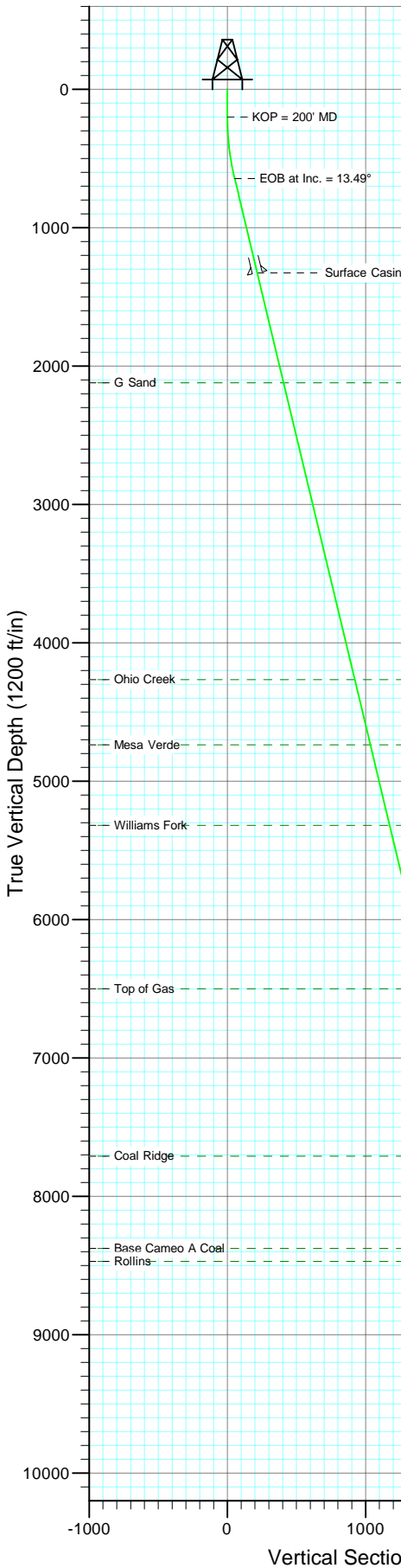
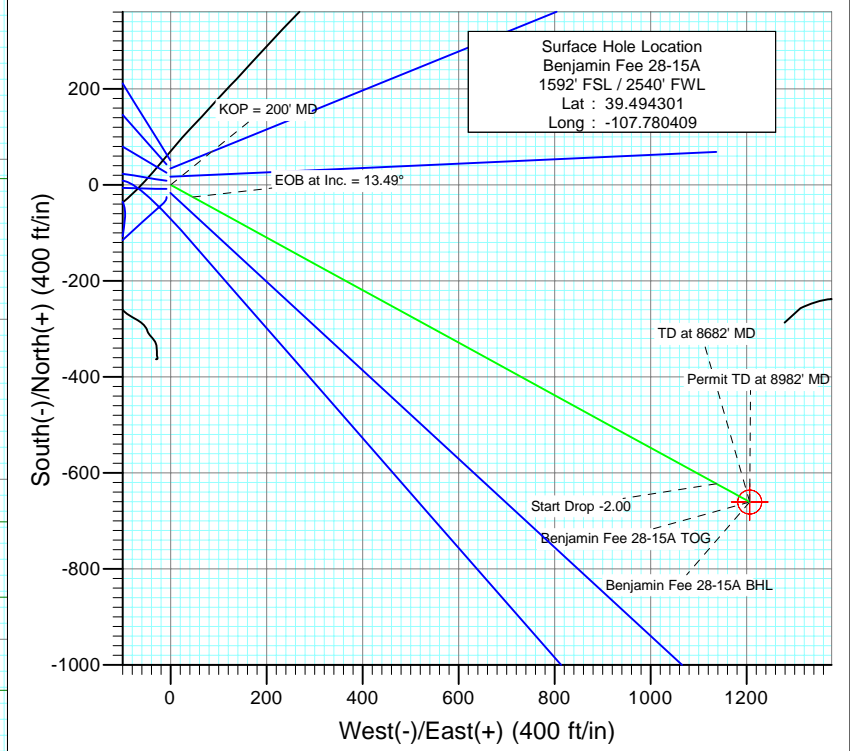




Project: Mamm Creek
 Site: K28NW Pad
 Well: Benjamin Fee 28-15A
 Wellbore: DD
 Design: Plan #2



SECTION DETAILS											
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	V Sect	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	649.6	13.49	118.70	645.5	-25.3	46.2	3.00	118.70	52.7		
4	5983.0	13.49	118.70	5831.8	-622.7	1137.4	0.00	0.00	0.00	1296.7	
5	6657.5	0.00	0.00	6500.0	-660.7	1206.7	2.00	180.00	1375.7	Benjamin Fee 28-15A TOG	
6	8682.5	0.00	0.00	8525.0	-660.7	1206.7	0.00	0.00	1375.7	Benjamin Fee 28-15A BHL	
7	8982.5	0.00	0.00	8825.0	-660.7	1206.7	0.00	0.00	1375.7		



FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
2121.0	2167.0	G Sand
4265.0	4371.8	Ohio Creek
4737.0	4857.2	Mesa Verde
5319.0	5455.7	Williams Fork
6500.0	6657.5	Top of Gas
7709.0	7866.5	Coal Ridge
8375.0	8532.5	Base Cameo A Coal
8470.0	8627.5	Rollins

Azimuths to True North
Magnetic North: 10.30°

Magnetic Field
Strength: 52364.6snT
Dip Angle: 65.81°
Date: 11/24/2010
Model: IGRF200510

Plan #2 Benjamin Fee 28-15A (920 FSL - 1470 FEL) Job #10xxx: KR					
WELL @ 5965.0ft (Original Well Elev) North American Datum 1983 Well Benjamin Fee 28-15A, True North					
Target	Azimuth	Origin Type	N/S	E/W	
Benjamin Fee 28-15A BHL	118.70	Slot	0.0	0.0	
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
Benjamin Fee 28-15A BHL	8525.0	-660.7	1206.7	39.492487	-107.776133

Cathedral Energy Services

Planning Report

Database: EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference: Well Benjamin Fee 28-15A
Company: EnCana Oil & Gas (USA) Inc	TVD Reference: WELL @ 5965.0ft (Original Well Elev)
Project: Mamm Creek	MD Reference: WELL @ 5965.0ft (Original Well Elev)
Site: K28NW Pad	North Reference: True
Well: Benjamin Fee 28-15A	Survey Calculation Method: Minimum Curvature
Wellbore: DD	
Design: Plan #2	

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

Site K28NW Pad					
Site Position:		Northing:	1,613,160.16 ft	Latitude:	39.494711
From:	Lat/Long	Easting:	2,356,412.22 ft	Longitude:	-107.780819
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	-1.44 °

Well Benjamin Fee 28-15A						
Well Position	+N/-S	0.0 ft	Northing:	1,613,007.91 ft	Latitude:	39.494301
	+E/-W	0.0 ft	Easting:	2,356,524.27 ft	Longitude:	-107.780409
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,943.0 ft

Wellbore DD					
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
	IGRF200510	11/24/2010	(°)	(°)	(nT)
			10.30	65.81	52,365

Design Plan #2					
Audit Notes:					
Version:	Phase:	PLAN	Tie On Depth:	0.0	
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(ft)	(ft)	(ft)	(°)	
	0.0	0.0	0.0	118.70	

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	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
649.6	13.49	118.70	645.5	-25.3	46.2	3.00	3.00	0.00	118.70	
5,983.0	13.49	118.70	5,831.8	-622.7	1,137.4	0.00	0.00	0.00	0.00	
6,657.5	0.00	0.00	6,500.0	-660.7	1,206.7	2.00	-2.00	0.00	180.00	Benjamin Fee 28-15A
8,682.5	0.00	0.00	8,525.0	-660.7	1,206.7	0.00	0.00	0.00	0.00	Benjamin Fee 28-15A
8,982.5	0.00	0.00	8,825.0	-660.7	1,206.7	0.00	0.00	0.00	0.00	

