3rd)	**MD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	NP MF01D-9 O04 696 (was 17C-4)	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design O04 696 (3rd) - NP MF02A-9 O04 696 (was 18C-4) - DD - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-142.23	-22.2	-17.2	28.1				
100.0	100.0	100.0	100.0	0.1	0.1	-142.23	-22.2	-17.2	28.1	27.9	0.27	103.327	
200.0	200.0	200.0	200.0	0.3	0.3	-142.23	-22.2	-17.2	28.1	27.5	0.62	45.278	CC, ES
300.0	300.0	298.6	298.6	0.5	0.5	50.66	-24.7	-17.7	30.0	29.1	0.97	30.966	
400.0	399.8	397.1	396.8	0.7	0.7	51.70	-32.2	-19.1	33.7	32.4	1.34	25.194	
500.0	499.3	495.3	494.1	0.9	1.0	55.03	-44.6	-21.4	38.8	37.0	1.76	22.007	
600.0	598.0	593.2	590.5	1.2	1.3	59.51	-61.9	-24.7	45.5	43.2	2.30	19.800	
700.0	695.8	690.8	685.4	1.6	1.8	64.27	-83.9	-28.8	54.0	51.0	2.99	18.051	
800.0	792.4	787.9	778.6	2.1	2.3	68.73	-110.5	-33.8	64.6	60.7	3.88	16.651	
900.0	887.5	884.5	869.9	2.7	2.9	72.66	-141.5	-39.6	77.2	72.3	4.96	15.575	
1,000.0	980.9	980.9	959.4	3.3	3.5	76.01	-177.0	-46.3	92.0	85.7	6.21	14.802	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well NP MF01D-9 O04 696 (was 17C-4)
Project:	North Piceance	**TVD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Reference Site:	O04 696 (3rd)	**MD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	NP MF01D-9 O04 696 (was 17C-4)	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design O04 696 (3rd) - NP MF06A-3 O04 696 (was 11C-3) - DD - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	38.13	71.8	56.4	91.3				
100.0	100.0	100.0	100.0	0.1	0.1	38.13	71.8	56.4	91.3	91.1	0.27	335.462	
200.0	200.0	200.0	200.0	0.3	0.3	38.13	71.8	56.4	91.3	90.7	0.62	147.001	CC, ES
300.0	300.0	296.3	296.2	0.5	0.5	-128.88	74.3	56.4	93.7	92.8	0.97	96.932	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well NP MF01D-9 O04 696 (was 17C-4)
Project:	North Piceance	**TVD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Reference Site:	O04 696 (3rd)	**MD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	NP MF01D-9 O04 696 (was 17C-4)	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design O04 696 (3rd) - NP MF08B-9 O04 696 (was 01B-9) - DD - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-163.56	-21.2	-6.3	22.1				
100.0	100.0	100.0	100.0	0.1	0.1	-163.56	-21.2	-6.3	22.1	21.9	0.27	81.315	
200.0	200.0	200.0	200.0	0.3	0.3	-163.56	-21.2	-6.3	22.1	21.5	0.62	35.633	CC, ES
300.0	300.0	298.9	298.9	0.5	0.5	28.35	-23.7	-5.7	23.8	22.9	0.97	24.579	
400.0	399.8	397.7	397.4	0.7	0.7	26.00	-31.2	-4.0	26.2	24.8	1.33	19.708	
500.0	499.3	496.4	495.2	0.9	1.0	24.26	-43.6	-1.1	28.5	26.8	1.70	16.763	
600.0	598.0	595.0	592.2	1.2	1.3	23.01	-60.9	2.9	30.8	28.7	2.09	14.733	
700.0	695.8	693.4	687.9	1.6	1.8	22.13	-83.0	8.1	33.1	30.6	2.51	13.206	
800.0	792.4	791.7	782.3	2.1	2.3	21.56	-109.8	14.3	35.4	32.4	2.95	11.980	
