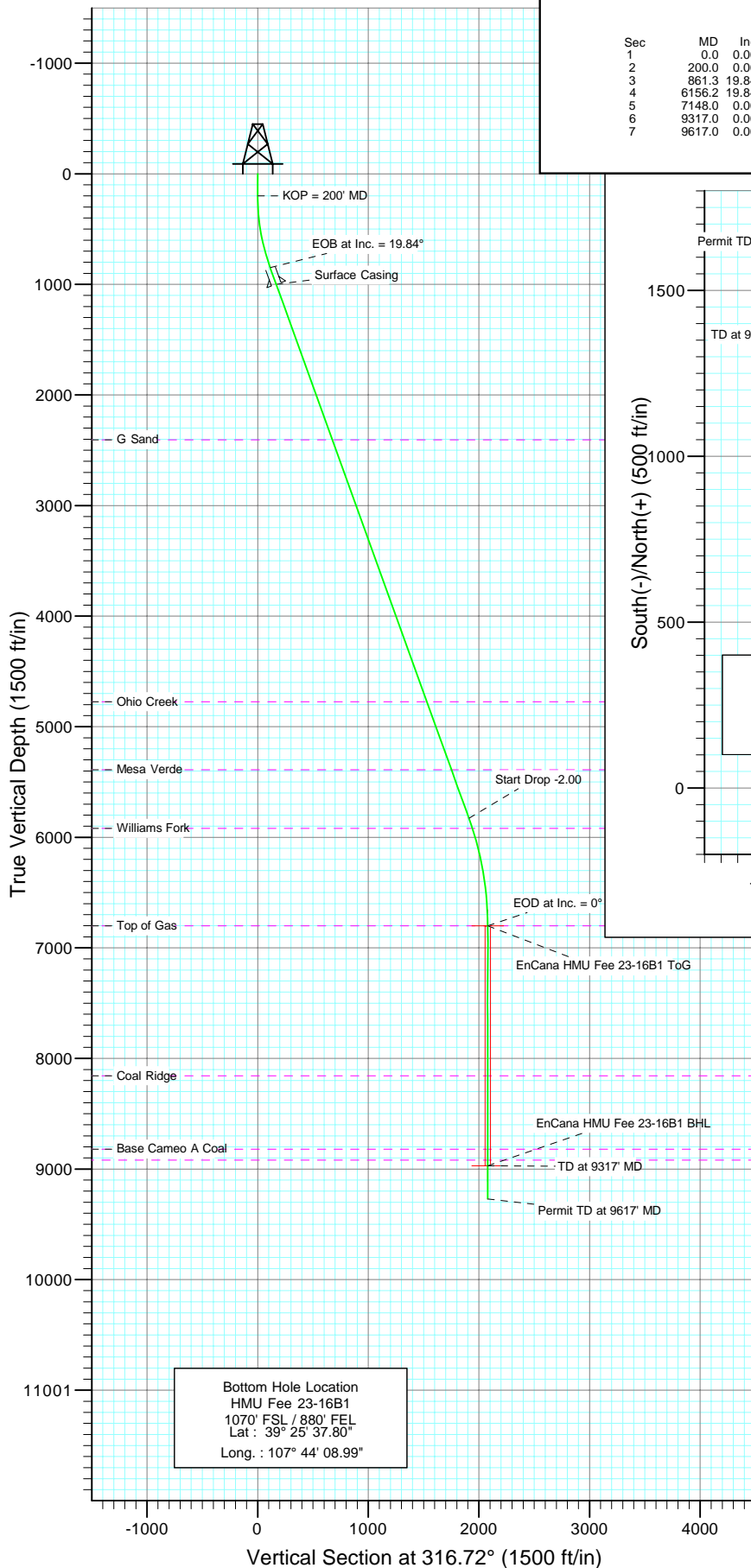
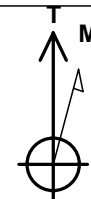
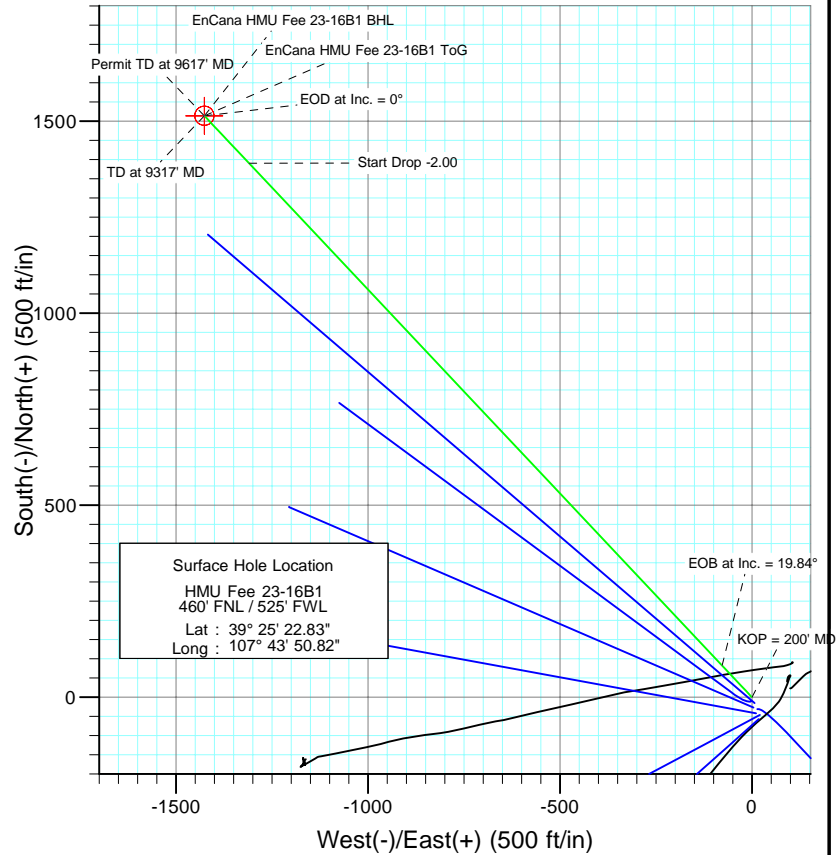




Project: Mamm Creek  
Site: (D25W)  
Well: HMU Fee 23-16B1  
Wellbore: DD  
Design: Plan #1



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	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	
3	861.3	19.84	316.72	848.1	82.5	-77.7	3.00	316.72	113.3	
4	6156.2	19.84	316.72	5828.8	1390.6	-1309.6	0.00	0.00	1910.2	
5	7148.0	0.00	0.00	6801.0	1514.4	-1426.1	2.00	180.00	2080.2	EnCana HMU Fee 23-16B1 ToG
6	9317.0	0.00	0.00	8970.0	1514.4	-1426.1	0.00	0.00	2080.2	EnCana HMU Fee 23-16B1 BHL
7	9617.0	0.00	0.00	9270.0	1514.4	-1426.1	0.00	0.00	2080.2	



Azimuths to True North  
Magnetic North: 10.30°

Magnetic Field  
Strength: 52346.2snT  
Dip Angle: 65.76°  
Date: 8/25/2010  
Model: IGRF200510

#### FORMATION TOP DETAILS

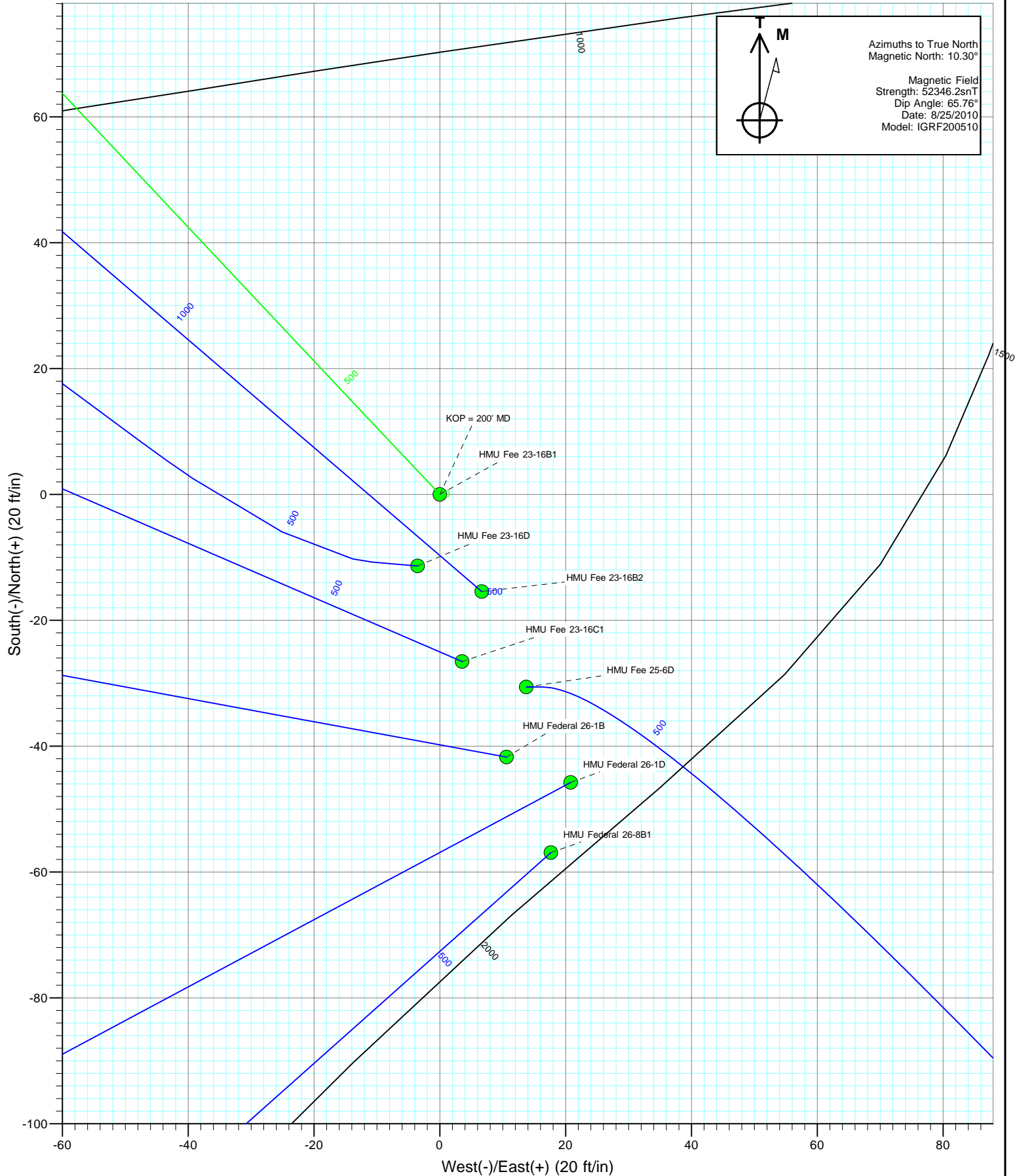
TVDPPath	MDPath	Formation
2406.0	2517.4	G Sand
4775.0	5035.9	Ohio Creek
5390.0	5689.7	Mesa Verde
5919.0	6251.5	Williams Fork
6801.0	7148.0	Top of Gas
8157.0	8504.0	Coal Ridge
8820.0	9167.0	Base Cameo A Coal
8919.0	9266.0	Rollins

DESIGN DETAILS: Plan #1  
Job #10xxx: KR

WELL @ 7250.0ft (Original Well Elev)					
Target	Azimuth	Origin	N/S	E/W	From TVD
EnCana HMU Fee 23-16B1 BHL	316.72	Slot	0.0	0.0	0.0

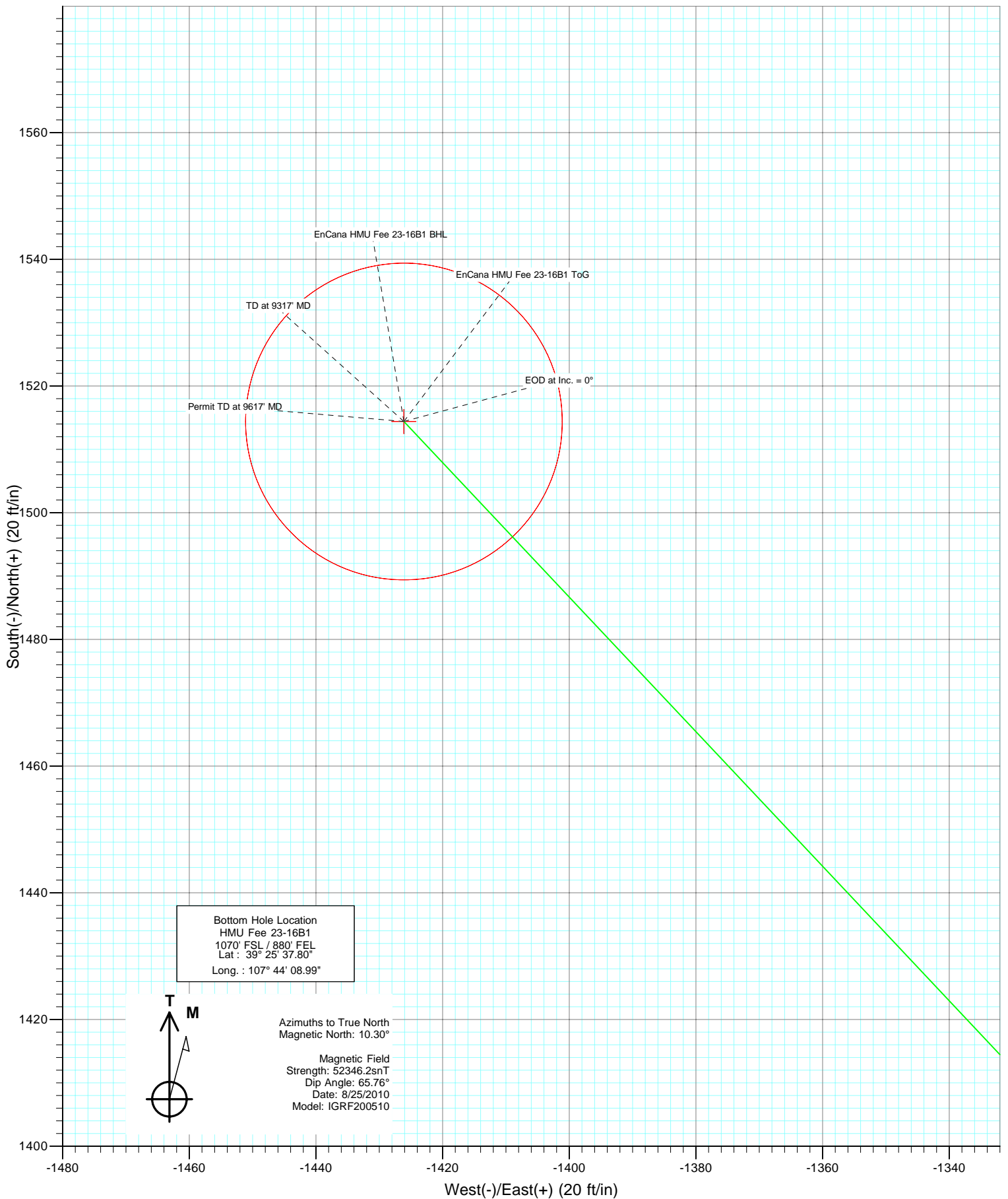


Project: Mamm Creek  
Site: (D25W)  
Well: HMU Fee 23-16B1  
Wellbore: DD  
Design: Plan #1