Cathedral Energy Services

Planning Report

Database: EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference: Well Benjamin Fee 28-15A
Company: EnCana Oil & Gas (USA) Inc	TVD Reference: WELL @ 5965.0ft (Original Well Elev)
Project: Mamm Creek	MD Reference: WELL @ 5965.0ft (Original Well Elev)
Site: K28NW Pad	North Reference: True
Well: Benjamin Fee 28-15A	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	
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	118.70	300.0	-1.3	2.3	2.6	3.00	3.00	
400.0	6.00	118.70	399.6	-5.0	9.2	10.5	3.00	3.00	
500.0	9.00	118.70	498.8	-11.3	20.6	23.5	3.00	3.00	
600.0	12.00	118.70	597.1	-20.0	36.6	41.7	3.00	3.00	
649.6	13.49	118.70	645.5	-25.3	46.2	52.7	3.00	3.00	EOB at Inc. = 13.49°
700.0	13.49	118.70	694.5	-30.9	56.5	64.4	0.00	0.00	
800.0	13.49	118.70	791.7	-42.1	77.0	87.8	0.00	0.00	
900.0	13.49	118.70	889.0	-53.3	97.4	111.1	0.00	0.00	
1,000.0	13.49	118.70	986.2	-64.5	117.9	134.4	0.00	0.00	
1,100.0	13.49	118.70	1,083.4	-75.8	138.3	157.7	0.00	0.00	
1,200.0	13.49	118.70	1,180.7	-87.0	158.8	181.1	0.00	0.00	
1,300.0	13.49	118.70	1,277.9	-98.2	179.3	204.4	0.00	0.00	
1,350.0	13.49	118.70	1,326.5	-103.8	189.5	216.0	0.00	0.00	Surface Casing
1,400.0	13.49	118.70	1,375.2	-109.4	199.7	227.7	0.00	0.00	
1,500.0	13.49	118.70	1,472.4	-120.6	220.2	251.0	0.00	0.00	
1,600.0	13.49	118.70	1,569.6	-131.8	240.6	274.4	0.00	0.00	
1,700.0	13.49	118.70	1,666.9	-143.0	261.1	297.7	0.00	0.00	
1,800.0	13.49	118.70	1,764.1	-154.2	281.6	321.0	0.00	0.00	
1,900.0	13.49	118.70	1,861.4	-165.4	302.0	344.3	0.00	0.00	
2,000.0	13.49	118.70	1,958.6	-176.6	322.5	367.7	0.00	0.00	
2,100.0	13.49	118.70	2,055.9	-187.8	342.9	391.0	0.00	0.00	
2,167.0	13.49	118.70	2,121.0	-195.3	356.6	406.6	0.00	0.00	G Sand
2,200.0	13.49	118.70	2,153.1	-199.0	363.4	414.3	0.00	0.00	
2,300.0	13.49	118.70	2,250.3	-210.2	383.9	437.6	0.00	0.00	
2,400.0	13.49	118.70	2,347.6	-221.4	404.3	460.9	0.00	0.00	
2,500.0	13.49	118.70	2,444.8	-232.6	424.8	484.3	0.00	0.00	
2,600.0	13.49	118.70	2,542.1	-243.8	445.2	507.6	0.00	0.00	
2,700.0	13.49	118.70	2,639.3	-255.0	465.7	530.9	0.00	0.00	
2,800.0	13.49	118.70	2,736.5	-266.2	486.1	554.2	0.00	0.00	
2,900.0	13.49	118.70	2,833.8	-277.4	506.6	577.6	0.00	0.00	
3,000.0	13.49	118.70	2,931.0	-288.6	527.1	600.9	0.00	0.00	
3,100.0	13.49	118.70	3,028.3	-299.8	547.5	624.2	0.00	0.00	
3,200.0	13.49	118.70	3,125.5	-311.0	568.0	647.5	0.00	0.00	
3,300.0	13.49	118.70	3,222.8	-322.2	588.4	670.9	0.00	0.00	
3,400.0	13.49	118.70	3,320.0	-333.4	608.9	694.2	0.00	0.00	
3,500.0	13.49	118.70	3,417.2	-344.6	629.4	717.5	0.00	0.00	
3,600.0	13.49	118.70	3,514.5	-355.8	649.8	740.8	0.00	0.00	
3,700.0	13.49	118.70	3,611.7	-367.0	670.3	764.2	0.00	0.00	
3,800.0	13.49	118.70	3,709.0	-378.2	690.7	787.5	0.00	0.00	
3,900.0	13.49	118.70	3,806.2	-389.4	711.2	810.8	0.00	0.00	
4,000.0	13.49	118.70	3,903.4	-400.6	731.6	834.1	0.00	0.00	
4,100.0	13.49	118.70	4,000.7	-411.8	752.1	857.5	0.00	0.00	
4,200.0	13.49	118.70	4,097.9	-423.0	772.6	880.8	0.00	0.00	
4,300.0	13.49	118.70	4,195.2	-434.2	793.0	904.1	0.00	0.00	
4,371.8	13.49	118.70	4,265.0	-442.3	807.7	920.9	0.00	0.00	Ohio Creek
4,400.0	13.49	118.70	4,292.4	-445.4	813.5	927.4	0.00	0.00	
4,500.0	13.49	118.70	4,389.7	-456.6	833.9	950.8	0.00	0.00	
4,600.0	13.49	118.70	4,486.9	-467.8	854.4	974.1	0.00	0.00	
4,700.0	13.49	118.70	4,584.1	-479.0	874.9	997.4	0.00	0.00	