900.0	887.5	890.0	875.0	2.7	2.9	21.24	-141.3	21.6	37.6	34.2	3.44	10.945	
1,000.0	980.9	988.1	965.9	3.3	3.6	21.12	-177.4	30.0	39.8	35.8	3.96	10.037	
1,100.0	1,072.2	1,086.1	1,054.6	4.1	4.3	21.17	-217.9	39.4	41.9	37.3	4.54	9.218	
1,200.0	1,161.3	1,184.0	1,141.0	4.9	5.2	21.38	-262.7	49.8	43.9	38.7	5.18	8.466	
1,300.0	1,247.9	1,281.8	1,224.9	5.8	6.1	21.71	-311.8	61.2	45.9	39.9	5.90	7.768	
1,400.0	1,331.8	1,379.6	1,306.0	6.8	7.1	22.15	-364.9	73.6	47.7	41.0	6.71	7.117	
1,500.0	1,412.6	1,477.2	1,384.1	7.9	8.2	22.70	-422.0	86.8	49.5	41.9	7.61	6.510	
1,600.0	1,490.4	1,574.8	1,459.1	9.0	9.3	23.33	-482.8	100.9	51.3	42.6	8.62	5.946	
1,700.0	1,564.7	1,672.4	1,530.8	10.2	10.5	24.03	-547.2	115.9	53.0	43.2	9.75	5.430	
1,800.0	1,637.8	1,771.2	1,600.5	11.4	11.7	23.77	-615.5	131.8	56.8	46.1	10.70	5.315	
1,900.0	1,710.8	1,871.1	1,670.6	12.6	13.0	23.37	-684.8	147.9	61.2	49.6	11.59	5.281	
2,000.0	1,783.9	1,971.0	1,740.7	13.9	14.3	23.03	-754.2	164.0	65.5	53.1	12.47	5.255	
2,100.0	1,856.9	2,070.9	1,810.8	15.1	15.5	22.72	-823.5	180.1	69.9	56.5	13.35	5.235	
2,200.0	1,930.0	2,170.8	1,880.8	16.3	16.8	22.45	-892.9	196.2	74.2	60.0	14.22	5.219	
2,300.0	2,003.1	2,270.7	1,950.9	17.5	18.1	22.21	-962.2	212.3	78.6	63.5	15.09	5.206	
2,400.0	2,076.1	2,370.6	2,021.0	18.7	19.3	22.00	-1,031.6	228.4	82.9	67.0	15.96	5.196	
2,500.0	2,149.2	2,470.5	2,091.1	19.9	20.6	21.81	-1,100.9	244.5	87.3	70.4	16.82	5.187	
2,600.0	2,222.2	2,570.4	2,161.2	21.2	21.9	21.63	-1,170.2	260.6	91.6	73.9	17.68	5.181	
2,700.0	2,295.3	2,670.3	2,231.3	22.4	23.1	21.47	-1,239.6	276.7	96.0	77.4	18.54	5.175	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well NP MF01D-9 O04 696 (was 17C-4)
Project:	North Piceance	**TVD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Reference Site:	O04 696 (3rd)	**MD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	NP MF01D-9 O04 696 (was 17C-4)	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design O04 696 (3rd) - NP MF11B-3 O04 696 (was 14A-3) - DD - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	43.17	66.8	62.7	91.6				
100.0	100.0	100.0	100.0	0.1	0.1	43.17	66.8	62.7	91.6	91.3	0.27	336.372	
200.0	200.0	200.0	200.0	0.3	0.3	43.17	66.8	62.7	91.6	91.0	0.62	147.399	CC, ES
300.0	300.0	295.4	295.4	0.5	0.5	-122.66	68.2	64.6	94.4	93.4	0.96	98.014	SF

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well NP MF01D-9 O04 696 (was 17C-4)
Project:	North Piceance	**TVD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Reference Site:	O04 696 (3rd)	**MD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	NP MF01D-9 O04 696 (was 17C-4)	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design O04 696 (3rd) - NP MF11D-3 O04 696 (was 14B-3) - DD - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	43.67	60.7	58.0	83.9				
100.0	100.0	100.0	100.0	0.1	0.1	43.67	60.7	58.0	83.9	83.7	0.27	308.313	