Project: Mamm Creek  
Site: (D25W)  
Well: HMU Fee 23-16B1  
Wellbore: DD  
Design: Plan #1



# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well HMU Fee 23-16B1
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Project:</b>	Mamm Creek	<b>MD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Site:</b>	(D25W)	<b>North Reference:</b>	True
<b>Well:</b>	HMU Fee 23-16B1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #1		

<b>Project</b>	Mamm Creek		
<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	(D25W)				
Site Position:		Northing:	1,586,700.90 ft	Latitude:	39.423009
From:	Lat/Long	Easting:	2,369,887.50 ft	Longitude:	-107.730782
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	-1.41 °

Well	HMU Fee 23-16B1					
Well Position	+N/-S	0.0 ft	Northing:	1,586,700.90 ft	Latitude:	39.423009
	+E/-W	0.0 ft	Easting:	2,369,887.50 ft	Longitude:	-107.730782
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	7,228.0 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>
	IGRF200510	8/25/2010	10.30	65.76	52,346

<b>Design</b>	Plan #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	316.72

<b>Plan Sections</b>										
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	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
861.3	19.84	316.72	848.1	82.5	-77.7	3.00	3.00	0.00	316.72	
6,156.2	19.84	316.72	5,828.8	1,390.6	-1,309.6	0.00	0.00	0.00	0.00	
7,148.0	0.00	0.00	6,801.0	1,514.4	-1,426.1	2.00	-2.00	0.00	180.00	EnCana HMU Fee 23
9,317.0	0.00	0.00	8,970.0	1,514.4	-1,426.1	0.00	0.00	0.00	0.00	EnCana HMU Fee 23
9,617.0	0.00	0.00	9,270.0	1,514.4	-1,426.1	0.00	0.00	0.00	0.00	

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well HMU Fee 23-16B1
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Project:</b>	Mamm Creek	<b>MD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Site:</b>	(D25W)	<b>North Reference:</b>	True
<b>Well:</b>	HMU Fee 23-16B1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #1		

### 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	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	KOP = 200' MD
300.0	3.00	316.72	300.0	1.9	-1.8	2.6	3.00	3.00	
400.0	6.00	316.72	399.6	7.6	-7.2	10.5	3.00	3.00	
500.0	9.00	316.72	498.8	17.1	-16.1	23.5	3.00	3.00	
600.0	12.00	316.72	597.1	30.4	-28.6	41.7	3.00	3.00	
700.0	15.00	316.72	694.3	47.4	-44.6	65.1	3.00	3.00	
800.0	18.00	316.72	790.2	68.1	-64.1	93.5	3.00	3.00	
861.3	19.84	316.72	848.1	82.5	-77.7	113.3	3.00	3.00	EOB at Inc. = 19.84°
900.0	19.84	316.72	884.6	92.1	-86.7	126.5	0.00	0.00	
1,000.0	19.84	316.72	978.6	116.8	-110.0	160.4	0.00	0.00	
1,022.7	19.84	316.72	1,000.0	122.4	-115.3	168.1	0.00	0.00	Surface Casing
1,100.0	19.84	316.72	1,072.7	141.5	-133.2	194.4	0.00	0.00	
1,200.0	19.84	316.72	1,166.8	166.2	-156.5	228.3	0.00	0.00	
1,300.0	19.84	316.72	1,260.8	190.9	-179.8	262.2	0.00	0.00	
1,400.0	19.84	316.72	1,354.9	215.6	-203.0	296.2	0.00	0.00	
1,500.0	19.84	316.72	1,449.0	240.3	-226.3	330.1	0.00	0.00	
1,600.0	19.84	316.72	1,543.0	265.0	-249.6	364.0	0.00	0.00	
1,700.0	19.84	316.72	1,637.1	289.7	-272.8	398.0	0.00	0.00	
1,800.0	19.84	316.72	1,731.2	314.4	-296.1	431.9	0.00	0.00	
1,900.0	19.84	316.72	1,825.2	339.1	-319.4	465.8	0.00	0.00	
2,000.0	19.84	316.72	1,919.3	363.8	-342.6	499.8	0.00	0.00	
2,100.0	19.84	316.72	2,013.4	388.5	-365.9	533.7	0.00	0.00	
2,200.0	19.84	316.72	2,107.4	413.3	-389.2	567.6	0.00	0.00	
2,300.0	19.84	316.72	2,201.5	438.0	-412.4	601.6	0.00	0.00	
2,400.0	19.84	316.72	2,295.6	462.7	-435.7	635.5	0.00	0.00	
2,500.0	19.84	316.72	2,389.6	487.4	-459.0	669.5	0.00	0.00	
2,517.4	19.84	316.72	2,406.0	491.7	-463.0	675.4	0.00	0.00	G Sand
2,600.0	19.84	316.72	2,483.7	512.1	-482.2	703.4	0.00	0.00	
2,700.0	19.84	316.72	2,577.8	536.8	-505.5	737.3	0.00	0.00	
2,800.0	19.84	316.72	2,671.8	561.5	-528.7	771.3	0.00	0.00	
2,900.0	19.84	316.72	2,765.9	586.2	-552.0	805.2	0.00	0.00	
3,000.0	19.84	316.72	2,860.0	610.9	-575.3	839.1	0.00	0.00	
3,100.0	19.84	316.72	2,954.0	635.6	-598.5	873.1	0.00	0.00	
3,200.0	19.84	316.72	3,048.1	660.3	-621.8	907.0	0.00	0.00	
3,300.0	19.84	316.72	3,142.1	685.0	-645.1	940.9	0.00	0.00	
3,400.0	19.84	316.72	3,236.2	709.7	-668.3	974.9	0.00	0.00	
3,500.0	19.84	316.72	3,330.3	734.4	-691.6	1,008.8	0.00	0.00	
3,600.0	19.84	316.72	3,424.3	759.1	-714.9	1,042.7	0.00	0.00	
3,700.0	19.84	316.72	3,518.4	783.8	-738.1	1,076.7	0.00	0.00	
3,800.0	19.84	316.72	3,612.5	808.5	-761.4	1,110.6	0.00	0.00	
3,900.0	19.84	316.72	3,706.5	833.2	-784.7	1,144.5	0.00	0.00	
4,000.0	19.84	316.72	3,800.6	858.0	-807.9	1,178.5	0.00	0.00	
4,100.0	19.84	316.72	3,894.7	882.7	-831.2	1,212.4	0.00	0.00	
4,200.0	19.84	316.72	3,988.7	907.4	-854.5	1,246.4	0.00	0.00	
4,300.0	19.84	316.72	4,082.8	932.1	-877.7	1,280.3	0.00	0.00	
4,400.0	19.84	316.72	4,176.9	956.8	-901.0	1,314.2	0.00	0.00	
4,500.0	19.84	316.72	4,270.9	981.5	-924.2	1,348.2	0.00	0.00	
4,600.0	19.84	316.72	4,365.0	1,006.2	-947.5	1,382.1	0.00	0.00	
4,700.0	19.84	316.72	4,459.1	1,030.9	-970.8	1,416.0	0.00	0.00	
4,800.0	19.84	316.72	4,553.1	1,055.6	-994.0	1,450.0	0.00	0.00	

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well HMU Fee 23-16B1
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Project:</b>	Mamm Creek	<b>MD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Site:</b>	(D25W)	<b>North Reference:</b>	True
<b>Well:</b>	HMU Fee 23-16B1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #1		

### 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
4,900.0	19.84	316.72	4,647.2	1,080.3	-1,017.3	1,483.9	0.00	0.00	
5,000.0	19.84	316.72	4,741.3	1,105.0	-1,040.6	1,517.8	0.00	0.00	
5,035.9	19.84	316.72	4,775.0	1,113.9	-1,048.9	1,530.0	0.00	0.00	Ohio Creek
5,100.0	19.84	316.72	4,835.3	1,129.7	-1,063.8	1,551.8	0.00	0.00	
5,200.0	19.84	316.72	4,929.4	1,154.4	-1,087.1	1,585.7	0.00	0.00	
5,300.0	19.84	316.72	5,023.5	1,179.1	-1,110.4	1,619.6	0.00	0.00	
5,400.0	19.84	316.72	5,117.5	1,203.8	-1,133.6	1,653.6	0.00	0.00	
5,500.0	19.84	316.72	5,211.6	1,228.5	-1,156.9	1,687.5	0.00	0.00	
5,600.0	19.84	316.72	5,305.7	1,253.2	-1,180.2	1,721.5	0.00	0.00	
5,689.7	19.84	316.72	5,390.0	1,275.4	-1,201.0	1,751.9	0.00	0.00	Mesa Verde
5,700.0	19.84	316.72	5,399.7	1,277.9	-1,203.4	1,755.4	0.00	0.00	
5,800.0	19.84	316.72	5,493.8	1,302.6	-1,226.7	1,789.3	0.00	0.00	
5,900.0	19.84	316.72	5,587.9	1,327.4	-1,250.0	1,823.3	0.00	0.00	
6,000.0	19.84	316.72	5,681.9	1,352.1	-1,273.2	1,857.2	0.00	0.00	
6,100.0	19.84	316.72	5,776.0	1,376.8	-1,296.5	1,891.1	0.00	0.00	
6,156.2	19.84	316.72	5,828.8	1,390.6	-1,309.6	1,910.2	0.00	0.00	Start Drop -2.00
6,200.0	18.96	316.72	5,870.2	1,401.2	-1,319.5	1,924.7	2.00	-2.00	
6,251.5	17.93	316.72	5,919.0	1,413.1	-1,330.7	1,941.0	2.00	-2.00	Williams Fork
6,300.0	16.96	316.72	5,965.3	1,423.7	-1,340.7	1,955.6	2.00	-2.00	
6,400.0	14.96	316.72	6,061.4	1,443.7	-1,359.5	1,983.1	2.00	-2.00	
6,500.0	12.96	316.72	6,158.5	1,461.3	-1,376.1	2,007.2	2.00	-2.00	
6,600.0	10.96	316.72	6,256.3	1,476.4	-1,390.3	2,027.9	2.00	-2.00	
6,700.0	8.96	316.72	6,354.8	1,488.9	-1,402.1	2,045.2	2.00	-2.00	
6,800.0	6.96	316.72	6,453.8	1,499.0	-1,411.6	2,059.1	2.00	-2.00	
6,900.0	4.96	316.72	6,553.3	1,506.6	-1,418.7	2,069.5	2.00	-2.00	
7,000.0	2.96	316.72	6,653.0	1,511.6	-1,423.5	2,076.4	2.00	-2.00	
7,100.0	0.96	316.72	6,753.0	1,514.1	-1,425.8	2,079.8	2.00	-2.00	
7,148.0	0.00	0.00	6,801.0	1,514.4	-1,426.1	2,080.2	2.00	-2.00	EOD at Inc. = 0° - Top of Gas - EnCana HMU F
7,200.0	0.00	0.00	6,853.0	1,514.4	-1,426.1	2,080.2	0.00	0.00	
7,300.0	0.00	0.00	6,953.0	1,514.4	-1,426.1	2,080.2	0.00	0.00	
7,400.0	0.00	0.00	7,053.0	1,514.4	-1,426.1	2,080.2	0.00	0.00	
7,500.0	0.00	0.00	7,153.0	1,514.4	-1,426.1	2,080.2	0.00	0.00	
7,600.0	0.00	0.00	7,253.0	1,514.4	-1,426.1	2,080.2	0.00	0.00	
7,700.0	0.00	0.00	7,353.0	1,514.4	-1,426.1	2,080.2	0.00	0.00	
7,800.0	0.00	0.00	7,453.0	1,514.4	-1,426.1	2,080.2	0.00	0.00	
7,900.0	0.00	0.00	7,553.0	1,514.4	-1,426.1	2,080.2	0.00	0.00	
8,000.0	0.00	0.00	7,653.0	1,514.4	-1,426.1	2,080.2	0.00	0.00	
8,100.0	0.00	0.00	7,753.0	1,514.4	-1,426.1	2,080.2	0.00	0.00	
8,200.0	0.00	0.00	7,853.0	1,514.4	-1,426.1	2,080.2	0.00	0.00	
8,300.0	0.00	0.00	7,953.0	1,514.4	-1,426.1	2,080.2	0.00	0.00	
8,400.0	0.00	0.00	8,053.0	1,514.4	-1,426.1	2,080.2	0.00	0.00	
8,500.0	0.00	0.00	8,153.0	1,514.4	-1,426.1	2,080.2	0.00	0.00	
8,504.0	0.00	0.00	8,157.0	1,514.4	-1,426.1	2,080.2	0.00	0.00	Coal Ridge
8,600.0	0.00	0.00	8,253.0	1,514.4	-1,426.1	2,080.2	0.00	0.00	
8,700.0	0.00	0.00	8,353.0	1,514.4	-1,426.1	2,080.2	0.00	0.00	
8,800.0	0.00	0.00	8,453.0	1,514.4	-1,426.1	2,080.2	0.00	0.00	
8,900.0	0.00	0.00	8,553.0	1,514.4	-1,426.1	2,080.2	0.00	0.00	
9,000.0	0.00	0.00	8,653.0	1,514.4	-1,426.1	2,080.2	0.00	0.00	
9,100.0	0.00	0.00	8,753.0	1,514.4	-1,426.1	2,080.2	0.00	0.00	
9,167.0	0.00	0.00	8,820.0	1,514.4	-1,426.1	2,080.2	0.00	0.00	Base Cameo A Coal
9,200.0	0.00	0.00	8,853.0	1,514.4	-1,426.1	2,080.2	0.00	0.00	
9,266.0	0.00	0.00	8,919.0	1,514.4	-1,426.1	2,080.2	0.00	0.00	Rollins