Cathedral Energy Services

Planning Report

Database: EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference: Well Benjamin Fee 28-15A
Company: EnCana Oil & Gas (USA) Inc	TVD Reference: WELL @ 5965.0ft (Original Well Elev)
Project: Mamm Creek	MD Reference: WELL @ 5965.0ft (Original Well Elev)
Site: K28NW Pad	North Reference: True
Well: Benjamin Fee 28-15A	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
4,800.0	13.49	118.70	4,681.4	-490.2	895.3	1,020.7	0.00	0.00	
4,857.2	13.49	118.70	4,737.0	-496.6	907.0	1,034.1	0.00	0.00	Mesa Verde
4,900.0	13.49	118.70	4,778.6	-501.4	915.8	1,044.1	0.00	0.00	
5,000.0	13.49	118.70	4,875.9	-512.6	936.2	1,067.4	0.00	0.00	
5,100.0	13.49	118.70	4,973.1	-523.8	956.7	1,090.7	0.00	0.00	
5,200.0	13.49	118.70	5,070.3	-535.0	977.1	1,114.0	0.00	0.00	
5,300.0	13.49	118.70	5,167.6	-546.2	997.6	1,137.4	0.00	0.00	
5,400.0	13.49	118.70	5,264.8	-557.4	1,018.1	1,160.7	0.00	0.00	
5,455.7	13.49	118.70	5,319.0	-563.7	1,029.5	1,173.7	0.00	0.00	Williams Fork
5,500.0	13.49	118.70	5,362.1	-568.6	1,038.5	1,184.0	0.00	0.00	
5,600.0	13.49	118.70	5,459.3	-579.8	1,059.0	1,207.3	0.00	0.00	
5,700.0	13.49	118.70	5,556.6	-591.0	1,079.4	1,230.7	0.00	0.00	
5,800.0	13.49	118.70	5,653.8	-602.2	1,099.9	1,254.0	0.00	0.00	
5,900.0	13.49	118.70	5,751.0	-613.4	1,120.4	1,277.3	0.00	0.00	
5,983.0	13.49	118.70	5,831.8	-622.7	1,137.4	1,296.7	0.00	0.00	Start Drop -2.00
6,000.0	13.15	118.70	5,848.3	-624.6	1,140.8	1,300.6	2.00	-2.00	
6,100.0	11.15	118.70	5,946.1	-634.7	1,159.2	1,321.6	2.00	-2.00	
6,200.0	9.15	118.70	6,044.5	-643.2	1,174.7	1,339.2	2.00	-2.00	
6,300.0	7.15	118.70	6,143.5	-650.0	1,187.1	1,353.4	2.00	-2.00	
6,400.0	5.15	118.70	6,242.9	-655.1	1,196.5	1,364.1	2.00	-2.00	
6,500.0	3.15	118.70	6,342.6	-658.6	1,202.9	1,371.4	2.00	-2.00	
6,600.0	1.15	118.70	6,442.5	-660.4	1,206.2	1,375.1	2.00	-2.00	
6,657.5	0.00	0.00	6,500.0	-660.7	1,206.7	1,375.7	2.00	-2.00	EOD at Inc. = 0° - Top of Gas - Benjamin Fee 2
6,700.0	0.00	0.00	6,542.5	-660.7	1,206.7	1,375.7	0.00	0.00	
6,800.0	0.00	0.00	6,642.5	-660.7	1,206.7	1,375.7	0.00	0.00	
6,900.0	0.00	0.00	6,742.5	-660.7	1,206.7	1,375.7	0.00	0.00	
7,000.0	0.00	0.00	6,842.5	-660.7	1,206.7	1,375.7	0.00	0.00	
7,100.0	0.00	0.00	6,942.5	-660.7	1,206.7	1,375.7	0.00	0.00	
7,200.0	0.00	0.00	7,042.5	-660.7	1,206.7	1,375.7	0.00	0.00	
7,300.0	0.00	0.00	7,142.5	-660.7	1,206.7	1,375.7	0.00	0.00	
7,400.0	0.00	0.00	7,242.5	-660.7	1,206.7	1,375.7	0.00	0.00	
7,500.0	0.00	0.00	7,342.5	-660.7	1,206.7	1,375.7	0.00	0.00	
7,600.0	0.00	0.00	7,442.5	-660.7	1,206.7	1,375.7	0.00	0.00	
7,700.0	0.00	0.00	7,542.5	-660.7	1,206.7	1,375.7	0.00	0.00	
7,800.0	0.00	0.00	7,642.5	-660.7	1,206.7	1,375.7	0.00	0.00	
7,866.5	0.00	0.00	7,709.0	-660.7	1,206.7	1,375.7	0.00	0.00	Coal Ridge
7,900.0	0.00	0.00	7,742.5	-660.7	1,206.7	1,375.7	0.00	0.00	
8,000.0	0.00	0.00	7,842.5	-660.7	1,206.7	1,375.7	0.00	0.00	
8,100.0	0.00	0.00	7,942.5	-660.7	1,206.7	1,375.7	0.00	0.00	
8,200.0	0.00	0.00	8,042.5	-660.7	1,206.7	1,375.7	0.00	0.00	
8,300.0	0.00	0.00	8,142.5	-660.7	1,206.7	1,375.7	0.00	0.00	
8,400.0	0.00	0.00	8,242.5	-660.7	1,206.7	1,375.7	0.00	0.00	
8,500.0	0.00	0.00	8,342.5	-660.7	1,206.7	1,375.7	0.00	0.00	
8,532.5	0.00	0.00	8,375.0	-660.7	1,206.7	1,375.7	0.00	0.00	Base Cameo A Coal
8,600.0	0.00	0.00	8,442.5	-660.7	1,206.7	1,375.7	0.00	0.00	
8,627.5	0.00	0.00	8,470.0	-660.7	1,206.7	1,375.7	0.00	0.00	Rollins
8,682.5	0.00	0.00	8,525.0	-660.7	1,206.7	1,375.7	0.00	0.00	TD at 8682' MD - Benjamin Fee 28-15A BHL
8,700.0	0.00	0.00	8,542.5	-660.7	1,206.7	1,375.7	0.00	0.00	
8,800.0	0.00	0.00	8,642.5	-660.7	1,206.7	1,375.7	0.00	0.00	
8,900.0	0.00	0.00	8,742.5	-660.7	1,206.7	1,375.7	0.00	0.00	
8,982.5	0.00	0.00	8,825.0	-660.7	1,206.7	1,375.7	0.00	0.00	Permit TD at 8982' MD

Cathedral Energy Services

Planning Report

Database: EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference: Well Benjamin Fee 28-15A
Company: EnCana Oil & Gas (USA) Inc	TVD Reference: WELL @ 5965.0ft (Original Well Elev)
Project: Mamm Creek	MD Reference: WELL @ 5965.0ft (Original Well Elev)
Site: K28NW Pad	North Reference: True
Well: Benjamin Fee 28-15A	Survey Calculation Method: Minimum Curvature
Wellbore: DD	
Design: Plan #2	

Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
- Shape									
Benjamin Fee 28-15A BI - plan hits target center - Circle (radius 25.0)	0.00	0.00	8,525.0	-660.7	1,206.7	1,612,317.14	2,357,713.96	39.492487	-107.776133
Benjamin Fee 28-15A T - plan hits target center - Point	0.00	0.00	6,500.0	-660.7	1,206.7	1,612,317.14	2,357,713.96	39.492487	-107.776133

Casing Points					
Measured Depth	Vertical Depth	Name	Casing Diameter	Hole Diameter	
(ft)	(ft)		(in)	(in)	
1,350.0	1,326.5	Surface Casing	0.000	0.000	

Formations					
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction
(ft)	(ft)			(°)	(°)
2,167.0	2,121.0	G Sand			
4,371.8	4,265.0	Ohio Creek			
4,857.2	4,737.0	Mesa Verde			
5,455.7	5,319.0	Williams Fork			
6,657.5	6,500.0	Top of Gas			
7,866.5	7,709.0	Coal Ridge			
8,532.5	8,375.0	Base Cameo A Coal			
8,627.5	8,470.0	Rollins			

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S	+E/-W	
(ft)	(ft)	(ft)	(ft)	
200.0	200.0	0.0	0.0	KOP = 200' MD
649.6	645.5	-25.3	46.2	EOB at Inc. = 13.49°
5,983.0	5,831.8	-622.7	1,137.4	Start Drop -2.00
6,657.5	6,500.0	-660.7	1,206.7	EOD at Inc. = 0°
8,682.5	8,525.0	-660.7	1,206.7	TD at 8682' MD
8,982.5	8,825.0	-660.7	1,206.7	Permit TD at 8982' MD

EnCana Oil & Gas (USA) Inc

Mamm Creek

K28NW Pad

Benjamin Fee 28-15A

DD

Plan #2

Anticollision Report

23 November, 2010

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Benjamin Fee 28-15A
Project:	Mamm Creek	TVD Reference:	WELL @ 5965.0ft (Original Well Elev)
Reference Site:	K28NW Pad	MD Reference:	WELL @ 5965.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Benjamin Fee 28-15A	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:	Stations	Error Model:	Systematic Ellipse
Depth Range:	0.0 to 99,999.0ft	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 828.6ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program		Date	11/23/2010		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	8,982.5	Plan #2 (DD)	MWD	Geolink MWD	