200.0	200.0	200.0	200.0	0.3	0.3	43.67	60.7	58.0	83.9	83.3	0.62	135.103	CC, ES
300.0	300.0	295.9	295.8	0.5	0.5	-122.01	61.9	60.0	86.7	85.7	0.96	89.914	
400.0	399.8	391.0	390.7	0.7	0.7	-123.08	65.5	66.2	96.7	95.4	1.32	73.180	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well NP MF01D-9 O04 696 (was 17C-4)
Project:	North Piceance	**TVD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Reference Site:	O04 696 (3rd)	**MD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	NP MF01D-9 O04 696 (was 17C-4)	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design O04 696 (3rd) - NP MF11E-3 O04 696 (was 13A-3) - DD - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	38.30	49.6	39.2	63.2				
100.0	100.0	100.0	100.0	0.1	0.1	38.30	49.6	39.2	63.2	62.9	0.27	232.088	
200.0	200.0	200.0	200.0	0.3	0.3	38.30	49.6	39.2	63.2	62.6	0.62	101.702	CC, ES
300.0	300.0	297.0	297.0	0.5	0.5	-126.95	50.6	41.4	65.9	64.9	0.97	68.094	
400.0	399.8	393.3	393.0	0.7	0.7	-127.32	53.7	48.0	75.8	74.5	1.33	57.011	
500.0	499.3	488.1	487.0	0.9	1.0	-128.47	58.7	58.8	93.4	91.6	1.73	53.898	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well NP MF01D-9 O04 696 (was 17C-4)
Project:	North Piceance	**TVD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Reference Site:	O04 696 (3rd)	**MD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	NP MF01D-9 O04 696 (was 17C-4)	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design O04 696 (3rd) - NP MF11G-3 O04 696 (was 14C-3) - DD - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	38.38	43.5	34.5	55.5				
100.0	100.0	100.0	100.0	0.1	0.1	38.38	43.5	34.5	55.5	55.2	0.27	203.892	
200.0	200.0	200.0	200.0	0.3	0.3	38.38	43.5	34.5	55.5	54.9	0.62	89.346	CC
228.2	228.2	228.2	228.2	0.4	0.4	-127.54	43.5	34.5	55.6	54.9	0.72	77.216	ES
300.0	300.0	300.0	300.0	0.5	0.5	-127.98	43.5	34.5	55.9	54.9	0.97	57.605	
400.0	399.8	397.5	397.5	0.7	0.7	-130.19	44.1	36.9	61.2	59.9	1.33	46.084	
500.0	499.3	494.1	493.8	0.9	0.9	-132.22	45.9	44.0	73.8	72.1	1.72	42.867	SF
600.0	598.0	589.1	588.0	1.2	1.1	-133.61	48.8	55.7	93.6	91.4	2.17	43.056	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well NP MF01D-9 O04 696 (was 17C-4)
Project:	North Piceance	**TVD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Reference Site:	O04 696 (3rd)	**MD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	NP MF01D-9 O04 696 (was 17C-4)	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design O04 696 (3rd) - NP MF14A-3 O04 696 (was 13B-3) - DD - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	45.57	44.5	45.4	63.6				
100.0	100.0	100.0	100.0	0.1	0.1	45.57	44.5	45.4	63.6	63.3	0.27	233.650	
200.0	200.0	200.0	200.0	0.3	0.3	45.57	44.5	45.4	63.6	63.0	0.62	102.386	CC, ES
300.0	300.0	297.2	297.2	0.5	0.5	-119.46	44.9	47.9	66.0	65.1	0.97	68.187	
400.0	399.8	393.9	393.6	0.7	0.7	-119.46	46.2	55.1	74.9	73.6	1.34	55.951	