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well HMU Fee 23-16B1
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Project:</b>	Mamm Creek	<b>MD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Site:</b>	(D25W)	<b>North Reference:</b>	True
<b>Well:</b>	HMU Fee 23-16B1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #1		

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
9,300.0	0.00	0.00	8,953.0	1,514.4	-1,426.1	2,080.2	0.00	0.00	
9,317.0	0.00	0.00	8,970.0	1,514.4	-1,426.1	2,080.2	0.00	0.00	TD at 9317' MD - EnCana HMU Fee 23-16B1 B
9,400.0	0.00	0.00	9,053.0	1,514.4	-1,426.1	2,080.2	0.00	0.00	
9,500.0	0.00	0.00	9,153.0	1,514.4	-1,426.1	2,080.2	0.00	0.00	
9,600.0	0.00	0.00	9,253.0	1,514.4	-1,426.1	2,080.2	0.00	0.00	
9,617.0	0.00	0.00	9,270.0	1,514.4	-1,426.1	2,080.2	0.00	0.00	Permit TD at 9617' MD

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
EnCana HMU Fee 23-16	0.00	0.00	6,801.0	1,514.4	-1,426.1	1,588,249.86	2,368,499.02	39.427167	-107.735831
- plan hits target center									
- Point									
EnCana HMU Fee 23-16	0.00	0.00	8,970.0	1,514.4	-1,426.1	1,588,249.86	2,368,499.02	39.427167	-107.735831
- plan hits target center									
- Circle (radius 25.0)									

Casing Points					
Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)	
1,022.7	1,000.0	Surface Casing	5.500	6.000	

Formations					
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,517.4	2,406.0	G Sand			
5,035.9	4,775.0	Ohio Creek			
5,689.7	5,390.0	Mesa Verde			
6,251.5	5,919.0	Williams Fork			
7,148.0	6,801.0	Top of Gas			
8,504.0	8,157.0	Coal Ridge			
9,167.0	8,820.0	Base Cameo A Coal			
9,266.0	8,919.0	Rollins			

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well HMU Fee 23-16B1
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Project:</b>	Mamm Creek	<b>MD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Site:</b>	(D25W)	<b>North Reference:</b>	True
<b>Well:</b>	HMU Fee 23-16B1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #1		

### Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
200.0	200.0	0.0	0.0	KOP = 200' MD
861.3	848.1	82.5	-77.7	EOB at Inc. = 19.84°
6,156.2	5,828.8	1,390.6	-1,309.6	Start Drop -2.00
7,148.0	6,801.0	1,514.4	-1,426.1	EOD at Inc. = 0°
9,317.0	8,970.0	1,514.4	-1,426.1	TD at 9317' MD
9,617.0	9,270.0	1,514.4	-1,426.1	Permit TD at 9617' MD



# **EnCana Oil & Gas (USA) Inc**

**Mamm Creek**

**(D25W)**

**HMU Fee 23-16B1**

**DD**

**Plan #1**

## **Anticollision Report**

**27 August, 2010**

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well HMU Fee 23-16B1
<b>Project:</b>	Mamm Creek	<b>TVD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Reference Site:</b>	(D25W)	<b>MD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HMU Fee 23-16B1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Reference</b>	Plan #1
<b>Filter type:</b>	NO GLOBAL FILTER: Using user defined selection & filtering criteria
<b>Interpolation Method:</b>	Stations
<b>Depth Range:</b>	0.0 to 99,999.0ft
<b>Results Limited by:</b>	Maximum center-center distance of 500.0ft
<b>Warning Levels Evaluated at:</b>	2.00 Sigma
<b>Error Model:</b>	Systematic Ellipse
<b>Scan Method:</b>	Closest Approach 3D
<b>Error Surface:</b>	Elliptical Conic

<b>Survey Tool Program</b>	<b>Date</b>	8/27/2010
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>
0.0	9,617.0	Plan #1 (DD)
		<b>Tool Name</b>
		MWD
		<b>Description</b>
		Geolink MWD

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well HMU Fee 23-16B1
<b>Project:</b>	Mamm Creek	<b>TVD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Reference Site:</b>	(D25W)	<b>MD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HMU Fee 23-16B1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

### Summary

Site Name Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)		Separation Factor	Warning
(D25W)						
HMU 25-3D (Existing) - Excel Drilling - Surveys	0.0	0.0	101.9			
HMU 25-3D (Existing) - Excel Drilling - Surveys	100.0	99.4	102.2	101.9	347.203	ES
HMU 25-3D (Existing) - Excel Drilling - Surveys	800.0	783.2	184.4	181.2	57.580	SF
HMU 26-1C (Existing) - Baker Hughes (Inteq) - Surveys	748.2	762.5	124.4	121.2	39.486	CC, ES
HMU 26-1C (Existing) - Baker Hughes (Inteq) - Surveys	1,000.0	1,011.3	140.2	136.1	34.098	SF
HMU Federal 24-13A1 - DD - Plan #1	200.0	200.0	237.3	236.7	381.890	CC, ES
HMU Federal 24-13A1 - DD - Plan #1	1,600.0	1,535.9	479.3	468.4	43.859	SF
HMU Federal 24-13D1 - DD - Plan #1	200.0	200.0	243.9	243.2	392.475	CC, ES
HMU Federal 24-13D1 - DD - Plan #1	1,600.0	1,542.1	477.5	467.7	48.668	SF
HMU Federal 24-13D2 - DD - Plan #1	200.0	200.0	234.7	234.1	377.812	CC, ES
HMU Federal 24-13D2 - DD - Plan #1	1,300.0	1,260.8	389.5	383.6	66.356	SF
HMU Federal 24-14A1 - DD - Plan #1	200.0	200.0	242.4	241.7	390.078	CC, ES
HMU Federal 24-14A1 - DD - Plan #1	1,100.0	943.3	476.0	470.1	80.720	SF
HMU Federal 24-14A2 - DD - Plan #1	200.0	200.0	233.8	233.2	376.301	CC, ES
HMU Federal 24-14A2 - DD - Plan #1	1,100.0	966.3	469.0	463.1	79.322	SF
HMU Federal 24-14A3 - DD - Plan #1	200.0	200.0	241.6	241.0	388.884	CC, ES
HMU Federal 24-14A3 - DD - Plan #1	1,100.0	974.6	479.5	473.8	83.366	SF
HMU Federal 25-3C - DD - Plan #1	200.0	200.0	242.5	241.9	390.311	CC, ES
HMU Federal 25-3C - DD - Plan #1	1,100.0	1,062.3	367.0	362.2	76.388	SF
HMU Federal 26-1B - DD - Plan #1	200.0	200.0	43.1	42.4	69.297	CC, ES
HMU Federal 26-1B - DD - Plan #1	800.0	799.5	95.3	91.3	23.765	SF
HMU Federal 26-1D - DD - Plan #1	200.0	200.0	50.3	49.7	80.930	CC, ES
HMU Federal 26-1D - DD - Plan #1	600.0	594.2	96.0	93.6	40.239	SF
HMU Federal 26-8B1 - DD - Plan #1	200.0	200.0	59.6	59.0	95.900	CC, ES
HMU Federal 26-8B1 - DD - Plan #1	600.0	586.9	115.3	112.9	49.264	SF
HMU Fee 23-16B2 - DD - Plan #1	200.0	200.0	16.8	16.2	27.055	CC, ES
HMU Fee 23-16B2 - DD - Plan #1	9,617.0	9,566.0	309.7	250.1	5.195	SF
HMU Fee 23-16C1 - DD - Plan #1	200.0	200.0	26.8	26.2	43.115	CC, ES
HMU Fee 23-16C1 - DD - Plan #1	700.0	701.8	49.9	46.5	14.822	SF
HMU Fee 23-16D - DD - Plan #1	200.0	200.0	11.9	11.3	19.164	CC, ES
HMU Fee 23-16D - DD - Plan #1	700.0	700.5	23.9	20.4	6.871	SF
HMU Fee 25-6B - DD - Plan #1	200.0	200.0	233.7	233.1	376.108	CC, ES
HMU Fee 25-6B - DD - Plan #1	861.3	774.6	370.9	367.1	97.460	SF
MCU 26-8C (Existing) - Excel Drilling - Surveys	0.0	0.0	100.3			
MCU 26-8C (Existing) - Excel Drilling - Surveys	100.0	99.7	100.5	100.2	338.439	ES
MCU 26-8C (Existing) - Excel Drilling - Surveys	800.0	786.6	161.3	158.0	49.673	SF