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Benjamin Fee 28-15A
Project:	Mamm Creek	TVD Reference:	WELL @ 5965.0ft (Original Well Elev)
Reference Site:	K28NW Pad	MD Reference:	WELL @ 5965.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Benjamin Fee 28-15A	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	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
Offset Well - Wellbore - Design						
K28NW Pad						
Benjamin 28-11 Existing - Existing - Existing	0.0	0.0	131.9			
Benjamin 28-11 Existing - Existing - Existing	100.0	99.4	132.1	131.9	486.515	ES
Benjamin 28-11 Existing - Existing - Existing	3,800.0	3,738.9	821.4	806.5	55.101	SF
Benjamin Federal 28-12B2 - DD - Plan #2	200.0	200.0	12.0	11.4	19.273	CC, ES
Benjamin Federal 28-12B2 - DD - Plan #2	300.0	299.2	16.7	15.7	17.189	SF
Benjamin Federal 28-12C1 - DD - Plan #2	200.0	200.0	11.7	11.1	18.849	CC, ES
Benjamin Federal 28-12C1 - DD - Plan #2	300.0	300.0	12.7	11.7	12.969	SF
Benjamin Federal 28-12C2 - DD - Plan #2	200.0	200.0	126.7	126.1	203.918	CC, ES
Benjamin Federal 28-12C2 - DD - Plan #2	600.0	565.3	201.2	199.2	100.184	SF
Benjamin Federal 28-13B1 - DD - Plan #2	200.0	200.0	116.2	115.6	186.989	CC, ES
Benjamin Federal 28-13B1 - DD - Plan #2	600.0	568.9	188.7	186.7	92.088	SF
Benjamin Federal 28-13B2 - DD - Plan #2	200.0	200.0	120.9	120.3	194.637	CC, ES
Benjamin Federal 28-13B2 - DD - Plan #2	600.0	569.4	191.8	189.7	92.205	SF
Benjamin Federal 28-13C1 - DD - Plan #2	200.0	200.0	111.0	110.3	178.583	CC, ES
Benjamin Federal 28-13C1 - DD - Plan #2	700.0	658.2	216.9	214.4	84.346	SF
Benjamin Federal 28-13C2 - DD - Plan #2	200.0	200.0	117.2	116.6	188.696	CC, ES
Benjamin Federal 28-13C2 - DD - Plan #2	900.0	822.9	303.6	299.9	82.654	SF
Benjamin Federal 28-14B1 - DD - Plan #2	200.0	200.0	26.8	26.2	43.097	CC, ES
Benjamin Federal 28-14B1 - DD - Plan #2	400.0	396.2	38.0	36.6	27.755	SF
Benjamin Federal 28-14B2 - DD - Plan #2	200.0	200.0	117.2	116.6	188.611	CC, ES
Benjamin Federal 28-14B2 - DD - Plan #2	2,900.0	2,792.1	810.5	795.0	52.590	SF
Benjamin Federal 28-14C - DD - Plan #2	200.0	200.0	108.3	107.7	174.327	CC, ES
Benjamin Federal 28-14C - DD - Plan #2	2,900.0	2,784.0	825.3	807.7	46.945	SF
Benjamin Federal 28-16C - DD - Plan #2	200.0	200.0	16.8	16.1	26.966	CC, ES
Benjamin Federal 28-16C - DD - Plan #2	700.0	696.6	31.0	27.5	8.966	SF
Benjamin Federal 33-3B - DD - Plan #2	200.0	200.0	111.0	110.3	178.584	CC, ES
Benjamin Federal 33-3B - DD - Plan #2	2,600.0	2,451.7	813.5	795.6	45.492	SF
Benjamin Federal 33-4B - DD - Plan #2	200.0	200.0	116.0	115.4	186.674	CC, ES
Benjamin Federal 33-4B - DD - Plan #2	900.0	824.6	298.0	294.3	78.800	SF
Benjamin Fee 28-10D2 - DD - Plan #2	200.0	200.0	17.1	16.5	27.552	CC, ES
Benjamin Fee 28-10D2 - DD - Plan #2	8,982.5	8,931.3	732.5	681.4	14.349	SF
Benjamin Fee 28-11A - DD - Plan #2	200.0	200.0	26.8	26.2	43.097	CC, ES
Benjamin Fee 28-11A - DD - Plan #2	300.0	298.7	30.8	29.8	31.647	SF
Benjamin Fee 28-11B - DD - Plan #2	200.0	200.0	43.4	42.8	69.841	CC, ES
Benjamin Fee 28-11B - DD - Plan #2	400.0	394.2	60.3	58.9	45.185	SF
Benjamin Fee 28-6C - DD - Plan #2	200.0	200.0	51.0	50.4	82.071	CC, ES
Benjamin Fee 28-6C - DD - Plan #2	400.0	393.6	66.2	64.9	49.247	SF
Benjamin Fee 28-9B - DD - Plan #2	200.0	200.0	34.2	33.6	55.105	CC, ES
Benjamin Fee 28-9B - DD - Plan #2	4,200.0	4,115.7	810.5	778.1	24.981	SF
Benjamin Fee 33-1B - DD - Plan #2	200.0	200.0	108.3	107.7	174.374	CC, ES
Benjamin Fee 33-1B - DD - Plan #2	1,800.0	1,828.1	159.3	144.5	10.710	SF
GMR 28-7D Existing - DD - Schlumberger Surveys	450.5	461.5	106.1	104.5	65.975	CC, ES
GMR 28-7D Existing - DD - Schlumberger Surveys	1,400.0	1,374.2	286.3	278.0	34.296	SF
GMU 28-14D Existing - Schlumberger Surveys - Schlumb	206.0	206.2	149.7	149.1	229.617	CC, ES
GMU 28-14D Existing - Schlumberger Surveys - Schlumb	1,500.0	1,401.3	429.6	423.0	64.363	SF
SWSW S27-T6S-R93W (M27NW Pad)						
GMR 28-10D (M27NW) Existing - DD - DD	8,535.9	9,310.5	380.7	308.5	5.272	CC, ES, SF

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Benjamin Fee 28-15A
Project:	Mamm Creek	TVD Reference:	WELL @ 5965.0ft (Original Well Elev)
Reference Site:	K28NW Pad	MD Reference:	WELL @ 5965.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Benjamin Fee 28-15A	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													Offset Site Error:	0.0 ft		
Survey Program: 100-MWD													K28NW Pad - Benjamin 28-11 Existing - Existing - Existing		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	-118.58	-63.1	-115.8	131.9							
100.0	100.0	99.4	99.4	0.1	0.1	-118.61	-63.3	-116.0	132.1	131.9	0.27	486.515	ES			
200.0	200.0	199.4	199.4	0.3	0.3	-118.74	-63.8	-116.3	132.6	132.0	0.62	213.621				
300.0	300.0	299.7	299.7	0.5	0.5	123.11	-64.6	-116.2	134.4	133.4	0.98	137.605				
400.0	399.6	400.0	400.0	0.7	0.7	125.05	-66.1	-115.4	138.8	137.4	1.36	102.108				
500.0	498.8	497.9	497.9	1.0	0.8	128.04	-68.3	-114.6	146.7	145.0	1.77	82.676				
600.0	597.1	595.1	595.0	1.4	1.0	131.85	-71.2	-114.5	159.5	157.3	2.22	71.749				
649.6	645.5	642.8	642.7	1.6	1.1	133.90	-72.8	-114.7	167.8	165.4	2.45	68.497				
700.0	694.5	691.2	691.0	1.8	1.2	136.06	-74.6	-115.1	177.1	174.5	2.68	66.169				
800.0	791.7	787.9	787.7	2.2	1.4	139.67	-78.5	-116.3	196.7	193.5	3.12	63.066				
900.0	889.0	884.2	883.8	2.7	1.6	142.58	-82.7	-117.7	217.2	213.7	3.55	61.230				
1,000.0	986.2	980.0	979.6	3.1	1.7	144.92	-87.1	-119.7	238.7	234.8	3.97	60.182				
1,100.0	1,083.4	1,076.6	1,076.0	3.5	1.9	146.88	-91.6	-122.1	261.0	256.6	4.38	59.599				
1,200.0	1,180.7	1,172.9	1,172.2	4.0	2.1	148.54	-96.1	-124.7	283.8	279.0	4.79	59.292				
1,300.0	1,277.9	1,270.0	1,269.1	4.4	2.3	149.97	-100.5	-127.5	306.9	301.7	5.19	59.143				
1,400.0	1,375.2	1,366.4	1,365.3	4.9	2.5	151.17	-105.1	-130.3	330.2	324.6	5.59	59.072				
1,500.0	1,472.4	1,465.0	1,463.8	5.3	2.7	152.22	-109.9	-133.2	353.6	347.6	5.99	59.013				
1,600.0	1,569.6	1,564.6	1,563.2	5.8	2.9	153.11	-115.0	-135.4	376.5	370.1	6.40	58.836				
1,700.0	1,666.9	1,663.6	1,662.1	6.2	3.1	153.87	-120.2	-137.1	398.9	392.1	6.80	58.628				
1,800.0	1,764.1	1,762.8	1,761.1	6.7	3.3	154.57	-125.3	-138.4	420.9	413.7	7.20	58.423				
1,900.0	1,861.4	1,861.4	1,859.6	7.1	3.5	155.21	-130.3	-139.2	442.6	435.0	7.60	58.221				
2,000.0	1,958.6	1,960.4	1,958.5	7.6	3.7	155.79	-135.4	-139.9	464.2	456.2	8.00	58.018				
2,100.0	2,055.9	2,059.7	2,057.6	8.0	3.8	156.32	-140.5	-140.2	485.4	477.0	8.40	57.803				
2,200.0	2,153.1	2,158.8	2,156.7	8.5	4.0	156.82	-145.5	-140.2	506.4	497.6	8.79	57.592				
2,300.0	2,250.3	2,258.6	2,256.4	8.9	4.2	157.28	-150.6	-139.8	527.1	517.9	9.19	57.377				
2,400.0	2,347.6	2,358.1	2,355.7	9.4	4.4	157.73	-155.5	-139.0	547.4	537.8	9.58	57.165				
2,500.0	2,444.8	2,456.9	2,454.4	9.8	4.6	158.16	-160.2	-138.1	567.5	557.6	9.96	56.978				
2,600.0	2,542.1	2,555.6	2,553.0	10.3	4.8	158.59	-164.7	-136.9	587.6	577.2	10.34	56.826				
2,700.0	2,639.3	2,654.0	2,651.3	10.7	5.0	159.00	-169.0	-135.6	607.5	596.8	10.72	56.686				
2,800.0	2,736.5	2,752.3	2,749.4	11.2	5.2	159.37	-173.4	-134.2	627.4	616.3	11.09	56.550				
2,900.0	2,833.8	2,850.4	2,847.4	11.6	5.4	159.72	-178.0	-132.9	647.3	635.8	11.47	56.419				
3,000.0	2,931.0	2,949.3	2,946.2	12.1	5.5	160.03	-182.7	-131.4	667.1	655.3	11.85	56.281				
3,100.0	3,028.3	3,049.3	3,046.1	12.5	5.7	160.32	-187.6	-129.8	686.8	674.5	12.24	56.124				
3,200.0	3,125.5	3,148.4	3,145.0	13.0	5.9	160.59	-192.4	-127.9	706.1	693.5	12.62	55.966				
3,300.0	3,222.8	3,246.7	3,243.2	13.4	6.1	160.84	-197.4	-125.9	725.5	712.5	13.00	55.816				
3,400.0	3,320.0	3,345.6	3,342.0	13.9	6.3	161.08	-202.3	-123.9	744.8	731.4	13.38	55.668				
3,500.0	3,417.2	3,444.5	3,440.7	14.3	6.5	161.30	-207.3	-121.8	764.0	750.2	13.76	55.521				
3,600.0	3,514.5	3,542.9	3,538.9	14.8	6.7	161.51	-212.4	-119.6	783.1	768.9	14.14	55.379				
3,700.0	3,611.7	3,640.8	3,636.7	15.2	6.9	161.70	-217.5	-117.5	802.2	787.7	14.52	55.240				
3,800.0	3,709.0	3,738.9	3,734.6	15.7	7.1	161.87	-222.8	-115.4	821.4	806.5	14.91	55.101	SF			