500.0	499.3	489.3	488.2	0.9	1.0	-120.30	48.2	67.0	90.5	88.8	1.76	51.318	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well NP MF01D-9 O04 696 (was 17C-4)
Project:	North Piceance	**TVD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Reference Site:	O04 696 (3rd)	**MD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	NP MF01D-9 O04 696 (was 17C-4)	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design O04 696 (3rd) - NP MF14C-3 O04 696 (was 14D-3) - DD - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	46.64	38.5	40.7	56.0				
100.0	100.0	100.0	100.0	0.1	0.1	46.64	38.5	40.7	56.0	55.7	0.27	205.751	
200.0	200.0	200.0	200.0	0.3	0.3	46.64	38.5	40.7	56.0	55.4	0.62	90.161	CC, ES
300.0	300.0	297.8	297.8	0.5	0.5	-118.04	38.5	43.2	58.2	57.3	0.97	60.011	
400.0	399.8	395.1	394.7	0.7	0.7	-117.46	38.6	50.7	66.5	65.1	1.35	49.310	
500.0	499.3	491.2	490.1	0.9	1.0	-117.76	38.9	62.9	80.9	79.1	1.79	45.250	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well NP MF01D-9 O04 696 (was 17C-4)
Project:	North Piceance	**TVD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Reference Site:	O04 696 (3rd)	**MD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	NP MF01D-9 O04 696 (was 17C-4)	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design O04 696 (3rd) - NP MF14D-3 O04 696 (was 19A-3) - DD - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	37.73	28.3	21.9	35.8				
100.0	100.0	100.0	100.0	0.1	0.1	37.73	28.3	21.9	35.8	35.6	0.27	131.626	
200.0	200.0	200.0	200.0	0.3	0.3	37.73	28.3	21.9	35.8	35.2	0.62	57.679	CC
228.4	228.4	228.4	228.4	0.4	0.4	-128.23	28.3	21.9	35.9	35.2	0.72	49.837	ES
300.0	300.0	300.0	300.0	0.5	0.5	-128.91	28.3	21.9	36.2	35.3	0.97	37.342	
400.0	399.8	398.8	398.8	0.7	0.7	-131.41	28.1	24.5	41.0	39.6	1.33	30.746	
500.0	499.3	497.1	496.8	0.9	0.9	-132.40	27.5	32.1	51.7	50.0	1.74	29.701	SF
600.0	598.0	594.3	593.1	1.2	1.1	-132.26	26.5	44.5	68.3	66.1	2.23	30.653	
700.0	695.8	689.8	687.1	1.6	1.5	-131.57	25.1	61.4	90.8	88.0	2.82	32.165	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well NP MF01D-9 O04 696 (was 17C-4)
Project:	North Piceance	**TVD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Reference Site:	O04 696 (3rd)	**MD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	NP MF01D-9 O04 696 (was 17C-4)	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design O04 696 (3rd) - NP MF14E-3 O04 696 (was 19B-3) - DD - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	50.45	23.3	28.2	36.6				
100.0	100.0	100.0	100.0	0.1	0.1	50.45	23.3	28.2	36.6	36.3	0.27	134.311	
200.0	200.0	200.0	200.0	0.3	0.3	50.45	23.3	28.2	36.6	35.9	0.62	58.856	CC, ES
300.0	300.0	298.8	298.8	0.5	0.5	-113.09	22.6	30.7	38.4	37.4	0.97	39.394	
400.0	399.8	397.3	396.9	0.7	0.7	-111.24	20.6	38.0	45.2	43.8	1.36	33.128	
500.0	499.3	494.9	493.7	0.9	1.0	-110.70	17.3	50.1	57.1	55.3	1.83	31.193	