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well HMU Fee 23-16B1
<b>Project:</b>	Mamm Creek	<b>TVD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Reference Site:</b>	(D25W)	<b>MD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HMU Fee 23-16B1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design (D25W) - HMU 25-3D (Existing) - Excel Drilling - Surveys													Offset Site Error:	0.0 ft
Survey Program: 238-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre		Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
							+N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	76.95	23.0	99.3	101.9					
100.0	100.0	99.4	99.4	0.1	0.2	76.94	23.1	99.6	102.2	101.9	0.29	347.203 ES		
200.0	200.0	198.8	198.8	0.3	0.3	76.92	23.3	100.4	103.1	102.5	0.63	164.370		
300.0	300.0	298.0	298.0	0.5	0.5	121.24	23.8	101.8	105.9	104.9	0.98	108.564		
400.0	399.6	396.7	396.7	0.7	0.7	123.99	25.2	103.8	112.4	111.1	1.36	82.801		
500.0	498.8	494.9	494.8	1.0	0.9	127.86	27.5	106.4	123.1	121.3	1.77	69.353		
600.0	597.1	592.3	592.1	1.4	1.1	132.20	30.7	109.7	138.4	136.1	2.23	62.094		
700.0	694.3	688.4	688.1	1.8	1.3	136.55	34.5	113.5	158.7	156.0	2.71	58.561		
800.0	790.2	783.2	782.6	2.4	1.5	140.53	38.8	117.8	184.4	181.2	3.20	57.580 SF		
861.3	848.1	840.4	839.7	2.7	1.6	142.70	41.8	120.8	202.8	199.3	3.50	57.922		
900.0	884.6	876.4	875.6	3.0	1.7	144.14	43.7	122.7	215.1	211.4	3.69	58.356		
1,000.0	978.6	968.6	967.5	3.6	1.9	147.03	49.3	128.3	247.9	243.7	4.17	59.459		
1,100.0	1,072.7	1,059.0	1,057.4	4.2	2.1	148.95	55.7	134.7	281.8	277.1	4.65	60.558		
1,200.0	1,166.8	1,144.8	1,142.7	4.8	2.3	150.35	61.5	142.5	317.7	312.6	5.13	61.960		
1,300.0	1,260.8	1,224.0	1,221.1	5.4	2.6	151.31	66.6	151.7	356.3	350.7	5.60	63.646		
1,400.0	1,354.9	1,305.0	1,301.1	6.1	2.8	152.08	71.2	163.7	397.8	391.7	6.07	65.539		
1,500.0	1,449.0	1,380.9	1,375.8	6.7	3.1	152.79	73.9	177.0	442.4	435.9	6.51	67.985		
1,600.0	1,543.0	1,458.2	1,451.6	7.3	3.3	153.64	74.1	192.0	489.7	482.8	6.91	70.870		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well HMU Fee 23-16B1
<b>Project:</b>	Mamm Creek	<b>TVD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Reference Site:</b>	(D25W)	<b>MD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HMU Fee 23-16B1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design (D25W) - HMU 26-1C (Existing) - Baker Hughes (Inteq) - Surveys													Offset Site Error:	0.0 ft
Survey Program: 170-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total Uncertainty Axis	Separation Factor	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)				
0.0	0.0	0.0	0.0	0.0	0.0	48.77	91.8	104.8	139.3					
100.0	100.0	99.9	99.9	0.1	0.2	48.87	91.6	105.0	139.3	139.1	0.29	483.477		
200.0	200.0	199.7	199.7	0.3	0.3	49.19	91.1	105.5	139.4	138.8	0.62	224.440		
300.0	300.0	301.2	301.2	0.5	0.5	94.05	90.4	106.5	139.8	138.8	0.98	142.152		
400.0	399.6	407.7	407.6	0.7	0.7	97.44	88.3	103.3	137.1	135.7	1.39	98.705		
500.0	498.8	510.3	509.9	1.0	0.9	102.69	85.3	96.5	132.1	130.2	1.84	71.628		
600.0	597.1	611.7	610.8	1.4	1.1	109.91	82.4	87.1	127.6	125.2	2.35	54.179		
700.0	694.3	713.6	711.9	1.8	1.4	118.87	80.3	74.5	124.8	121.9	2.89	43.175		
748.2	740.7	762.5	760.3	2.1	1.5	123.83	79.4	67.2	124.4	121.2	3.15	39.486 CC, ES		
800.0	790.2	814.6	811.6	2.4	1.7	129.52	78.3	58.7	125.0	121.6	3.39	36.870		
861.3	848.1	875.8	871.9	2.7	1.9	136.62	77.1	47.7	127.8	124.1	3.65	35.015		
900.0	884.6	914.3	909.7	3.0	2.0	141.22	76.1	40.3	130.5	126.7	3.79	34.421		
1,000.0	978.6	1,011.3	1,004.6	3.6	2.4	152.03	73.2	20.8	140.2	136.1	4.11	34.098 SF		
1,100.0	1,072.7	1,107.8	1,099.0	4.2	2.8	161.25	70.4	0.9	154.1	149.7	4.43	34.796		
1,200.0	1,166.8	1,204.9	1,193.8	4.8	3.2	169.13	67.3	-19.8	170.9	166.1	4.80	35.571		
1,300.0	1,260.8	1,299.6	1,286.3	5.4	3.5	175.43	64.1	-39.9	190.5	185.2	5.26	36.222		
1,400.0	1,354.9	1,396.3	1,380.8	6.1	3.9	-179.40	60.9	-60.3	212.0	206.2	5.82	36.409		
1,500.0	1,449.0	1,491.3	1,473.5	6.7	4.3	-175.11	57.3	-80.7	235.2	228.7	6.48	36.295		
1,600.0	1,543.0	1,587.6	1,567.4	7.3	4.7	-171.47	53.4	-101.6	259.3	252.1	7.21	35.961		
1,700.0	1,637.1	1,683.4	1,660.9	8.0	5.1	-168.53	49.8	-122.1	284.4	276.4	7.98	35.651		
1,800.0	1,731.2	1,778.6	1,753.9	8.6	5.5	-166.13	46.4	-142.2	309.9	301.1	8.76	35.379		
1,900.0	1,825.2	1,873.0	1,846.1	9.2	5.9	-164.09	42.4	-162.0	336.5	326.9	9.55	35.229		
2,000.0	1,919.3	1,970.0	1,941.0	9.8	6.3	-162.39	38.8	-181.9	363.3	352.9	10.35	35.083		
2,100.0	2,013.4	2,066.1	2,034.8	10.5	6.7	-160.87	35.1	-202.2	390.1	378.9	11.17	34.922		
2,200.0	2,107.4	2,161.6	2,128.2	11.1	7.1	-159.58	31.5	-222.0	417.2	405.2	11.98	34.826		
2,300.0	2,201.5	2,258.6	2,223.0	11.7	7.5	-158.38	27.8	-242.6	444.5	431.6	12.82	34.676		
2,400.0	2,295.6	2,355.4	2,317.3	12.4	7.9	-157.27	24.2	-263.6	471.5	457.9	13.66	34.527		
2,500.0	2,389.6	2,450.9	2,410.7	13.0	8.3	-156.38	20.9	-283.8	498.7	484.3	14.48	34.451		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well HMU Fee 23-16B1
<b>Project:</b>	Mamm Creek	<b>TVD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Reference Site:</b>	(D25W)	<b>MD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HMU Fee 23-16B1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design (D25W) - HMU Federal 24-13A1 - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	55.71	133.7	196.0	237.3					
100.0	100.0	100.0	100.0	0.1	0.1	55.71	133.7	196.0	237.3	237.0	0.27	871.492		
200.0	200.0	200.0	200.0	0.3	0.3	55.71	133.7	196.0	237.3	236.7	0.62	381.890	CC, ES	
300.0	300.0	292.4	292.4	0.5	0.5	99.10	135.9	196.3	239.3	238.3	0.97	246.667		
400.0	399.6	384.6	384.3	0.7	0.7	99.41	142.5	197.1	245.3	243.9	1.37	178.544		
500.0	498.8	476.3	475.4	1.0	0.9	99.89	153.5	198.4	255.3	253.4	1.87	136.529		
600.0	597.1	567.9	565.6	1.4	1.2	100.48	168.7	200.2	269.2	266.7	2.47	108.903		
700.0	694.3	666.2	662.2	1.8	1.6	101.67	187.1	202.3	285.6	282.4	3.20	89.245		
800.0	790.2	763.8	758.0	2.4	1.9	103.60	205.4	204.5	303.3	299.3	4.02	75.436		
861.3	848.1	823.1	816.3	2.7	2.1	105.07	216.5	205.8	315.1	310.6	4.56	69.137		
900.0	884.6	860.5	853.0	3.0	2.3	106.25	223.4	206.6	322.9	318.0	4.90	65.885		
1,000.0	978.6	957.0	947.8	3.6	2.6	109.05	241.5	208.7	343.6	337.8	5.79	59.379		
1,100.0	1,072.7	1,053.5	1,042.5	4.2	3.0	111.54	259.5	210.8	365.0	358.3	6.67	54.750		
1,200.0	1,166.8	1,150.0	1,137.3	4.8	3.3	113.76	277.6	213.0	387.0	379.5	7.54	51.336		
1,300.0	1,260.8	1,246.5	1,232.1	5.4	3.7	115.74	295.6	215.1	409.5	401.1	8.40	48.746		
1,400.0	1,354.9	1,343.0	1,326.8	6.1	4.0	117.51	313.6	217.2	432.4	423.2	9.25	46.735		
1,500.0	1,449.0	1,439.5	1,421.6	6.7	4.4	119.11	331.7	219.3	455.7	445.6	10.10	45.141		
1,600.0	1,543.0	1,535.9	1,516.4	7.3	4.8	120.55	349.7	221.4	479.3	468.4	10.93	43.859	SF	

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well HMU Fee 23-16B1
<b>Project:</b>	Mamm Creek	<b>TVD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Reference Site:</b>	(D25W)	<b>MD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HMU Fee 23-16B1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design (D25W) - HMU Federal 24-13D1 - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	57.99	129.3	206.8	243.9					
100.0	100.0	100.0	100.0	0.1	0.1	57.99	129.3	206.8	243.9	243.6	0.27	895.648		
200.0	200.0	200.0	200.0	0.3	0.3	57.99	129.3	206.8	243.9	243.2	0.62	392.475 CC, ES		
300.0	300.0	292.5	292.4	0.5	0.5	101.36	131.5	207.1	245.9	244.9	0.97	253.441		
400.0	399.6	384.7	384.4	0.7	0.7	101.61	138.1	207.9	252.0	250.7	1.37	183.363		
500.0	498.8	478.3	477.3	1.0	0.9	102.04	149.2	209.3	262.2	260.3	1.86	140.658		
600.0	597.1	577.3	575.4	1.4	1.2	103.22	162.3	211.0	274.4	271.9	2.46	111.739		
700.0	694.3	675.6	672.9	1.8	1.5	105.23	175.3	212.6	288.1	285.0	3.13	91.960		
800.0	790.2	773.0	769.4	2.4	1.7	107.87	188.2	214.3	303.9	300.0	3.89	78.122		
861.3	848.1	832.1	828.0	2.7	1.9	109.73	196.0	215.3	314.8	310.4	4.38	71.899		
900.0	884.6	869.4	864.9	3.0	2.0	111.12	200.9	215.9	322.2	317.5	4.69	68.741		
1,000.0	978.6	965.5	960.2	3.6	2.3	114.45	213.6	217.5	342.0	336.5	5.47	62.493		
1,100.0	1,072.7	1,061.6	1,055.4	4.2	2.6	117.42	226.4	219.1	362.8	356.6	6.24	58.140		
1,200.0	1,166.8	1,157.7	1,150.6	4.8	2.8	120.07	239.1	220.7	384.6	377.6	6.99	55.013		
1,300.0	1,260.8	1,253.8	1,245.9	5.4	3.1	122.44	251.8	222.3	407.0	399.3	7.72	52.713		
1,400.0	1,354.9	1,349.9	1,341.1	6.1	3.4	124.56	264.5	224.0	430.0	421.6	8.43	50.988		
1,500.0	1,449.0	1,446.0	1,436.4	6.7	3.7	126.47	277.2	225.6	453.6	444.4	9.13	49.677		
1,600.0	1,543.0	1,542.1	1,531.6	7.3	4.0	128.20	289.9	227.2	477.5	467.7	9.81	48.668 SF		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well HMU Fee 23-16B1
<b>Project:</b>	Mamm Creek	<b>TVD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Reference Site:</b>	(D25W)	<b>MD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HMU Fee 23-16B1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design (D25W) - HMU Federal 24-13D2 - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning	
0.0	0.0	0.0	0.0	0.0	0.0	59.79	118.1	202.9	234.7					
100.0	100.0	100.0	100.0	0.1	0.1	59.79	118.1	202.9	234.7	234.5	0.27	862.186		
200.0	200.0	200.0	200.0	0.3	0.3	59.79	118.1	202.9	234.7	234.1	0.62	377.812	CC, ES	
300.0	300.0	300.0	300.0	0.5	0.5	103.67	118.1	202.9	235.4	234.4	0.98	240.565		
400.0	399.6	399.6	399.6	0.7	0.7	105.45	118.1	202.9	237.3	236.0	1.37	173.291		
500.0	498.8	498.8	498.8	1.0	0.8	108.30	118.1	202.9	241.2	239.3	1.81	132.888		
600.0	597.1	597.1	597.1	1.4	1.0	112.08	118.1	202.9	247.5	245.2	2.32	106.759		
700.0	694.3	694.3	694.3	1.8	1.2	116.52	118.1	202.9	257.4	254.5	2.87	89.607		
800.0	790.2	790.2	790.2	2.4	1.3	121.36	118.1	202.9	271.6	268.1	3.46	78.561		
861.3	848.1	848.1	848.1	2.7	1.4	124.39	118.1	202.9	282.8	279.0	3.81	74.147		
900.0	884.6	884.6	884.6	3.0	1.5	126.45	118.1	202.9	290.7	286.7	4.03	72.171		
1,000.0	978.6	978.6	978.6	3.6	1.7	131.29	118.1	202.9	312.8	308.3	4.55	68.783		
1,100.0	1,072.7	1,072.7	1,072.7	4.2	1.8	135.51	118.1	202.9	336.9	331.9	5.02	67.064		
1,200.0	1,166.8	1,166.8	1,166.8	4.8	2.0	139.17	118.1	202.9	362.6	357.1	5.46	66.381		
1,300.0	1,260.8	1,260.8	1,260.8	5.4	2.2	142.37	118.1	202.9	389.5	383.6	5.87	66.356	SF	
1,400.0	1,354.9	1,354.9	1,354.9	6.1	2.3	145.16	118.1	202.9	417.4	411.2	6.25	66.754		
1,500.0	1,449.0	1,449.0	1,449.0	6.7	2.5	147.61	118.1	202.9	446.2	439.6	6.62	67.423		
1,600.0	1,543.0	1,543.0	1,543.0	7.3	2.7	149.77	118.1	202.9	475.7	468.7	6.97	68.262		



# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well HMU Fee 23-16B1
<b>Project:</b>	Mamm Creek	<b>TVD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Reference Site:</b>	(D25W)	<b>MD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HMU Fee 23-16B1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design (D25W) - HMU Federal 24-14A1 - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)				
0.0	0.0	0.0	0.0	0.0	0.0	61.92	114.1	213.8	242.4					
100.0	100.0	100.0	100.0	0.1	0.1	61.92	114.1	213.8	242.4	242.1	0.27	890.177		
200.0	200.0	200.0	200.0	0.3	0.3	61.92	114.1	213.8	242.4	241.7	0.62	390.078	CC, ES	
300.0	300.0	289.1	289.1	0.5	0.5	105.49	115.6	215.3	245.3	244.3	0.96	255.421		
400.0	399.6	377.7	377.4	0.7	0.7	106.32	120.0	219.6	254.1	252.7	1.34	190.098		
500.0	498.8	465.0	464.2	1.0	0.9	107.53	127.3	226.6	268.8	267.0	1.77	151.499		
600.0	597.1	550.7	548.7	1.4	1.2	108.96	137.2	236.1	289.5	287.2	2.29	126.517		
700.0	694.3	634.1	630.4	1.8	1.5	110.42	149.5	247.9	316.3	313.5	2.89	109.576		
800.0	790.2	714.9	708.7	2.4	1.9	111.77	163.8	261.7	349.2	345.6	3.57	97.753		
861.3	848.1	763.0	754.8	2.7	2.2	112.49	173.4	270.9	372.2	368.2	4.03	92.363		
900.0	884.6	800.0	790.2	3.0	2.4	113.51	181.4	278.6	387.8	383.5	4.34	89.361		
1,000.0	978.6	868.7	855.1	3.6	2.8	115.05	197.6	294.2	430.3	425.2	5.10	84.317		
1,100.0	1,072.7	943.3	924.6	4.2	3.3	116.26	217.0	312.8	476.0	470.1	5.90	80.720	SF	