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Benjamin Fee 28-15A
Project:	Mamm Creek	TVD Reference:	WELL @ 5965.0ft (Original Well Elev)
Reference Site:	K28NW Pad	MD Reference:	WELL @ 5965.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Benjamin Fee 28-15A	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													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	-43.11	8.7	-8.2	12.0						
100.0	100.0	100.0	100.0	0.1	0.1	-43.11	8.7	-8.2	12.0	11.7	0.27	43.981			
200.0	200.0	200.0	200.0	0.3	0.3	-43.11	8.7	-8.2	12.0	11.4	0.62	19.273 CC, ES			
300.0	300.0	299.2	299.2	0.5	0.5	-170.07	9.1	-10.7	16.7	15.7	0.97	17.189 SF			
400.0	399.6	396.9	396.6	0.7	0.7	-179.45	10.3	-18.2	31.5	30.2	1.32	23.956			
500.0	498.8	491.6	490.5	1.0	1.0	175.97	12.2	-30.1	56.5	54.9	1.65	34.179			
600.0	597.1	582.0	579.5	1.4	1.3	173.72	14.6	-45.8	91.1	89.1	1.98	45.954			
649.6	645.5	625.0	621.5	1.6	1.5	173.02	16.0	-54.7	111.6	109.5	2.14	52.118			
700.0	694.5	667.4	662.8	1.8	1.7	172.52	17.5	-64.4	134.1	131.8	2.31	58.027			
800.0	791.7	748.9	741.4	2.2	2.1	171.70	20.8	-85.6	181.5	178.8	2.64	68.658			
900.0	889.0	826.7	815.5	2.7	2.5	171.03	24.5	-108.9	232.4	229.4	2.97	78.220			
1,000.0	986.2	900.0	884.4	3.1	3.0	170.48	28.3	-133.5	286.7	283.4	3.29	87.050			
1,100.0	1,083.4	976.4	955.2	3.5	3.6	169.96	32.8	-162.0	344.1	340.5	3.62	94.953			
1,200.0	1,180.7	1,050.9	1,023.6	4.0	4.1	169.55	37.4	-191.1	403.2	399.2	3.95	102.032			
1,300.0	1,277.9	1,131.5	1,097.7	4.4	4.7	169.21	42.3	-222.6	462.3	458.0	4.29	107.761			
1,400.0	1,375.2	1,212.2	1,171.7	4.9	5.3	168.95	47.2	-254.1	521.4	516.7	4.63	112.649			
1,500.0	1,472.4	1,292.8	1,245.8	5.3	5.9	168.74	52.1	-285.6	580.5	575.5	4.97	116.864			
1,600.0	1,569.6	1,373.4	1,319.9	5.8	6.5	168.57	57.1	-317.1	639.6	634.3	5.31	120.537			
1,700.0	1,666.9	1,454.1	1,393.9	6.2	7.2	168.43	62.0	-348.6	698.7	693.1	5.65	123.767			
1,800.0	1,764.1	1,534.7	1,468.0	6.7	7.8	168.31	66.9	-380.1	757.9	751.9	5.98	126.630			
1,900.0	1,861.4	1,615.3	1,542.1	7.1	8.4	168.21	71.9	-411.6	817.0	810.7	6.32	129.185			

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Benjamin Fee 28-15A
Project:	Mamm Creek	TVD Reference:	WELL @ 5965.0ft (Original Well Elev)
Reference Site:	K28NW Pad	MD Reference:	WELL @ 5965.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Benjamin Fee 28-15A	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													Offset Site Error:	0.0 ft	
Survey Program: 0-MWD													Offset Well Error:		0.0 ft
Reference													Warning		
Offset				Semi Major Axis			Distance				Total	Separation			
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	-135.67	-8.4	-8.2	11.7						
100.0	100.0	100.0	100.0	0.1	0.1	-135.67	-8.4	-8.2	11.7	11.4	0.27	43.014			
200.0	200.0	200.0	200.0	0.3	0.3	-135.67	-8.4	-8.2	11.7	11.1	0.62	18.849 CC, ES			
300.0	300.0	300.0	300.0	0.5	0.5	117.07	-8.4	-8.2	12.7	11.7	0.98	12.969 SF			
400.0	399.6	399.6	399.6	0.7	0.7	140.21	-8.4	-8.2	17.7	16.3	1.34	13.199			
500.0	498.8	498.8	498.8	1.0	0.8	156.82	-8.4	-8.2	29.0	27.3	1.69	17.179			
600.0	597.1	597.1	597.1	1.4	1.0	165.59	-8.4	-8.2	46.3	44.3	2.02	22.928			
649.6	645.5	645.5	645.5	1.6	1.1	168.26	-8.4	-8.2	57.0	54.8	2.18	26.122			
700.0	694.5	694.5	694.5	1.8	1.2	170.26	-8.4	-8.2	68.5	66.2	2.35	29.147			
800.0	791.7	789.9	789.9	2.2	1.3	172.60	-8.4	-8.6	92.0	89.3	2.69	34.235			
900.0	889.0	881.4	881.3	2.7	1.5	173.27	-8.3	-12.7	119.2	116.2	3.02	39.443			
1,000.0	986.2	970.5	970.0	3.1	1.7	173.06	-8.1	-20.9	150.7	147.3	3.36	44.841			
1,100.0	1,083.4	1,056.8	1,055.5	3.5	1.9	172.47	-7.9	-32.8	186.2	182.5	3.70	50.311			
1,200.0	1,180.7	1,140.2	1,137.5	4.0	2.1	171.71	-7.5	-47.9	225.6	221.6	4.04	55.785			
1,300.0	1,277.9	1,220.6	1,215.8	4.4	2.4	170.91	-7.2	-65.8	268.7	264.3	4.39	61.221			
1,400.0	1,375.2	1,300.0	1,292.4	4.9	2.8	170.11	-6.7	-86.8	315.4	310.7	4.74	66.529			
1,500.0	1,472.4	1,371.6	1,360.7	5.3	3.1	169.40	-6.3	-108.4	365.4	360.3	5.09	71.856			
1,600.0	1,569.6	1,442.3	1,427.3	5.8	3.6	168.71	-5.8	-132.3	418.6	413.1	5.43	77.039			
1,700.0	1,666.9	1,500.0	1,480.9	6.2	3.9	168.17	-5.3	-153.5	474.8	469.1	5.76	82.490			
1,800.0	1,764.1	1,574.1	1,548.8	6.7	4.5	167.51	-4.7	-183.2	533.6	527.5	6.12	87.121			
1,900.0	1,861.4	1,643.0	1,610.9	7.1	5.0	166.93	-4.1	-212.9	594.8	588.4	6.48	91.775			
2,000.0	1,958.6	1,721.5	1,681.6	7.6	5.6	166.38	-3.4	-247.0	656.5	649.7	6.86	95.707			
2,100.0	2,055.9	1,800.1	1,752.4	8.0	6.3	165.92	-2.7	-281.2	718.3	711.0	7.24	99.244			
2,200.0	2,153.1	1,878.6	1,823.1	8.5	6.9	165.54	-2.0	-315.4	780.0	772.4	7.61	102.440			