600.0	598.0	591.3	588.6	1.2	1.3	-110.87	12.8	66.8	74.0	71.6	2.41	30.778	SF
700.0	695.8	686.3	681.1	1.6	1.8	-111.26	7.1	87.6	95.9	92.8	3.11	30.879	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well NP MF01D-9 O04 696 (was 17C-4)
Project:	North Piceance	**TVD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Reference Site:	O04 696 (3rd)	**MD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	NP MF01D-9 O04 696 (was 17C-4)	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design O04 696 (3rd) - NP MF15A-4 O04 696 (was 11D-3) - DD - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	38.16	65.8	51.7	83.7				
100.0	100.0	100.0	100.0	0.1	0.1	38.16	65.8	51.7	83.7	83.4	0.27	307.278	
200.0	200.0	200.0	200.0	0.3	0.3	38.16	65.8	51.7	83.7	83.0	0.62	134.650	CC, ES
300.0	300.0	297.4	297.3	0.5	0.5	-129.32	68.2	51.0	85.6	84.6	0.97	88.119	
400.0	399.8	393.6	393.3	0.7	0.7	-135.09	75.2	49.0	94.1	92.7	1.34	69.968	SF

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well NP MF01D-9 O04 696 (was 17C-4)
Project:	North Piceance	**TVD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Reference Site:	O04 696 (3rd)	**MD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	NP MF01D-9 O04 696 (was 17C-4)	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design O04 696 (3rd) - NP MF15D-4 O04 696 (was 01B-9) - DD - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-142.23	-16.2	-12.5	20.5				
100.0	100.0	100.0	100.0	0.1	0.1	-142.23	-16.2	-12.5	20.5	20.2	0.27	75.155	
200.0	200.0	200.0	200.0	0.3	0.3	-142.23	-16.2	-12.5	20.5	19.8	0.62	32.933	
300.0	300.0	300.0	300.0	0.5	0.5	53.42	-16.2	-12.5	20.1	19.1	0.97	20.672	
400.0	399.8	399.4	399.4	0.7	0.7	71.31	-15.8	-14.2	18.6	17.3	1.34	13.939	
401.2	401.1	400.6	400.6	0.7	0.7	71.68	-15.8	-14.3	18.6	17.3	1.34	13.886	CC, ES
500.0	499.3	497.9	497.7	0.9	0.8	106.38	-14.7	-19.2	23.3	21.5	1.74	13.349	SF
600.0	598.0	595.9	595.6	1.2	1.0	131.08	-13.3	-25.7	38.0	35.9	2.14	17.795	
700.0	695.8	692.9	692.3	1.6	1.2	144.08	-11.8	-32.1	59.9	57.4	2.51	23.830	
800.0	792.4	788.5	787.6	2.1	1.4	151.51	-10.4	-38.4	87.7	84.8	2.88	30.401	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well NP MF01D-9 O04 696 (was 17C-4)
Project:	North Piceance	**TVD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Reference Site:	O04 696 (3rd)	**MD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	NP MF01D-9 O04 696 (was 17C-4)	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design O04 696 (3rd) - NP MF18B-4 O04 696 (was 01A-9) - DD - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-158.12	-27.3	-11.0	29.4				
100.0	100.0	100.0	100.0	0.1	0.1	-158.12	-27.3	-11.0	29.4	29.2	0.27	108.072	
200.0	200.0	200.0	200.0	0.3	0.3	-158.12	-27.3	-11.0	29.4	28.8	0.62	47.358	CC, ES
300.0	300.0	298.5	298.5	0.5	0.5	35.09	-29.8	-11.0	31.3	30.3	0.97	32.324	