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well HMU Fee 23-16B1
<b>Project:</b>	Mamm Creek	<b>TVD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Reference Site:</b>	(D25W)	<b>MD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HMU Fee 23-16B1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design (D25W) - HMU Federal 24-14A2 - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning	
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)				
0.0	0.0	0.0	0.0	0.0	0.0	63.88	103.0	209.9	233.8					
100.0	100.0	100.0	100.0	0.1	0.1	63.88	103.0	209.9	233.8	233.5	0.27	858.738		
200.0	200.0	200.0	200.0	0.3	0.3	63.88	103.0	209.9	233.8	233.2	0.62	376.301	CC, ES	
300.0	300.0	289.5	289.5	0.5	0.5	107.45	104.4	211.4	236.8	235.8	0.96	246.440		
400.0	399.6	378.4	378.2	0.7	0.7	108.26	108.9	215.8	245.8	244.5	1.34	183.830		
500.0	498.8	466.2	465.3	1.0	0.9	109.46	116.1	223.0	260.9	259.1	1.77	147.052		
600.0	597.1	552.1	550.1	1.4	1.2	110.86	125.9	232.7	282.2	279.9	2.29	123.365		
700.0	694.3	635.8	632.0	1.8	1.5	112.27	138.1	244.8	309.6	306.7	2.88	107.366		
800.0	790.2	716.8	710.5	2.4	1.9	113.55	152.3	258.9	343.1	339.6	3.57	96.238		
861.3	848.1	764.9	756.7	2.7	2.2	114.22	161.8	268.3	366.6	362.6	4.02	91.189		
900.0	884.6	800.0	790.2	3.0	2.4	115.16	169.3	275.8	382.4	378.1	4.32	88.456		
1,000.0	978.6	877.1	863.1	3.6	2.8	116.82	187.0	293.3	425.3	420.2	5.09	83.491		
1,100.0	1,072.7	966.3	947.5	4.2	3.3	118.39	207.7	313.8	469.0	463.1	5.91	79.322	SF	

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well HMU Fee 23-16B1
<b>Project:</b>	Mamm Creek	<b>TVD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Reference Site:</b>	(D25W)	<b>MD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HMU Fee 23-16B1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design (D25W) - HMU Federal 24-14A3 - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program:		0-MWD											Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	66.10	97.9	220.9	241.6					
100.0	100.0	100.0	100.0	0.1	0.1	66.10	97.9	220.9	241.6	241.4	0.27	887.452		
200.0	200.0	200.0	200.0	0.3	0.3	66.10	97.9	220.9	241.6	241.0	0.62	388.884	CC, ES	
300.0	300.0	289.1	289.0	0.5	0.5	109.67	99.2	222.5	244.7	243.8	0.96	255.017		
400.0	399.6	377.5	377.2	0.7	0.7	110.48	103.3	227.2	254.1	252.8	1.33	190.638		
500.0	498.8	464.6	463.8	1.0	0.9	111.66	109.8	234.8	269.8	268.0	1.76	152.979		
600.0	597.1	549.9	547.9	1.4	1.2	113.04	118.7	245.2	291.8	289.6	2.27	128.832		
700.0	694.3	632.7	629.0	1.8	1.5	114.42	129.6	258.0	320.3	317.5	2.84	112.589		
800.0	790.2	712.6	706.5	2.4	1.9	115.66	142.4	272.8	355.0	351.5	3.50	101.371		
861.3	848.1	760.6	752.6	2.7	2.1	116.34	151.0	282.9	379.3	375.4	3.94	96.338		
900.0	884.6	795.4	785.9	3.0	2.3	117.31	157.5	290.5	395.4	391.2	4.23	93.531		
1,000.0	978.6	885.0	871.7	3.6	2.8	119.49	174.3	310.1	437.2	432.3	4.99	87.706		
1,100.0	1,072.7	974.6	957.6	4.2	3.2	121.30	191.0	329.6	479.5	473.8	5.75	83.366	SF	

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well HMU Fee 23-16B1
<b>Project:</b>	Mamm Creek	<b>TVD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Reference Site:</b>	(D25W)	<b>MD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HMU Fee 23-16B1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> (D25W) - HMU Federal 25-3C - DD - Plan #1													<b>Offset Site Error:</b>	0.0 ft
Survey Program: 0-MWD													<b>Offset Well Error:</b>	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	70.06	82.7	228.0	242.5					
100.0	100.0	100.0	100.0	0.1	0.1	70.06	82.7	228.0	242.5	0.27	890.708			
200.0	200.0	200.0	200.0	0.3	0.3	70.06	82.7	228.0	242.5	0.62	390.311 CC, ES			
300.0	300.0	300.0	300.0	0.5	0.5	113.87	82.7	228.0	243.6	0.98	249.210			
400.0	399.6	399.6	399.6	0.7	0.7	115.44	82.7	228.0	246.8	1.36	181.092			
500.0	498.8	498.8	498.8	1.0	0.8	117.94	82.7	228.0	252.8	1.79	140.820			
600.0	597.1	597.1	597.1	1.4	1.0	121.19	82.7	228.0	261.9	2.28	115.090			
700.0	694.3	694.3	694.3	1.8	1.2	124.95	82.7	228.0	274.9	2.80	98.332			
800.0	790.2	790.2	790.2	2.4	1.3	128.99	82.7	228.0	292.4	3.34	87.579			
861.3	848.1	848.1	848.1	2.7	1.4	131.50	82.7	228.0	305.7	3.67	83.288			
900.0	884.6	884.6	884.6	3.0	1.5	133.23	82.7	228.0	314.8	3.87	81.355			
1,000.0	978.6	978.6	978.6	3.6	1.7	137.29	82.7	228.0	339.7	4.36	77.944			
1,100.0	1,072.7	1,062.3	1,062.3	4.2	1.8	140.53	82.1	228.8	367.0	4.80	76.388 SF			
1,200.0	1,166.8	1,140.6	1,140.5	4.8	2.0	143.42	79.5	232.0	398.9	5.21	76.541			
1,300.0	1,260.8	1,216.1	1,215.7	5.4	2.1	146.04	75.0	237.5	435.4	5.59	77.937			
1,400.0	1,354.9	1,299.3	1,298.2	6.1	2.3	148.66	68.5	245.6	475.5	5.93	80.135			

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well HMU Fee 23-16B1
<b>Project:</b>	Mamm Creek	<b>TVD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Reference Site:</b>	(D25W)	<b>MD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HMU Fee 23-16B1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design (D25W) - HMU Federal 26-1B - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Distance		Total		Separation		Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor		
0.0	0.0	0.0	0.0	0.0	0.0	165.74	-41.7	10.6	43.1					
100.0	100.0	100.0	100.0	0.1	0.1	165.74	-41.7	10.6	43.1	42.8	0.27	158.139		
200.0	200.0	200.0	200.0	0.3	0.3	165.74	-41.7	10.6	43.1	42.4	0.62	69.297 CC, ES		
300.0	300.0	300.9	300.9	0.5	0.5	-149.49	-41.2	8.0	44.3	43.3	0.98	45.102		
400.0	399.6	401.7	401.3	0.7	0.7	-145.46	-39.8	0.1	48.0	46.6	1.39	34.570		
500.0	498.8	502.1	500.9	1.0	1.0	-140.03	-37.4	-12.8	54.7	52.8	1.90	28.813		
600.0	597.1	601.9	599.0	1.4	1.4	-134.48	-34.1	-30.7	64.6	62.0	2.54	25.404		
700.0	694.3	701.0	696.1	1.8	1.7	-132.09	-30.6	-49.9	78.2	74.9	3.26	23.988		
800.0	790.2	799.5	792.7	2.4	2.1	-132.65	-27.1	-69.0	95.3	91.3	4.01	23.765 SF		
861.3	848.1	859.4	851.4	2.7	2.3	-133.83	-25.0	-80.7	107.6	103.1	4.47	24.066		
900.0	884.6	897.3	888.5	3.0	2.5	-134.81	-23.6	-88.0	115.8	111.0	4.76	24.346		
1,000.0	978.6	994.9	984.2	3.6	2.8	-136.80	-20.1	-106.9	137.1	131.6	5.49	24.964		
1,100.0	1,072.7	1,092.5	1,079.9	4.2	3.2	-138.25	-16.7	-125.9	158.5	152.3	6.22	25.467		
1,200.0	1,166.8	1,190.1	1,175.6	4.8	3.6	-139.36	-13.2	-144.8	180.0	173.0	6.95	25.882		
1,300.0	1,260.8	1,287.7	1,271.3	5.4	4.0	-140.23	-9.7	-163.8	201.5	193.8	7.68	26.230		
1,400.0	1,354.9	1,385.3	1,367.0	6.1	4.4	-140.93	-6.2	-182.7	223.1	214.7	8.41	26.525		
1,500.0	1,449.0	1,482.9	1,462.7	6.7	4.7	-141.51	-2.8	-201.6	244.7	235.6	9.14	26.778		
1,600.0	1,543.0	1,580.5	1,558.4	7.3	5.1	-142.00	0.7	-220.6	266.3	256.5	9.86	26.998		
1,700.0	1,637.1	1,678.1	1,654.1	8.0	5.5	-142.41	4.2	-239.5	288.0	277.4	10.59	27.190		
1,800.0	1,731.2	1,775.8	1,749.8	8.6	5.9	-142.76	7.7	-258.5	309.6	298.3	11.32	27.360		
1,900.0	1,825.2	1,873.4	1,845.5	9.2	6.3	-143.07	11.2	-277.4	331.3	319.2	12.04	27.511		
2,000.0	1,919.3	1,971.0	1,941.1	9.8	6.6	-143.34	14.6	-296.3	352.9	340.2	12.77	27.646		
2,100.0	2,013.4	2,068.6	2,036.8	10.5	7.0	-143.58	18.1	-315.3	374.6	361.1	13.49	27.767		
2,200.0	2,107.4	2,166.2	2,132.5	11.1	7.4	-143.79	21.6	-334.2	396.3	382.1	14.22	27.876		
2,300.0	2,201.5	2,263.8	2,228.2	11.7	7.8	-143.98	25.1	-353.2	418.0	403.0	14.94	27.976		
2,400.0	2,295.6	2,361.4	2,323.9	12.4	8.2	-144.16	28.5	-372.1	439.7	424.0	15.66	28.067		
2,500.0	2,389.6	2,459.0	2,419.6	13.0	8.6	-144.31	32.0	-391.1	461.4	445.0	16.39	28.150		
2,600.0	2,483.7	2,556.7	2,515.3	13.6	8.9	-144.45	35.5	-410.0	483.0	465.9	17.11	28.226		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well HMU Fee 23-16B1
<b>Project:</b>	Mamm Creek	<b>TVD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Reference Site:</b>	(D25W)	<b>MD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HMU Fee 23-16B1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design (D25W) - HMU Federal 26-1D - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	155.55	-45.8	20.8	50.3					
100.0	100.0	100.0	100.0	0.1	0.1	155.55	-45.8	20.8	50.3	0.27	184.686			
200.0	200.0	200.0	200.0	0.3	0.3	155.55	-45.8	20.8	50.3	0.62	80.930 CC, ES			
300.0	300.0	299.7	299.7	0.5	0.5	-159.24	-47.0	18.5	53.0	0.98	54.108			
400.0	399.6	398.9	398.5	0.7	0.7	-154.49	-50.7	11.7	61.3	1.38	44.482			
500.0	498.8	496.8	495.6	1.0	1.0	-148.92	-56.6	0.5	75.7	1.85	40.900			
600.0	597.1	594.2	591.6	1.4	1.3	-144.58	-64.3	-13.9	96.0	2.39	40.239 SF			
700.0	694.3	691.1	687.1	1.8	1.6	-142.99	-72.0	-28.3	120.7	2.97	40.694			
800.0	790.2	786.8	781.5	2.4	1.9	-142.97	-79.7	-42.7	149.5	3.58	41.734			
861.3	848.1	844.8	838.6	2.7	2.1	-143.38	-84.3	-51.3	169.2	3.97	42.627			
900.0	884.6	881.3	874.6	3.0	2.3	-143.90	-87.2	-56.8	182.1	4.22	43.171			
1,000.0	978.6	975.5	967.4	3.6	2.6	-144.98	-94.7	-70.9	215.4	4.86	44.313			
1,100.0	1,072.7	1,069.7	1,060.3	4.2	2.9	-145.76	-102.3	-84.9	248.8	5.51	45.185			
1,200.0	1,166.8	1,163.9	1,153.1	4.8	3.2	-146.36	-109.8	-99.0	282.2	6.15	45.873			
1,300.0	1,260.8	1,258.1	1,246.0	5.4	3.5	-146.83	-117.3	-113.1	315.7	6.80	46.430			
1,400.0	1,354.9	1,352.4	1,338.8	6.1	3.9	-147.21	-124.8	-127.2	349.2	7.45	46.889			
1,500.0	1,449.0	1,446.6	1,431.7	6.7	4.2	-147.53	-132.4	-141.3	382.6	8.09	47.275			
1,600.0	1,543.0	1,540.8	1,524.5	7.3	4.5	-147.79	-139.9	-155.3	416.1	8.74	47.604			
1,700.0	1,637.1	1,635.0	1,617.4	8.0	4.8	-148.02	-147.4	-169.4	449.6	9.39	47.887			
1,800.0	1,731.2	1,729.2	1,710.2	8.6	5.2	-148.21	-154.9	-183.5	483.1	10.04	48.133			