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Benjamin Fee 28-15A
Project:	Mamm Creek	TVD Reference:	WELL @ 5965.0ft (Original Well Elev)
Reference Site:	K28NW Pad	MD Reference:	WELL @ 5965.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Benjamin Fee 28-15A	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													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	-66.27	51.0	-116.0	126.7						
100.0	100.0	100.0	100.0	0.1	0.1	-66.27	51.0	-116.0	126.7	126.4	0.27	465.351			
200.0	200.0	200.0	200.0	0.3	0.3	-66.27	51.0	-116.0	126.7	126.1	0.62	203.918	CC, ES		
300.0	300.0	294.5	294.4	0.5	0.5	174.57	50.7	-118.3	131.4	130.4	0.96	136.569			
400.0	399.6	387.6	387.3	0.7	0.7	173.36	49.6	-125.1	145.5	144.2	1.31	111.318			
500.0	498.8	478.3	477.3	1.0	0.9	171.78	48.0	-136.0	168.9	167.2	1.66	101.949			
600.0	597.1	565.3	563.1	1.4	1.2	170.16	45.9	-150.4	201.2	199.2	2.01	100.184	SF		
649.6	645.5	606.9	603.8	1.6	1.4	169.40	44.7	-158.7	220.5	218.3	2.18	101.059			
700.0	694.5	648.1	644.0	1.8	1.6	168.77	43.3	-167.8	241.6	239.2	2.37	101.885			
800.0	791.7	727.6	720.9	2.2	2.0	167.56	40.4	-187.6	286.1	283.3	2.75	104.080			
900.0	889.0	800.0	790.2	2.7	2.4	166.48	37.3	-208.5	334.0	330.9	3.12	107.018			
1,000.0	986.2	877.0	862.9	3.1	2.9	165.39	33.7	-233.4	385.1	381.6	3.52	109.366			
1,100.0	1,083.4	949.7	930.6	3.5	3.4	164.40	29.8	-259.6	439.2	435.3	3.91	112.214			
1,200.0	1,180.7	1,032.9	1,007.7	4.0	3.9	163.46	25.2	-290.5	494.3	490.0	4.34	113.998			
1,300.0	1,277.9	1,116.1	1,084.9	4.4	4.5	162.71	20.7	-321.3	549.5	544.7	4.76	115.473			
1,400.0	1,375.2	1,199.3	1,162.0	4.9	5.1	162.09	16.1	-352.1	604.7	599.6	5.18	116.711			
1,500.0	1,472.4	1,282.5	1,239.1	5.3	5.7	161.58	11.6	-382.9	660.0	654.4	5.60	117.762			
1,600.0	1,569.6	1,365.6	1,316.3	5.8	6.3	161.15	7.0	-413.8	715.3	709.3	6.03	118.670			
1,700.0	1,666.9	1,448.8	1,393.4	6.2	6.9	160.77	2.5	-444.6	770.7	764.2	6.45	119.462			
1,800.0	1,764.1	1,532.0	1,470.6	6.7	7.5	160.45	-2.1	-475.4	826.0	819.2	6.87	120.159			

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Benjamin Fee 28-15A
Project:	Mamm Creek	TVD Reference:	WELL @ 5965.0ft (Original Well Elev)
Reference Site:	K28NW Pad	MD Reference:	WELL @ 5965.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Benjamin Fee 28-15A	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													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	-68.48	42.6	-108.1	116.2						
100.0	100.0	100.0	100.0	0.1	0.1	-68.48	42.6	-108.1	116.2	115.9	0.27	426.719			
200.0	200.0	200.0	200.0	0.3	0.3	-68.48	42.6	-108.1	116.2	115.6	0.62	186.989 CC, ES			
300.0	300.0	295.2	295.2	0.5	0.5	172.25	41.9	-110.4	120.7	119.8	0.96	125.196			
400.0	399.6	389.2	388.9	0.7	0.7	170.77	39.9	-117.1	134.4	133.1	1.32	102.196			
500.0	498.8	480.8	479.8	1.0	0.9	168.86	36.7	-127.8	157.2	155.5	1.68	93.717			
600.0	597.1	568.9	566.6	1.4	1.3	166.93	32.4	-142.1	188.7	186.7	2.05	92.088 SF			
649.6	645.5	611.0	607.8	1.6	1.4	166.03	29.9	-150.3	207.5	205.3	2.24	92.834			
700.0	694.5	652.8	648.6	1.8	1.6	165.30	27.2	-159.3	228.1	225.7	2.44	93.498			
800.0	791.7	733.5	726.6	2.2	2.0	163.88	21.3	-179.0	271.6	268.8	2.85	95.233			
900.0	889.0	811.1	800.8	2.7	2.4	162.53	14.7	-200.9	318.5	315.2	3.27	97.260			
1,000.0	986.2	885.5	870.9	3.1	2.9	161.29	7.6	-224.7	368.5	364.8	3.71	99.411			
1,100.0	1,083.4	960.0	940.1	3.5	3.4	160.10	-0.4	-251.0	421.7	417.5	4.15	101.596			
1,200.0	1,180.7	1,039.4	1,013.3	4.0	4.0	159.00	-9.2	-280.4	476.5	471.9	4.61	103.308			
1,300.0	1,277.9	1,122.7	1,090.0	4.4	4.6	158.08	-18.5	-311.4	531.4	526.3	5.09	104.495			
1,400.0	1,375.2	1,206.0	1,166.8	4.9	5.2	157.33	-27.8	-342.3	586.4	580.8	5.56	105.493			
1,500.0	1,472.4	1,289.3	1,243.6	5.3	5.8	156.70	-37.1	-373.2	641.4	635.4	6.03	106.342			
1,600.0	1,569.6	1,372.6	1,320.4	5.8	6.4	156.18	-46.4	-404.1	696.5	690.0	6.50	107.075			
1,700.0	1,666.9	1,455.9	1,397.2	6.2	7.1	155.73	-55.7	-435.0	751.6	744.6	6.98	107.716			
1,800.0	1,764.1	1,539.2	1,474.0	6.7	7.7	155.34	-65.0	-465.9	806.8	799.3	7.45	108.282			