400.0	399.8	396.9	396.5	0.7	0.7	35.74	-37.4	-11.2	34.3	33.0	1.33	25.880	
500.0	499.3	495.9	494.7	0.9	1.0	38.47	-49.7	-11.5	37.5	35.8	1.72	21.857	
600.0	598.0	595.7	593.8	1.2	1.2	45.52	-62.8	-11.8	37.6	35.4	2.19	17.193	
700.0	695.8	695.3	692.5	1.6	1.5	59.14	-75.9	-12.2	35.4	32.5	2.87	12.348	
780.6	773.8	775.2	771.6	2.0	1.7	76.74	-86.4	-12.4	34.1	30.5	3.63	9.388	
800.0	792.4	794.4	790.6	2.1	1.8	81.85	-88.9	-12.5	34.2	30.4	3.82	8.951	
900.0	887.5	892.5	888.0	2.7	2.1	109.57	-101.9	-12.8	39.9	35.2	4.63	8.606	SF
1,000.0	980.9	989.6	984.2	3.3	2.3	131.35	-114.6	-13.1	55.5	50.5	4.94	11.227	
1,100.0	1,072.2	1,085.3	1,079.1	4.1	2.6	144.77	-127.2	-13.4	79.7	74.6	5.07	15.719	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well NP MF01D-9 O04 696 (was 17C-4)
Project:	North Piceance	**TVD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Reference Site:	O04 696 (3rd)	**MD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	NP MF01D-9 O04 696 (was 17C-4)	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design O04 696 (3rd) - NP MF19A-3 O04 696 (was 17B-4) - DD - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	39.03	21.3	17.2	27.4				
100.0	100.0	100.0	100.0	0.1	0.1	39.03	21.3	17.2	27.4	27.1	0.27	100.515	
200.0	200.0	200.0	200.0	0.3	0.3	39.03	21.3	17.2	27.4	26.7	0.62	44.046	CC
227.8	227.8	227.8	227.8	0.4	0.4	-126.98	21.3	17.2	27.4	26.7	0.72	38.176	ES
300.0	300.0	299.8	299.8	0.5	0.5	-126.59	21.0	17.8	27.9	27.0	0.97	28.781	
400.0	399.8	399.2	399.1	0.7	0.7	-125.08	19.0	22.6	32.5	31.2	1.35	24.149	
500.0	499.3	498.2	497.5	0.9	0.9	-123.03	15.0	32.1	41.7	39.9	1.80	23.201	SF
600.0	598.0	596.3	594.4	1.2	1.2	-121.16	9.1	46.1	55.5	53.2	2.36	23.498	
700.0	695.8	693.4	689.4	1.6	1.6	-119.64	1.3	64.4	73.8	70.8	3.06	24.123	
800.0	792.4	789.2	782.0	2.1	2.1	-118.42	-8.1	86.9	96.6	92.7	3.90	24.759	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well NP MF01D-9 O04 696 (was 17C-4)
Project:	North Piceance	**TVD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Reference Site:	O04 696 (3rd)	**MD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	NP MF01D-9 O04 696 (was 17C-4)	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design O04 696 (3rd) - NP MF19C-3 O04 696 (was 20B-3) - DD - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	55.41	16.2	23.5	28.5				
100.0	100.0	100.0	100.0	0.1	0.1	55.41	16.2	23.5	28.5	28.3	0.27	104.831	
200.0	200.0	200.0	200.0	0.3	0.3	55.41	16.2	23.5	28.5	27.9	0.62	45.937	CC, ES
300.0	300.0	299.3	299.3	0.5	0.5	-107.07	14.9	25.7	29.9	28.9	0.98	30.650	
400.0	399.8	398.3	397.9	0.7	0.7	-103.93	11.0	32.4	35.2	33.8	1.37	25.622	
500.0	499.3	496.8	495.6	0.9	1.0	-102.52	4.6	43.3	44.5	42.6	1.86	23.907	
600.0	598.0	594.5	591.7	1.2	1.3	-102.23	-4.3	58.5	57.6	55.2	2.47	23.330	
700.0	695.8	691.3	685.9	1.6	1.8	-102.45	-15.6	77.7	74.6	71.3	3.22	23.142	