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well HMU Fee 23-16B1
<b>Project:</b>	Mamm Creek	<b>TVD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Reference Site:</b>	(D25W)	<b>MD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HMU Fee 23-16B1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design (D25W) - HMU Federal 26-8B1 - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	162.75	-56.9	17.7	59.6					
100.0	100.0	100.0	100.0	0.1	0.1	162.75	-56.9	17.7	59.6	59.3	0.27	218.849		
200.0	200.0	200.0	200.0	0.3	0.3	162.75	-56.9	17.7	59.6	59.0	0.62	95.900 CC, ES		
300.0	300.0	298.6	298.6	0.5	0.5	-152.85	-58.6	15.8	63.0	62.0	0.98	64.571		
400.0	399.6	396.4	396.1	0.7	0.7	-150.09	-63.6	10.1	73.4	72.0	1.37	53.757		
500.0	498.8	492.7	491.6	1.0	1.0	-146.87	-71.8	0.9	90.8	89.0	1.81	50.061		
600.0	597.1	586.9	584.2	1.4	1.3	-143.92	-82.9	-11.5	115.3	112.9	2.34	49.264 SF		
700.0	694.3	678.2	673.2	1.8	1.7	-141.45	-96.5	-26.8	146.5	143.5	2.95	49.660		
800.0	790.2	770.0	761.9	2.4	2.1	-139.68	-112.2	-44.5	183.5	179.9	3.62	50.639		
861.3	848.1	826.1	816.1	2.7	2.4	-139.20	-121.9	-55.4	208.1	204.1	4.06	51.294		
900.0	884.6	861.4	850.2	3.0	2.6	-139.33	-128.0	-62.2	224.1	219.8	4.34	51.614		
1,000.0	978.6	952.5	938.2	3.6	3.0	-139.60	-143.7	-79.9	265.3	260.3	5.08	52.204		
1,100.0	1,072.7	1,043.6	1,026.1	4.2	3.5	-139.80	-159.4	-97.5	306.6	300.7	5.83	52.576		
1,200.0	1,166.8	1,134.7	1,114.1	4.8	3.9	-139.95	-175.1	-115.2	347.8	341.2	6.58	52.825		
1,300.0	1,260.8	1,225.8	1,202.1	5.4	4.3	-140.07	-190.8	-132.8	389.1	381.7	7.34	52.998		
1,400.0	1,354.9	1,316.9	1,290.1	6.1	4.8	-140.16	-206.5	-150.4	430.3	422.2	8.10	53.124		
1,500.0	1,449.0	1,408.0	1,378.1	6.7	5.2	-140.24	-222.2	-168.1	471.6	462.7	8.86	53.217		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well HMU Fee 23-16B1
<b>Project:</b>	Mamm Creek	<b>TVD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Reference Site:</b>	(D25W)	<b>MD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HMU Fee 23-16B1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design (D25W) - HMU Fee 23-16B2 - DD - Plan #1													Offset Site Error: 0.0 ft	
Survey Program: 0-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	156.56	-15.4	6.7	16.8					
100.0	100.0	100.0	100.0	0.1	0.1	156.56	-15.4	6.7	16.8	16.5	0.27	61.741		
200.0	200.0	200.0	200.0	0.3	0.3	156.56	-15.4	6.7	16.8	16.2	0.62	27.055	CC, ES	
300.0	300.0	300.0	300.0	0.5	0.5	-162.77	-15.4	6.7	19.3	18.3	0.97	19.882		
400.0	399.6	399.6	399.6	0.7	0.7	-167.68	-15.4	6.7	26.9	25.6	1.32	20.403		
500.0	498.8	498.8	498.8	1.0	0.8	-171.64	-15.4	6.7	39.7	38.1	1.66	23.934		
600.0	597.1	600.0	599.9	1.4	1.0	-173.71	-13.7	4.7	55.3	53.3	2.00	27.638		
700.0	694.3	702.0	701.6	1.8	1.2	-174.40	-8.5	-1.4	71.0	68.6	2.35	30.269		
800.0	790.2	805.0	803.7	2.4	1.5	-174.44	0.4	-11.8	86.6	83.9	2.69	32.180		
861.3	848.1	868.4	866.2	2.7	1.7	-174.27	7.6	-20.2	96.1	93.2	2.91	33.060		
900.0	884.6	908.8	905.7	3.0	1.8	-174.11	12.9	-26.4	101.7	98.7	3.05	33.314		
1,000.0	978.6	1,014.0	1,007.8	3.6	2.3	-173.33	29.3	-45.5	112.5	109.1	3.45	32.602		
1,100.0	1,072.7	1,120.1	1,109.2	4.2	2.8	-172.04	49.5	-69.1	118.0	114.1	3.88	30.392		
1,200.0	1,166.8	1,220.4	1,204.2	4.8	3.4	-170.55	70.5	-93.6	120.5	116.1	4.34	27.754		
1,300.0	1,260.8	1,320.3	1,298.8	5.4	3.9	-169.13	91.5	-118.0	123.0	118.2	4.83	25.464		
1,400.0	1,354.9	1,420.2	1,393.4	6.1	4.5	-167.76	112.4	-142.4	125.7	120.3	5.36	23.451		
1,500.0	1,449.0	1,520.1	1,488.0	6.7	5.1	-166.46	133.4	-166.9	128.4	122.5	5.92	21.677		
1,600.0	1,543.0	1,620.1	1,582.6	7.3	5.7	-165.21	154.3	-191.3	131.2	124.7	6.52	20.111		
1,700.0	1,637.1	1,720.0	1,677.2	8.0	6.3	-164.01	175.3	-215.7	134.0	126.9	7.16	18.726		
1,800.0	1,731.2	1,819.9	1,771.8	8.6	6.9	-162.86	196.2	-240.2	136.9	129.1	7.83	17.500		
1,900.0	1,825.2	1,919.8	1,866.4	9.2	7.4	-161.76	217.2	-264.6	139.9	131.4	8.52	16.413		
2,000.0	1,919.3	2,019.7	1,961.0	9.8	8.0	-160.70	238.1	-289.0	142.9	133.6	9.25	15.447		
2,100.0	2,013.4	2,119.7	2,055.6	10.5	8.6	-159.69	259.0	-313.5	145.9	135.9	10.01	14.586		
2,200.0	2,107.4	2,219.6	2,150.2	11.1	9.2	-158.72	280.0	-337.9	149.0	138.3	10.79	13.818		
2,300.0	2,201.5	2,319.5	2,244.8	11.7	9.8	-157.80	300.9	-362.3	152.2	140.6	11.59	13.131		
2,400.0	2,295.6	2,419.4	2,339.4	12.4	10.4	-156.90	321.9	-386.8	155.3	142.9	12.41	12.514		
2,500.0	2,389.6	2,519.3	2,434.0	13.0	11.0	-156.05	342.8	-411.2	158.6	145.3	13.26	11.958		
2,600.0	2,483.7	2,619.3	2,528.6	13.6	11.6	-155.23	363.8	-435.6	161.8	147.7	14.12	11.457		
2,700.0	2,577.8	2,719.2	2,623.2	14.3	12.2	-154.44	384.7	-460.1	165.1	150.1	15.00	11.003		
2,800.0	2,671.8	2,819.1	2,717.7	14.9	12.8	-153.68	405.7	-484.5	168.4	152.5	15.90	10.591		
2,900.0	2,765.9	2,919.0	2,812.3	15.5	13.4	-152.95	426.6	-508.9	171.7	154.9	16.81	10.215		
3,000.0	2,860.0	3,019.0	2,906.9	16.2	14.0	-152.25	447.5	-533.4	175.1	157.3	17.73	9.872		
3,100.0	2,954.0	3,118.9	3,001.5	16.8	14.6	-151.57	468.5	-557.8	178.4	159.8	18.67	9.559		
3,200.0	3,048.1	3,218.8	3,096.1	17.4	15.2	-150.92	489.4	-582.2	181.9	162.2	19.62	9.271		
3,300.0	3,142.1	3,318.7	3,190.7	18.1	15.8	-150.30	510.4	-606.7	185.3	164.7	20.57	9.006		
3,400.0	3,236.2	3,418.6	3,285.3	18.7	16.4	-149.69	531.3	-631.1	188.7	167.2	21.54	8.761		
3,500.0	3,330.3	3,518.6	3,379.9	19.3	17.0	-149.11	552.3	-655.5	192.2	169.7	22.52	8.536		
3,600.0	3,424.3	3,618.5	3,474.5	19.9	17.7	-148.55	573.2	-680.0	195.7	172.2	23.50	8.326		
3,700.0	3,518.4	3,718.4	3,569.1	20.6	18.3	-148.01	594.2	-704.4	199.2	174.7	24.50	8.132		
3,800.0	3,612.5	3,818.3	3,663.7	21.2	18.9	-147.49	615.1	-728.8	202.7	177.2	25.50	7.952		
3,900.0	3,706.5	3,918.2	3,758.3	21.8	19.5	-146.98	636.1	-753.3	206.3	179.8	26.50	7.783		
4,000.0	3,800.6	4,018.2	3,852.9	22.5	20.1	-146.50	657.0	-777.7	209.8	182.3	27.52	7.626		
4,100.0	3,894.7	4,118.1	3,947.5	23.1	20.7	-146.03	677.9	-802.1	213.4	184.9	28.53	7.479		
4,200.0	3,988.7	4,218.0	4,042.1	23.7	21.3	-145.57	698.9	-826.6	217.0	187.4	29.56	7.342		
4,300.0	4,082.8	4,317.9	4,136.7	24.4	21.9	-145.13	719.8	-851.0	220.6	190.0	30.59	7.212		
4,400.0	4,176.9	4,417.8	4,231.3	25.0	22.5	-144.70	740.8	-875.4	224.2	192.6	31.62	7.091		
4,500.0	4,270.9	4,517.8	4,325.9	25.6	23.1	-144.29	761.7	-899.8	227.8	195.2	32.66	6.977		
4,600.0	4,365.0	4,617.7	4,420.5	26.3	23.7	-143.89	782.7	-924.3	231.5	197.8	33.70	6.869		
4,700.0	4,459.1	4,717.6	4,515.1	26.9	24.3	-143.50	803.6	-948.7	235.1	200.4	34.74	6.767		
4,800.0	4,553.1	4,817.5	4,609.7	27.5	24.9	-143.13	824.6	-973.1	238.8	203.0	35.79	6.671		
4,900.0	4,647.2	4,917.5	4,704.3	28.2	25.5	-142.76	845.5	-997.6	242.4	205.6	36.84	6.580		
5,000.0	4,741.3	5,017.4	4,798.9	28.8	26.1	-142.41	866.4	-1,022.0	246.1	208.2	37.90	6.494		