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Benjamin Fee 28-15A
Project:	Mamm Creek	TVD Reference:	WELL @ 5965.0ft (Original Well Elev)
Reference Site:	K28NW Pad	MD Reference:	WELL @ 5965.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Benjamin Fee 28-15A	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													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	-73.55	34.2	-116.0	120.9						
100.0	100.0	100.0	100.0	0.1	0.1	-73.55	34.2	-116.0	120.9	120.7	0.27	444.171			
200.0	200.0	200.0	200.0	0.3	0.3	-73.55	34.2	-116.0	120.9	120.3	0.62	194.637	CC, ES		
300.0	300.0	295.2	295.2	0.5	0.5	167.26	33.3	-118.2	125.4	124.4	0.96	129.956			
400.0	399.6	389.2	388.9	0.7	0.7	165.97	30.5	-124.6	138.8	137.5	1.32	105.195			
500.0	498.8	480.9	479.9	1.0	0.9	164.29	25.9	-134.9	161.0	159.3	1.69	95.256			
600.0	597.1	569.4	567.1	1.4	1.3	162.54	19.9	-148.6	191.8	189.7	2.08	92.205	SF		
649.6	645.5	611.7	608.5	1.6	1.4	161.70	16.4	-156.4	210.2	207.9	2.28	92.253			
700.0	694.5	653.9	649.6	1.8	1.6	161.06	12.6	-165.1	230.3	227.8	2.50	92.245			
800.0	791.7	735.3	728.3	2.2	2.0	159.73	4.2	-184.2	272.7	269.8	2.94	92.780			
900.0	889.0	813.7	803.2	2.7	2.5	158.41	-5.2	-205.4	318.4	315.0	3.40	93.748			
1,000.0	986.2	889.0	874.1	3.1	2.9	157.14	-15.3	-228.5	367.4	363.5	3.87	94.975			
1,100.0	1,083.4	961.1	941.1	3.5	3.5	155.96	-26.1	-252.9	419.3	415.0	4.35	96.417			
1,200.0	1,180.7	1,038.2	1,011.8	4.0	4.0	154.78	-38.6	-281.2	473.8	468.9	4.85	97.688			
1,300.0	1,277.9	1,121.4	1,087.9	4.4	4.7	153.73	-52.1	-311.9	528.6	523.3	5.37	98.430			
1,400.0	1,375.2	1,204.7	1,164.1	4.9	5.3	152.88	-65.7	-342.6	583.6	577.7	5.89	99.065			
1,500.0	1,472.4	1,287.9	1,240.3	5.3	5.9	152.18	-79.2	-373.4	638.7	632.3	6.41	99.610			
1,600.0	1,569.6	1,371.2	1,316.4	5.8	6.6	151.58	-92.8	-404.1	693.8	686.8	6.93	100.089			
1,700.0	1,666.9	1,454.4	1,392.6	6.2	7.2	151.08	-106.3	-434.8	748.9	741.5	7.45	100.515			
1,800.0	1,764.1	1,537.7	1,468.8	6.7	7.8	150.64	-119.9	-465.6	804.1	796.1	7.97	100.896			

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Benjamin Fee 28-15A
Project:	Mamm Creek	TVD Reference:	WELL @ 5965.0ft (Original Well Elev)
Reference Site:	K28NW Pad	MD Reference:	WELL @ 5965.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Benjamin Fee 28-15A	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													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	-76.72	25.5	-108.0	111.0						
100.0	100.0	100.0	100.0	0.1	0.1	-76.72	25.5	-108.0	111.0	110.7	0.27	407.536			
200.0	200.0	200.0	200.0	0.3	0.3	-76.72	25.5	-108.0	111.0	110.3	0.62	178.583 CC, ES			
300.0	300.0	295.8	295.8	0.5	0.5	164.04	24.2	-110.0	115.3	114.3	0.97	119.215			
400.0	399.6	390.6	390.2	0.7	0.7	162.62	20.6	-116.1	128.2	126.9	1.33	96.596			
500.0	498.8	483.1	482.1	1.0	1.0	160.78	14.6	-125.9	149.7	148.0	1.71	87.487			
600.0	597.1	572.5	570.2	1.4	1.3	158.88	6.7	-138.9	179.6	177.5	2.12	84.547			
649.6	645.5	615.5	612.2	1.6	1.4	157.99	2.1	-146.5	197.4	195.1	2.34	84.462			
700.0	694.5	658.2	653.9	1.8	1.6	157.30	-2.9	-154.7	216.9	214.4	2.57	84.346 SF			
800.0	791.7	741.0	733.8	2.2	2.0	155.86	-14.0	-173.0	258.2	255.1	3.05	84.560			
900.0	889.0	820.8	809.9	2.7	2.5	154.39	-26.4	-193.4	302.6	299.1	3.55	85.162			
1,000.0	986.2	900.0	884.4	3.1	3.0	152.93	-40.4	-216.4	350.3	346.2	4.08	85.915			
1,100.0	1,083.4	971.1	950.4	3.5	3.5	151.64	-54.3	-239.2	400.9	396.3	4.60	87.137			
1,200.0	1,180.7	1,041.6	1,014.6	4.0	4.1	150.40	-69.3	-263.9	454.5	449.4	5.13	88.607			
1,300.0	1,277.9	1,121.5	1,086.7	4.4	4.7	149.13	-87.2	-293.4	510.0	504.3	5.70	89.499			
1,400.0	1,375.2	1,204.1	1,161.2	4.9	5.4	148.06	-105.8	-324.0	565.8	559.5	6.28	90.154			
1,500.0	1,472.4	1,286.7	1,235.6	5.3	6.1	147.19	-124.3	-354.5	621.6	614.7	6.85	90.729			
1,600.0	1,569.6	1,369.4	1,310.1	5.8	6.7	146.45	-142.9	-385.1	677.5	670.1	7.43	91.246			
1,700.0	1,666.9	1,452.0	1,384.6	6.2	7.4	145.83	-161.5	-415.7	733.5	725.5	8.00	91.714			
1,800.0	1,764.1	1,534.6	1,459.1	6.7	8.1	145.30	-180.1	-446.2	789.6	781.0	8.57	92.137			

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Benjamin Fee 28-15A
Project:	Mamm Creek	TVD Reference:	WELL @ 5965.0ft (Original Well Elev)
Reference Site:	K28NW Pad	MD Reference:	WELL @ 5965.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Benjamin Fee 28-15A	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													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	-81.60	17.1	-116.0	117.2						
100.0	100.0	100.0	100.0	0.1	0.1	-81.60	17.1	-116.0	117.2	117.0	0.27	430.614			
200.0	200.0	200.0	200.0	0.3	0.3	-81.60	17.1	-116.0	117.2	116.6	0.62	188.696 CC, ES			
300.0	300.0	295.7	295.7	0.5	0.5	159.25	15.7	-117.9	121.5	120.5	0.97	125.546			
400.0	399.6	390.4	390.1	0.7	0.7	158.07	11.4	-123.5	134.1	132.7	1.33	100.690			
500.0	498.8	483.0	482.0	1.0	0.9	156.51	4.4	-132.6	155.0	153.3	1.73	89.837			
600.0	597.1	572.7	570.4	1.4	1.3	154.85	-4.9	-144.8	184.0	181.9	2.16	85.345			
649.6	645.5	615.9	612.6	1.6	1.4	154.06	-10.2	-151.9	201.3	199.0	2.38	84.551			
700.0	694.5	658.9	654.5	1.8	1.6	153.48	-16.1	-159.6	220.3	217.7	2.63	83.796			
800.0	791.7	742.3	735.1	2.2	2.0	152.15	-29.2	-176.8	260.4	257.2	3.14	82.935			
900.0	889.0	822.9	811.9	2.7	2.5	150.74	-43.9	-196.1	303.6	299.9	3.67	82.654 SF			
1,000.0	986.2	900.0	884.4	3.1	3.0	149.33	-59.8	-216.9	349.9	345.7	4.22	82.910			
1,100.0	1,083.4	975.1	954.0	3.5	3.6	147.96	-76.9	-239.4	399.3	394.5	4.79	83.289			
1,200.0	1,180.7	1,046.6	1,019.2	4.0	4.1	146.67	-94.8	-262.8	451.6	446.2	5.37	84.090			
1,300.0	1,277.9	1,115.1	1,080.5	4.4	4.7	145.47	-113.2	-287.1	506.6	500.7	5.94	85.291			
1,400.0	1,375.2	1,196.5	1,152.7	4.9	5.4	144.19	-136.0	-317.0	563.2	556.6	6.57	85.784			
1,500.0	1,472.4	1,278.4	1,225.3	5.3	6.1	143.14	-158.9	-347.1	619.9	612.7	7.19	86.232			
1,600.0	1,569.6	1,360.3	1,297.9	5.8	6.8	142.26	-181.8	-377.1	676.8	668.9	7.81	86.660			
1,700.0	1,666.9	1,442.1	1,370.5	6.2	7.5	141.52	-204.8	-407.2	733.7	725.3	8.43	87.063			
1,800.0	1,764.1	1,524.0	1,443.1	6.7	8.2	140.89	-227.7	-437.3	790.7	781.6	9.04	87.439			