800.0	792.4	786.9	777.7	2.1	2.3	-102.81	-29.1	100.7	95.2	91.1	4.12	23.095	SF

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well NP MF01D-9 O04 696 (was 17C-4)
Project:	North Piceance	**TVD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Reference Site:	O04 696 (3rd)	**MD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	NP MF01D-9 O04 696 (was 17C-4)	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design O04 696 (3rd) - NP MF19D-3 O04 696 (was 19C-3) - DD - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	37.69	6.1	4.7	7.7				
100.0	100.0	100.0	100.0	0.1	0.1	37.69	6.1	4.7	7.7	7.4	0.27	28.235	
200.0	200.0	200.0	200.0	0.3	0.3	37.69	6.1	4.7	7.7	7.1	0.62	12.373	CC
230.1	230.1	230.1	230.1	0.4	0.4	-128.83	6.1	4.7	7.8	7.0	0.73	10.685	ES
300.0	300.0	300.0	300.0	0.5	0.5	-131.78	6.1	4.7	8.1	7.1	0.97	8.354	SF
400.0	399.8	400.0	400.0	0.7	0.7	-147.55	5.6	5.2	11.9	10.6	1.32	9.025	
500.0	499.3	500.1	500.0	0.9	0.8	-150.11	2.1	9.0	18.6	16.9	1.70	10.960	
600.0	598.0	600.2	599.5	1.2	1.1	-146.86	-5.1	16.7	27.4	25.3	2.14	12.855	
700.0	695.8	699.8	697.8	1.6	1.4	-142.10	-15.1	28.5	39.3	36.6	2.70	14.542	
800.0	792.4	798.7	794.7	2.1	1.7	-137.53	-27.7	44.6	54.8	51.3	3.44	15.920	
900.0	887.5	896.9	889.6	2.7	2.2	-133.65	-42.8	64.7	73.9	69.5	4.36	16.967	
1,000.0	980.9	994.1	982.1	3.3	2.8	-130.43	-60.2	88.8	96.7	91.3	5.44	17.764	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well NP MF01D-9 O04 696 (was 17C-4)
Project:	North Piceance	**TVD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Reference Site:	O04 696 (3rd)	**MD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	NP MF01D-9 O04 696 (was 17C-4)	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design O04 696 (3rd) - NP MF19E-3 O04 696 (was 19D-3) - DD - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	84.66	1.0	11.0	11.0				
100.0	100.0	100.0	100.0	0.1	0.1	84.66	1.0	11.0	11.0	10.7	0.27	40.451	
200.0	200.0	200.0	200.0	0.3	0.3	84.66	1.0	11.0	11.0	10.4	0.62	17.726	CC, ES
300.0	300.0	299.5	299.5	0.5	0.5	-76.18	-0.5	13.0	12.9	11.9	0.97	13.234	
400.0	399.8	398.8	398.4	0.7	0.7	-77.06	-5.2	19.2	17.8	16.5	1.36	13.129	SF
500.0	499.3	497.6	496.4	0.9	1.0	-81.50	-13.0	29.4	25.7	23.9	1.83	14.071	
600.0	598.0	595.8	593.0	1.2	1.3	-85.99	-23.7	43.5	36.8	34.3	2.43	15.113	
700.0	695.8	693.3	687.9	1.6	1.8	-89.60	-37.3	61.4	51.1	47.9	3.20	15.973	
800.0	792.4	790.0	780.6	2.1	2.3	-92.29	-53.7	82.9	68.6	64.5	4.12	16.631	
900.0	887.5	885.6	870.9	2.7	2.9	-94.24	-72.6	107.9	89.3	84.1	5.21	17.134	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well NP MF01D-9 O04 696 (was 17C-4)
Project:	North Piceance	**TVD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Reference Site:	O04 696 (3rd)	**MD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	NP MF01D-9 O04 696 (was 17C-4)	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Offset Design O04 696 (3rd) - NP MF20F-3 O04 696 (was 20D-3) - DD - Plan #2