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



# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well HMU Fee 23-16B1
<b>Project:</b>	Mamm Creek	<b>TVD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Reference Site:</b>	(D25W)	<b>MD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HMU Fee 23-16B1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design (D25W) - HMU Fee 23-16B2 - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: O-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance				Total	Separation	Warning	
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Uncertainty Axis	Factor		
5,100.0	4,835.3	5,117.3	4,893.5	29.4	26.7	-142.07	887.4	-1,046.4	249.8	210.8	38.96	6.412		
5,200.0	4,929.4	5,217.2	4,988.1	30.1	27.3	-141.73	908.3	-1,070.9	253.5	213.5	40.02	6.335		
5,300.0	5,023.5	5,317.1	5,082.7	30.7	27.9	-141.41	929.3	-1,095.3	257.2	216.1	41.08	6.261		
5,400.0	5,117.5	5,417.1	5,177.3	31.3	28.5	-141.10	950.2	-1,119.7	260.9	218.8	42.15	6.191		
5,500.0	5,211.6	5,517.0	5,271.9	32.0	29.1	-140.79	971.2	-1,144.2	264.6	221.4	43.21	6.124		
5,600.0	5,305.7	5,616.9	5,366.5	32.6	29.7	-140.49	992.1	-1,168.6	268.4	224.1	44.28	6.060		
5,700.0	5,399.7	5,716.8	5,461.1	33.2	30.3	-140.20	1,013.1	-1,193.0	272.1	226.7	45.35	5.999		
5,800.0	5,493.8	5,816.7	5,555.7	33.9	30.9	-139.92	1,034.0	-1,217.5	275.8	229.4	46.43	5.941		
5,900.0	5,587.9	5,916.7	5,650.3	34.5	31.5	-139.65	1,055.0	-1,241.9	279.6	232.1	47.50	5.885		
6,000.0	5,681.9	6,016.6	5,744.9	35.1	32.1	-139.38	1,075.9	-1,266.3	283.3	234.7	48.58	5.832		
6,100.0	5,776.0	6,116.5	5,839.4	35.8	32.7	-139.12	1,096.8	-1,290.8	287.1	237.4	49.66	5.781		
6,156.2	5,828.8	6,171.7	5,891.7	36.1	33.1	-138.99	1,108.4	-1,304.2	289.2	239.0	50.25	5.756		
6,200.0	5,870.2	6,212.6	5,930.6	36.4	33.3	-138.94	1,116.7	-1,313.9	291.0	240.3	50.66	5.744		
6,300.0	5,965.3	6,306.0	6,020.0	36.9	33.8	-138.84	1,134.2	-1,334.3	294.7	243.2	51.52	5.720		
6,400.0	6,061.4	6,400.0	6,110.9	37.4	34.2	-138.75	1,149.9	-1,352.6	298.0	245.7	52.29	5.699		
6,500.0	6,158.5	6,492.7	6,201.2	37.8	34.6	-138.67	1,163.5	-1,368.5	300.9	248.0	52.97	5.682		
6,600.0	6,256.3	6,586.0	6,292.7	38.2	34.9	-138.61	1,175.2	-1,382.2	303.4	249.9	53.56	5.666		
6,700.0	6,354.8	6,679.3	6,384.8	38.5	35.2	-138.56	1,185.0	-1,393.6	305.5	251.5	54.06	5.652		
6,800.0	6,453.8	6,772.5	6,477.2	38.8	35.4	-138.52	1,192.9	-1,402.8	307.2	252.7	54.47	5.639		
6,900.0	6,553.3	6,865.8	6,570.0	39.0	35.6	-138.49	1,198.7	-1,409.6	308.4	253.6	54.80	5.628		
7,000.0	6,653.0	6,959.0	6,663.1	39.1	35.7	-138.47	1,202.6	-1,414.2	309.3	254.2	55.05	5.618		
7,100.0	6,753.0	7,052.2	6,756.2	39.2	35.8	-138.46	1,204.6	-1,416.4	309.7	254.5	55.21	5.610		
7,148.0	6,801.0	7,097.0	6,801.0	39.2	35.8	178.26	1,204.8	-1,416.7	309.7	254.5	55.26	5.605		
7,200.0	6,853.0	7,149.0	6,853.0	39.2	35.8	178.26	1,204.8	-1,416.7	309.7	254.4	55.34	5.597		
7,300.0	6,953.0	7,249.0	6,953.0	39.3	35.9	178.26	1,204.8	-1,416.7	309.7	254.2	55.50	5.581		
7,400.0	7,053.0	7,349.0	7,053.0	39.4	36.0	178.26	1,204.8	-1,416.7	309.7	254.1	55.66	5.565		
7,500.0	7,153.0	7,449.0	7,153.0	39.4	36.0	178.26	1,204.8	-1,416.7	309.7	253.9	55.82	5.548		
7,600.0	7,253.0	7,549.0	7,253.0	39.5	36.1	178.26	1,204.8	-1,416.7	309.7	253.8	55.99	5.532		
7,700.0	7,353.0	7,649.0	7,353.0	39.5	36.1	178.26	1,204.8	-1,416.7	309.7	253.6	56.15	5.516		
7,800.0	7,453.0	7,749.0	7,453.0	39.6	36.2	178.26	1,204.8	-1,416.7	309.7	253.4	56.32	5.500		
7,900.0	7,553.0	7,849.0	7,553.0	39.7	36.3	178.26	1,204.8	-1,416.7	309.7	253.3	56.49	5.483		
8,000.0	7,653.0	7,949.0	7,653.0	39.7	36.3	178.26	1,204.8	-1,416.7	309.7	253.1	56.66	5.467		
8,100.0	7,753.0	8,049.0	7,753.0	39.8	36.4	178.26	1,204.8	-1,416.7	309.7	252.9	56.83	5.450		
8,200.0	7,853.0	8,149.0	7,853.0	39.8	36.5	178.26	1,204.8	-1,416.7	309.7	252.7	57.00	5.434		
8,300.0	7,953.0	8,249.0	7,953.0	39.9	36.5	178.26	1,204.8	-1,416.7	309.7	252.6	57.18	5.417		
8,400.0	8,053.0	8,349.0	8,053.0	40.0	36.6	178.26	1,204.8	-1,416.7	309.7	252.4	57.36	5.400		
8,500.0	8,153.0	8,449.0	8,153.0	40.0	36.7	178.26	1,204.8	-1,416.7	309.7	252.2	57.53	5.384		
8,600.0	8,253.0	8,549.0	8,253.0	40.1	36.8	178.26	1,204.8	-1,416.7	309.7	252.0	57.71	5.367		
8,700.0	8,353.0	8,649.0	8,353.0	40.2	36.8	178.26	1,204.8	-1,416.7	309.7	251.8	57.90	5.350		
8,800.0	8,453.0	8,749.0	8,453.0	40.2	36.9	178.26	1,204.8	-1,416.7	309.7	251.7	58.08	5.333		
8,900.0	8,553.0	8,849.0	8,553.0	40.3	37.0	178.26	1,204.8	-1,416.7	309.7	251.5	58.26	5.316		
9,000.0	8,653.0	8,949.0	8,653.0	40.4	37.0	178.26	1,204.8	-1,416.7	309.7	251.3	58.45	5.299		
9,100.0	8,753.0	9,049.0	8,753.0	40.4	37.1	178.26	1,204.8	-1,416.7	309.7	251.1	58.64	5.282		
9,200.0	8,853.0	9,149.0	8,853.0	40.5	37.2	178.26	1,204.8	-1,416.7	309.7	250.9	58.82	5.266		
9,300.0	8,953.0	9,249.0	8,953.0	40.6	37.3	178.26	1,204.8	-1,416.7	309.7	250.7	59.01	5.249		
9,317.0	8,970.0	9,266.0	8,970.0	40.6	37.3	178.26	1,204.8	-1,416.7	309.7	250.7	59.05	5.246		
9,400.0	9,053.0	9,349.0	9,053.0	40.6	37.3	178.26	1,204.8	-1,416.7	309.7	250.5	59.21	5.232		
9,500.0	9,153.0	9,449.0	9,153.0	40.7	37.4	178.26	1,204.8	-1,416.7	309.7	250.3	59.40	5.215		
9,600.0	9,253.0	9,549.0	9,253.0	40.8	37.5	178.26	1,204.8	-1,416.7	309.7	250.1	59.59	5.197		
9,617.0	9,270.0	9,566.0	9,270.0	40.8	37.5	178.26	1,204.8	-1,416.7	309.7	250.1	59.63	5.195 SF		

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

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well HMU Fee 23-16B1
<b>Project:</b>	Mamm Creek	<b>TVD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Reference Site:</b>	(D25W)	<b>MD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HMU Fee 23-16B1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design (D25W) - HMU Fee 23-16C1 - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	172.39	-26.6	3.5	26.8					
100.0	100.0	100.0	100.0	0.1	0.1	172.39	-26.6	3.5	26.8	26.5	0.27	98.390		
200.0	200.0	200.0	200.0	0.3	0.3	172.39	-26.6	3.5	26.8	26.2	0.62	43.115 CC, ES		
300.0	300.0	300.7	300.7	0.5	0.5	-142.78	-25.5	1.1	27.6	26.6	0.98	28.100		
400.0	399.6	401.4	401.0	0.7	0.7	-138.62	-22.3	-6.2	30.0	28.6	1.39	21.578		
500.0	498.8	501.9	500.6	1.0	1.0	-133.06	-17.1	-18.3	34.4	32.4	1.91	17.988		
600.0	597.1	602.2	599.2	1.4	1.4	-127.33	-9.8	-35.2	40.8	38.2	2.60	15.722		
700.0	694.3	701.8	696.5	1.8	1.8	-124.86	-1.5	-54.5	49.9	46.5	3.37	14.822 SF		
800.0	790.2	801.0	793.5	2.4	2.2	-127.07	6.9	-73.8	62.1	57.9	4.15	14.960		
861.3	848.1	861.5	852.6	2.7	2.4	-129.60	11.9	-85.6	71.2	66.6	4.61	15.452		
900.0	884.6	899.6	889.9	3.0	2.6	-131.35	15.1	-93.0	77.4	72.5	4.88	15.855		
1,000.0	978.6	998.2	986.2	3.6	3.0	-134.79	23.4	-112.2	93.7	88.1	5.58	16.783		
1,100.0	1,072.7	1,096.7	1,082.5	4.2	3.4	-137.20	31.7	-131.3	110.3	104.0	6.28	17.562		
1,200.0	1,166.8	1,195.2	1,178.8	4.8	3.8	-138.98	39.9	-150.5	127.0	120.0	6.97	18.218		
1,300.0	1,260.8	1,293.7	1,275.1	5.4	4.2	-140.35	48.2	-169.6	143.8	136.1	7.66	18.774		
1,400.0	1,354.9	1,392.3	1,371.4	6.1	4.6	-141.43	56.5	-188.8	160.6	152.3	8.34	19.250		
1,500.0	1,449.0	1,490.8	1,467.7	6.7	5.0	-142.31	64.8	-207.9	177.5	168.5	9.03	19.661		
1,600.0	1,543.0	1,589.3	1,564.0	7.3	5.4	-143.03	73.0	-227.1	194.4	184.7	9.71	20.019		
1,700.0	1,637.1	1,687.9	1,660.3	8.0	5.8	-143.64	81.3	-246.2	211.4	201.0	10.40	20.333		
1,800.0	1,731.2	1,786.4	1,756.6	8.6	6.2	-144.16	89.6	-265.4	228.4	217.3	11.08	20.612		
1,900.0	1,825.2	1,884.9	1,852.9	9.2	6.6	-144.60	97.8	-284.5	245.4	233.6	11.76	20.859		
2,000.0	1,919.3	1,983.5	1,949.2	9.8	7.0	-144.99	106.1	-303.7	262.4	249.9	12.45	21.081		
2,100.0	2,013.4	2,082.0	2,045.5	10.5	7.4	-145.33	114.4	-322.8	279.4	266.3	13.13	21.281		
2,200.0	2,107.4	2,180.5	2,141.8	11.1	7.8	-145.63	122.6	-342.0	296.4	282.6	13.81	21.462		
2,300.0	2,201.5	2,279.0	2,238.1	11.7	8.2	-145.90	130.9	-361.1	313.4	299.0	14.49	21.627		
2,400.0	2,295.6	2,377.6	2,334.4	12.4	8.7	-146.14	139.2	-380.3	330.5	315.3	15.18	21.777		
2,500.0	2,389.6	2,476.1	2,430.7	13.0	9.1	-146.36	147.4	-399.4	347.5	331.7	15.86	21.915		
2,600.0	2,483.7	2,574.6	2,526.9	13.6	9.5	-146.56	155.7	-418.6	364.6	348.0	16.54	22.042		
2,700.0	2,577.8	2,673.2	2,623.2	14.3	9.9	-146.73	164.0	-437.7	381.6	364.4	17.22	22.159		
2,800.0	2,671.8	2,771.7	2,719.5	14.9	10.3	-146.90	172.3	-456.9	398.7	380.8	17.90	22.267		
2,900.0	2,765.9	2,870.2	2,815.8	15.5	10.7	-147.05	180.5	-476.0	415.7	397.1	18.59	22.368		
3,000.0	2,860.0	2,968.7	2,912.1	16.2	11.1	-147.19	188.8	-495.2	432.8	413.5	19.27	22.462		
3,100.0	2,954.0	3,067.3	3,008.4	16.8	11.5	-147.32	197.1	-514.3	449.9	429.9	19.95	22.549		
3,200.0	3,048.1	3,165.8	3,104.7	17.4	11.9	-147.44	205.3	-533.5	466.9	446.3	20.63	22.631		
3,300.0	3,142.1	3,264.3	3,201.0	18.1	12.3	-147.55	213.6	-552.7	484.0	462.7	21.31	22.708		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well HMU Fee 23-16B1
<b>Project:</b>	Mamm Creek	<b>TVD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Reference Site:</b>	(D25W)	<b>MD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HMU Fee 23-16B1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design (D25W) - HMU Fee 23-16D - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	-162.83	-11.4	-3.5	11.9					
100.0	100.0	100.0	100.0	0.1	0.1	-162.83	-11.4	-3.5	11.9	11.6	0.27	43.733		
200.0	200.0	200.0	200.0	0.3	0.3	-162.83	-11.4	-3.5	11.9	11.3	0.62	19.164 CC, ES		
300.0	300.0	300.2	300.2	0.5	0.5	-118.58	-9.8	-5.6	12.4	11.4	0.98	12.542		
400.0	399.6	400.4	400.0	0.7	0.7	-116.06	-5.2	-12.0	13.7	12.3	1.42	9.685		
500.0	498.8	500.5	499.3	1.0	1.0	-112.82	2.5	-22.6	16.0	14.0	1.97	8.133		
600.0	597.1	600.6	597.7	1.4	1.4	-109.59	13.2	-37.4	19.3	16.6	2.68	7.186		
700.0	694.3	700.5	695.3	1.8	1.8	-111.85	25.7	-54.6	23.9	20.4	3.47	6.871 SF		
800.0	790.2	800.2	792.6	2.4	2.2	-122.17	38.2	-71.8	30.9	26.7	4.17	7.409		
861.3	848.1	860.9	852.0	2.7	2.4	-129.52	45.8	-82.3	37.2	32.7	4.49	8.271		
900.0	884.6	899.3	889.5	3.0	2.6	-133.68	50.6	-88.9	41.8	37.1	4.66	8.966		
1,000.0	978.6	998.3	986.2	3.6	3.0	-141.05	63.1	-106.0	54.4	49.3	5.09	10.697		
1,100.0	1,072.7	1,097.3	1,083.0	4.2	3.4	-145.60	75.5	-123.1	67.6	62.1	5.52	12.239		
1,200.0	1,166.8	1,196.3	1,179.7	4.8	3.8	-148.65	87.9	-140.1	81.1	75.1	5.97	13.578		
1,300.0	1,260.8	1,295.3	1,276.4	5.4	4.2	-150.84	100.3	-157.2	94.7	88.3	6.43	14.736		
1,400.0	1,354.9	1,394.4	1,373.2	6.1	4.6	-152.47	112.7	-174.3	108.4	101.5	6.89	15.740		
1,500.0	1,449.0	1,493.4	1,469.9	6.7	5.0	-153.73	125.1	-191.4	122.2	114.9	7.35	16.616		
1,600.0	1,543.0	1,592.4	1,566.6	7.3	5.4	-154.74	137.5	-208.5	136.1	128.2	7.83	17.386		
1,700.0	1,637.1	1,691.4	1,663.4	8.0	5.8	-155.56	149.9	-225.5	149.9	141.6	8.30	18.066		
1,800.0	1,731.2	1,790.4	1,760.1	8.6	6.2	-156.24	162.3	-242.6	163.8	155.0	8.77	18.672		
1,900.0	1,825.2	1,889.4	1,856.9	9.2	6.6	-156.82	174.7	-259.7	177.7	168.5	9.25	19.213		
2,000.0	1,919.3	1,988.4	1,953.6	9.8	7.1	-157.31	187.1	-276.8	191.7	181.9	9.73	19.701		
2,100.0	2,013.4	2,087.4	2,050.3	10.5	7.5	-157.74	199.5	-293.9	205.6	195.4	10.21	20.142		
2,200.0	2,107.4	2,186.5	2,147.1	11.1	7.9	-158.11	211.9	-310.9	219.6	208.9	10.69	20.543		
2,300.0	2,201.5	2,285.5	2,243.8	11.7	8.3	-158.44	224.4	-328.0	233.5	222.4	11.17	20.908		
2,400.0	2,295.6	2,384.5	2,340.5	12.4	8.7	-158.73	236.8	-345.1	247.5	235.9	11.65	21.243		
2,500.0	2,389.6	2,483.5	2,437.3	13.0	9.1	-158.98	249.2	-362.2	261.5	249.3	12.13	21.551		
2,600.0	2,483.7	2,582.5	2,534.0	13.6	9.5	-159.22	261.6	-379.3	275.5	262.8	12.62	21.835		
2,700.0	2,577.8	2,681.5	2,630.7	14.3	9.9	-159.43	274.0	-396.3	289.4	276.3	13.10	22.097		
2,800.0	2,671.8	2,780.5	2,727.5	14.9	10.3	-159.62	286.4	-413.4	303.4	289.9	13.58	22.341		
2,900.0	2,765.9	2,879.5	2,824.2	15.5	10.8	-159.79	298.8	-430.5	317.4	303.4	14.07	22.568		
3,000.0	2,860.0	2,978.5	2,920.9	16.2	11.2	-159.95	311.2	-447.6	331.4	316.9	14.55	22.779		
3,100.0	2,954.0	3,077.6	3,017.7	16.8	11.6	-160.10	323.6	-464.7	345.4	330.4	15.03	22.977		
3,200.0	3,048.1	3,176.6	3,114.4	17.4	12.0	-160.23	336.0	-481.7	359.4	343.9	15.52	23.162		
3,300.0	3,142.1	3,275.6	3,211.1	18.1	12.4	-160.36	348.4	-498.8	373.4	357.4	16.00	23.336		
3,400.0	3,236.2	3,374.6	3,307.9	18.7	12.8	-160.47	360.8	-515.9	387.4	370.9	16.49	23.499		
3,500.0	3,330.3	3,473.6	3,404.6	19.3	13.2	-160.58	373.2	-533.0	401.4	384.4	16.97	23.653		
3,600.0	3,424.3	3,572.6	3,501.3	19.9	13.6	-160.68	385.7	-550.1	415.4	398.0	17.46	23.798		
3,700.0	3,518.4	3,671.6	3,598.1	20.6	14.0	-160.78	398.1	-567.1	429.4	411.5	17.94	23.936		
3,800.0	3,612.5	3,770.6	3,694.8	21.2	14.5	-160.86	410.5	-584.2	443.4	425.0	18.43	24.066		
3,900.0	3,706.5	3,869.7	3,791.6	21.8	14.9	-160.95	422.9	-601.3	457.4	438.5	18.91	24.189		
4,000.0	3,800.6	3,968.7	3,888.3	22.5	15.3	-161.03	435.3	-618.4	471.4	452.0	19.40	24.306		
4,100.0	3,894.7	4,067.7	3,985.0	23.1	15.7	-161.10	447.7	-635.5	485.4	465.6	19.88	24.418		
4,200.0	3,988.7	4,166.7	4,081.8	23.7	16.1	-161.17	460.1	-652.6	499.5	479.1	20.37	24.524		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well HMU Fee 23-16B1
<b>Project:</b>	Mamm Creek	<b>TVD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Reference Site:</b>	(D25W)	<b>MD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HMU Fee 23-16B1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design (D25W) - HMU Fee 25-6B - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program:		0-MWD											Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	68.21	86.8	217.0	233.7					
100.0	100.0	100.0	100.0	0.1	0.1	68.21	86.8	217.0	233.7	233.4	0.27	858.297		
200.0	200.0	200.0	200.0	0.3	0.3	68.21	86.8	217.0	233.7	233.1	0.62	376.108	CC, ES	
300.0	300.0	294.5	294.5	0.5	0.5	112.49	85.2	218.7	235.8	234.8	0.97	242.028		
400.0	399.6	387.6	387.3	0.7	0.7	115.34	80.7	223.9	242.6	241.3	1.38	176.014		
500.0	498.8	478.0	477.0	1.0	0.9	119.53	73.4	232.1	255.5	253.6	1.85	138.014		
600.0	597.1	564.3	562.1	1.4	1.2	124.39	63.8	242.9	275.8	273.4	2.38	115.995		
700.0	694.3	645.7	641.6	1.8	1.6	129.28	52.5	255.8	305.0	302.1	2.93	104.046		
800.0	790.2	723.8	717.3	2.4	1.9	133.87	39.5	270.4	343.5	340.0	3.48	98.698		
861.3	848.1	774.6	766.3	2.7	2.2	136.66	30.8	280.3	370.9	367.1	3.81	97.460	SF	
900.0	884.6	806.4	797.0	3.0	2.3	138.65	25.3	286.5	389.2	385.2	3.98	97.662		
1,000.0	978.6	888.4	876.2	3.6	2.7	143.11	11.1	302.6	438.0	433.6	4.41	99.355		
1,100.0	1,072.7	970.4	955.3	4.2	3.1	146.75	-3.1	318.6	488.7	483.9	4.79	102.091		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well HMU Fee 23-16B1
<b>Project:</b>	Mamm Creek	<b>TVD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Reference Site:</b>	(D25W)	<b>MD Reference:</b>	WELL @ 7250.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	HMU Fee 23-16B1	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design (D25W) - MCU 26-8C (Existing) - Excel Drilling - Surveys													Offset Site Error: 0.0 ft	
Survey Program: 264-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)				
0.0	0.0	0.0	0.0	0.0	0.0	65.73	41.2	91.4	100.3					
100.0	100.0	99.7	99.7	0.1	0.2	65.63	41.5	91.5	100.5	100.2	0.30	338.439	ES	
200.0	200.0	199.4	199.4	0.3	0.3	65.33	42.1	91.7	100.9	100.3	0.63	159.669		
300.0	300.0	299.1	299.1	0.5	0.5	109.46	43.2	92.0	102.5	101.5	0.98	104.681		
400.0	399.6	398.9	398.8	0.7	0.7	112.58	44.9	92.2	106.1	104.8	1.37	77.447		
500.0	498.8	497.3	497.3	1.0	0.8	117.39	47.2	92.3	112.5	110.7	1.81	62.304		
600.0	597.1	595.2	595.1	1.4	1.0	123.06	50.7	93.3	123.6	121.3	2.28	54.142		
700.0	694.3	691.7	691.5	1.8	1.2	129.45	53.7	94.6	139.4	136.6	2.77	50.304		
800.0	790.2	786.6	786.3	2.4	1.4	135.82	56.0	96.7	161.3	158.0	3.25	49.673	SF	
861.3	848.1	844.4	844.1	2.7	1.5	139.49	57.1	98.1	177.7	174.2	3.52	50.535		
900.0	884.6	880.6	880.3	3.0	1.5	141.89	57.4	99.0	189.0	185.3	3.67	51.435		
1,000.0	978.6	977.5	977.2	3.6	1.7	147.61	56.7	100.2	218.6	214.6	4.03	54.193		
1,100.0	1,072.7	1,073.2	1,072.9	4.2	1.9	152.27	54.8	99.8	248.6	244.2	4.36	57.082		
1,200.0	1,166.8	1,167.5	1,167.2	4.8	2.0	156.05	52.5	98.6	279.3	274.7	4.65	60.057		
1,300.0	1,260.8	1,259.3	1,258.8	5.4	2.2	159.45	48.0	96.6	311.1	306.2	4.92	63.292		
1,400.0	1,354.9	1,348.6	1,347.8	6.1	2.3	162.63	41.0	94.1	344.8	339.6	5.16	66.836		
1,500.0	1,449.0	1,438.9	1,437.5	6.7	2.5	165.72	31.3	90.7	379.9	374.5	5.39	70.471		
1,600.0	1,543.0	1,528.6	1,526.2	7.3	2.7	168.72	19.0	86.0	416.4	410.8	5.63	73.903		
1,700.0	1,637.1	1,620.3	1,616.2	8.0	2.9	171.83	3.2	79.0	454.3	448.4	5.91	76.918		
1,800.0	1,731.2	1,732.6	1,725.8	8.6	3.3	175.59	-17.4	65.0	490.4	484.2	6.28	78.140		