Offset Site Error: 0.0 ft

Survey Program: 0-MWD

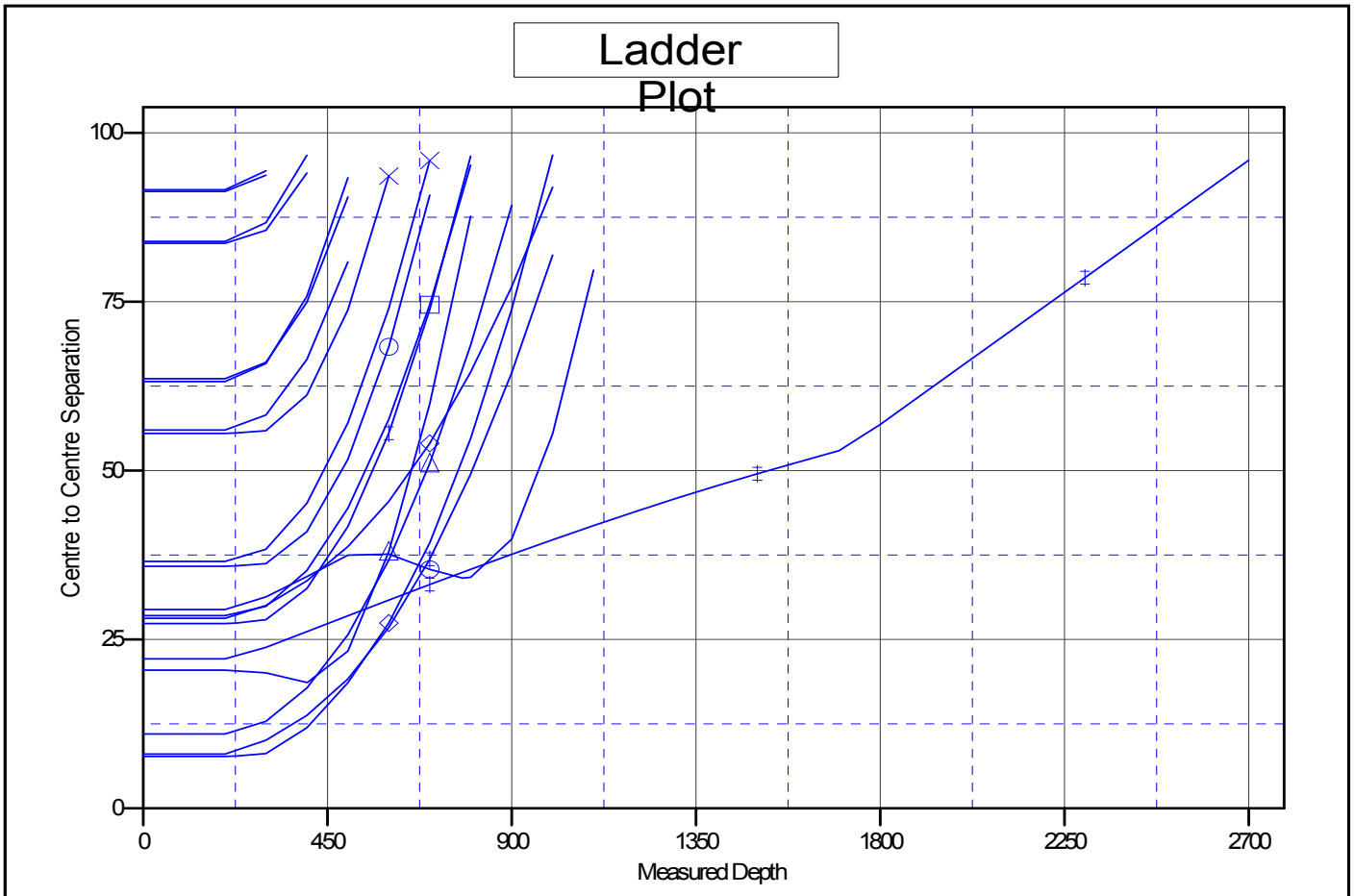
Offset Well Error: 0.0 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	128.84	-5.0	6.3	8.0				
100.0	100.0	100.0	100.0	0.1	0.1	128.84	-5.0	6.3	8.0	7.8	0.27	29.549	
200.0	200.0	200.0	200.0	0.3	0.3	128.84	-5.0	6.3	8.0	7.4	0.62	12.948	CC, ES
300.0	300.0	299.5	299.5	0.5	0.5	-36.93	-7.0	8.0	10.1	9.1	0.97	10.411	
400.0	399.8	398.8	398.5	0.7	0.7	-44.98	-12.7	13.2	13.8	12.4	1.33	10.344	SF
500.0	499.3	497.9	496.7	0.9	1.0	-55.69	-22.2	21.9	19.2	17.4	1.76	10.876	
600.0	598.0	596.5	593.7	1.2	1.3	-65.14	-35.4	33.9	26.8	24.4	2.34	11.465	
700.0	695.8	694.7	689.2	1.6	1.8	-72.37	-52.1	49.2	36.9	33.8	3.10	11.908	
800.0	792.4	792.3	782.9	2.1	2.3	-77.65	-72.4	67.6	49.5	45.4	4.05	12.225	
900.0	887.5	889.4	874.5	2.7	2.9	-81.50	-96.0	89.2	64.5	59.3	5.18	12.463	
1,000.0	980.9	985.8	963.8	3.3	3.6	-84.33	-122.8	113.6	81.9	75.4	6.47	12.652	

Company:	EnCana Oil & Gas (USA) Inc	**Local Co-ordinate Reference:**	Well NP MF01D-9 O04 696 (was 17C-4)
Project:	North Piceance	**TVD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Reference Site:	O04 696 (3rd)	**MD Reference:**	WELL @ 6044.0ft (Original Well Elev)
Site Error:	0.0ft	**North Reference:**	True
Reference Well:	NP MF01D-9 O04 696 (was 17C-4)	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.0ft	**Output errors are at**	2.00 sigma
Reference Wellbore	DD	**Database:**	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #2	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to WELL @ 6044.0ft (Original Well Elev)
Offset Depths are relative to Offset Datum
Central Meridian is 105° 30' 0.00 W °

Coordinates are relative to: NP MF01D-9 O04 696 (was 17C-4)
Coordinate System is US State Plane 1983, Colorado Central Zone
Grid Convergence at Surface is: -1.64°



LEGEND

- NP MF02A-9 O04 696 (was 18C-4), DD, Plan #2 V0
- NP MF06A-3 O04 696 (was 11C-3), DD, Plan #2 V0
- NP MF08B-9 O04 696 (was 01B-9), DD, Plan #2 V0
- NP MF11B-3 O04 696 (was 14A-3), DD, Plan #2 V0
- NP MF11D-3 O04 696 (was 14B-3), DD, Plan #2 V0
- NP MF11E-3 O04 696 (was 13A-3), DD, Plan #2 V0
- NP MF11G-3 O04 696 (was 14C-3), DD, Plan #2 V0
- NP MF14A-3 O04 696 (was 13B-3), DD, Plan #2 V0
- NP MF14C-3 O04 696 (was 14D-3), DD, Plan #2 V0
- NP MF14D-3 O04 696 (was 19A-3), DD, Plan #2 V0
- NP MF14E-3 O04 696 (was 19B-3), DD, Plan #2 V0
- NP MF15A-4 O04 696 (was 11D-3), DD, Plan #2 V0
- NP MF15D-4 O04 696 (was 01B-9), DD, Plan #2 V0
- NP MF18B-4 O04 696 (was 01A-9), DD, Plan #2 V0
- NP MF19A-3 O04 696 (was 17B-4), DD, Plan #2
- NP MF19C-3 O04 696 (was 20B-3), DD, Plan #2
- NP MF19D-3 O04 696 (was 19C-3), DD, Plan #2
- NP MF19E-3 O04 696 (was 19D-3), DD, Plan #2
- NP MF20F-3 O04 696 (was 20D-3), DD, Plan #2