# Cathedral Energy Services

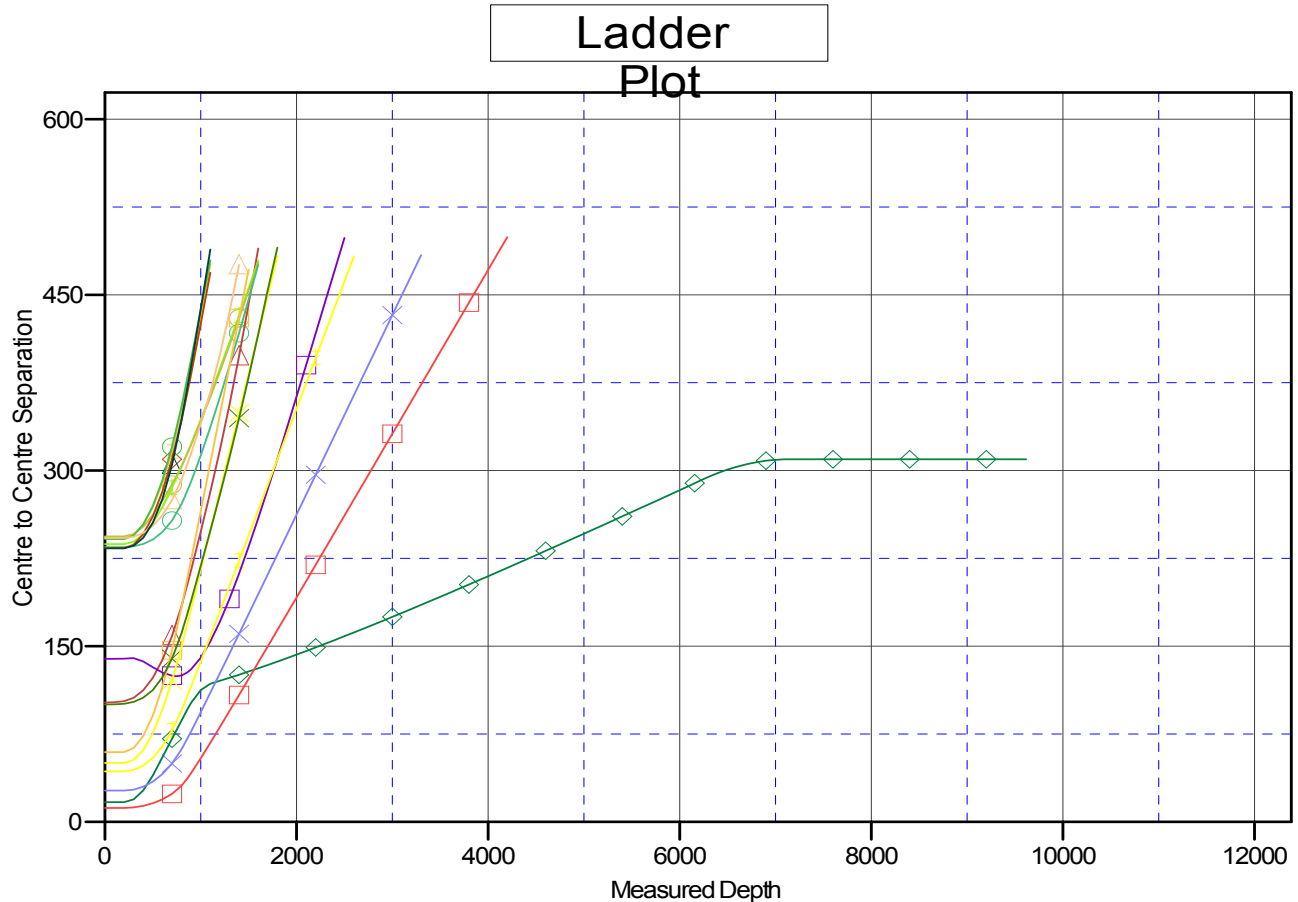
## Anticollision Report

**Company:** EnCana Oil & Gas (USA) Inc  
**Project:** Mamm Creek  
**Reference Site:** (D25W)  
**Site Error:** 0.0ft  
**Reference Well:** HMU Fee 23-16B1  
**Well Error:** 0.0ft  
**Reference Wellbore:** DD  
**Reference Design:** Plan #1

**Local Co-ordinate Reference:** Well HMU Fee 23-16B1  
**TVD Reference:** WELL @ 7250.0ft (Original Well Elev)  
**MD Reference:** WELL @ 7250.0ft (Original Well Elev)  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature  
**Output errors are at** 2.00 sigma  
**Database:** EDM 5000.1 US Multi Users DB  
**Offset TVD Reference:** Offset Datum

Reference Depths are relative to WELL @ 7250.0ft (Original Well Elev)  
 Offset Depths are relative to Offset Datum  
 Central Meridian is -105.500000 °

Coordinates are relative to: HMU Fee 23-16B1  
 Coordinate System is US State Plane 1983, Colorado Central Zone  
 Grid Convergence at Surface is: -1.41°



### LEGEND

MU 25-3D (Existing), Excel Drilling, Surveys V0	HMU Federal 24-14A2, DD, Plan #1 V0	HMU Fee 23-16B2, DD, Plan #1 V0
MU 26-1C (Existing), Baker Hughes (Inteq), Surveys V0	HMU Federal 24-14A3, DD, Plan #1 V0	HMU Fee 23-16C1, DD, Plan #1 V0
MU Federal 24-13A1, DD, Plan #1 V0	HMU Federal 25-3C, DD, Plan #1 V0	HMU Fee 23-16D, DD, Plan #1 V0
MU Federal 24-13D1, DD, Plan #1 V0	HMU Federal 26-1B, DD, Plan #1 V0	HMU Fee 25-6B, DD, Plan #1 V0
MU Federal 24-13D2, DD, Plan #1 V0	HMU Federal 26-1D, DD, Plan #1 V0	MCU 26-8C (Existing), Excel Drilling, Surveys V0
MU Federal 24-14A1, DD, Plan #1 V0	HMU Federal 26-8B1, DD, Plan #1 V0	