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Benjamin Fee 28-15A
Project:	Mamm Creek	TVD Reference:	WELL @ 5965.0ft (Original Well Elev)
Reference Site:	K28NW Pad	MD Reference:	WELL @ 5965.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Benjamin Fee 28-15A	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													Offset Site Error:	0.0 ft		
Survey Program: 0-MWD													Offset Well Error:		0.0 ft	
Reference													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	-162.20	-25.5	-8.2	26.8							
100.0	100.0	100.0	100.0	0.1	0.1	-162.20	-25.5	-8.2	26.8	26.5	0.27	98.351				
200.0	200.0	200.0	200.0	0.3	0.3	-162.20	-25.5	-8.2	26.8	26.2	0.62	43.097 CC, ES				
300.0	300.0	298.2	298.1	0.5	0.5	82.34	-29.2	-8.5	30.0	29.0	0.98	30.752				
400.0	399.6	396.2	395.8	0.7	0.7	96.21	-35.8	-12.8	38.0	36.6	1.37	27.755 SF				
500.0	498.8	493.3	492.2	1.0	0.9	112.23	-43.6	-21.1	53.2	51.4	1.80	29.499				
600.0	597.1	590.1	588.3	1.4	1.2	124.09	-51.7	-30.0	74.3	72.0	2.27	32.670				
649.6	645.5	637.7	635.5	1.6	1.3	128.64	-55.7	-34.4	86.7	84.2	2.51	34.551				
700.0	694.5	685.8	683.2	1.8	1.5	132.60	-59.7	-38.8	100.2	97.4	2.75	36.486				
800.0	791.7	781.3	778.0	2.2	1.7	137.97	-67.6	-47.6	127.9	124.7	3.21	39.815				
900.0	889.0	876.9	872.8	2.7	2.0	141.42	-75.6	-56.4	156.2	152.6	3.67	42.517				
1,000.0	986.2	972.4	967.6	3.1	2.2	143.81	-83.5	-65.2	185.0	180.8	4.14	44.717				
1,100.0	1,083.4	1,068.0	1,062.4	3.5	2.5	145.56	-91.5	-73.9	213.9	209.3	4.60	46.529				
1,200.0	1,180.7	1,163.5	1,157.2	4.0	2.8	146.89	-99.4	-82.7	243.0	237.9	5.06	48.042				
1,300.0	1,277.9	1,259.1	1,252.1	4.4	3.0	147.94	-107.4	-91.5	272.2	266.6	5.52	49.321				
1,400.0	1,375.2	1,354.6	1,346.9	4.9	3.3	148.79	-115.4	-100.3	301.4	295.4	5.98	50.415				
1,500.0	1,472.4	1,450.1	1,441.7	5.3	3.6	149.48	-123.3	-109.1	330.7	324.3	6.44	51.362				
1,600.0	1,569.6	1,545.7	1,536.5	5.8	3.8	150.07	-131.3	-117.9	360.0	353.1	6.90	52.187				
1,700.0	1,666.9	1,641.2	1,631.3	6.2	4.1	150.56	-139.2	-126.6	389.4	382.0	7.36	52.913				
1,800.0	1,764.1	1,736.8	1,726.1	6.7	4.4	150.99	-147.2	-135.4	418.8	411.0	7.82	53.557				
1,900.0	1,861.4	1,832.3	1,820.9	7.1	4.6	151.36	-155.1	-144.2	448.2	439.9	8.28	54.131				
2,000.0	1,958.6	1,927.9	1,915.7	7.6	4.9	151.68	-163.1	-153.0	477.6	468.9	8.74	54.647				
2,100.0	2,055.9	2,023.4	2,010.5	8.0	5.1	151.97	-171.1	-161.8	507.0	497.8	9.20	55.112				
2,200.0	2,153.1	2,118.9	2,105.3	8.5	5.4	152.22	-179.0	-170.6	536.5	526.8	9.66	55.534				
2,300.0	2,250.3	2,214.5	2,200.1	8.9	5.7	152.45	-187.0	-179.4	565.9	555.8	10.12	55.919				
2,400.0	2,347.6	2,310.0	2,294.9	9.4	5.9	152.66	-194.9	-188.1	595.4	584.8	10.58	56.271				
2,500.0	2,444.8	2,405.6	2,389.7	9.8	6.2	152.84	-202.9	-196.9	624.8	613.8	11.04	56.593				
2,600.0	2,542.1	2,501.1	2,484.5	10.3	6.5	153.01	-210.8	-205.7	654.3	642.8	11.50	56.891				
2,700.0	2,639.3	2,596.7	2,579.3	10.7	6.7	153.17	-218.8	-214.5	683.8	671.8	11.96	57.166				
2,800.0	2,736.5	2,692.2	2,674.1	11.2	7.0	153.31	-226.8	-223.3	713.2	700.8	12.42	57.421				
2,900.0	2,833.8	2,787.7	2,768.9	11.6	7.3	153.44	-234.7	-232.1	742.7	729.8	12.88	57.658				
3,000.0	2,931.0	2,883.3	2,863.7	12.1	7.5	153.56	-242.7	-240.8	772.2	758.9	13.34	57.879				
3,100.0	3,028.3	2,978.8	2,958.5	12.5	7.8	153.67	-250.6	-249.6	801.7	787.9	13.80	58.085				

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Benjamin Fee 28-15A
Project:	Mamm Creek	TVD Reference:	WELL @ 5965.0ft (Original Well Elev)
Reference Site:	K28NW Pad	MD Reference:	WELL @ 5965.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Benjamin Fee 28-15A	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													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	-98.22	-16.8	-116.0	117.2						
100.0	100.0	100.0	100.0	0.1	0.1	-98.22	-16.8	-116.0	117.2	116.9	0.27	430.421			
200.0	200.0	200.0	200.0	0.3	0.3	-98.22	-16.8	-116.0	117.2	116.6	0.62	188.611	CC, ES		
300.0	300.0	296.5	296.4	0.5	0.5	142.79	-18.9	-117.1	120.7	119.8	0.97	124.166			
400.0	399.6	392.2	391.9	0.7	0.7	142.00	-25.4	-120.4	131.3	130.0	1.36	96.713			
500.0	498.8	486.5	485.5	1.0	1.0	140.89	-35.9	-125.7	148.9	147.1	1.80	82.617			
600.0	597.1	582.4	580.1	1.4	1.3	139.98	-49.7	-132.6	172.7	170.4	2.30	74.918			
649.6	645.5	630.2	627.3	1.6	1.4	139.91	-56.6	-136.2	185.9	183.4	2.57	72.386			
700.0	694.5	678.6	675.0	1.8	1.6	140.20	-63.7	-139.7	199.9	197.0	2.84	70.268			
800.0	791.7	774.7	769.8	2.2	1.9	140.68	-77.6	-146.8	227.6	224.2	3.40	66.937			
900.0	889.0	870.8	864.6	2.7	2.2	141.05	-91.6	-153.8	255.3	251.4	3.96	64.443			
1,000.0	986.2	966.8	959.4	3.1	2.5	141.35	-105.5	-160.9	283.1	278.5	4.53	62.519			
1,100.0	1,083.4	1,062.9	1,054.2	3.5	2.8	141.60	-119.5	-168.0	310.8	305.7	5.10	60.995			
1,200.0	1,180.7	1,159.0	1,149.0	4.0	3.1	141.81	-133.4	-175.0	338.6	332.9	5.67	59.760			
1,300.0	1,277.9	1,255.0	1,243.7	4.4	3.5	141.98	-147.4	-182.1	366.3	360.1	6.24	58.741			
1,400.0	1,375.2	1,351.1	1,338.5	4.9	3.8	142.13	-161.4	-189.2	394.1	387.2	6.81	57.887			
1,500.0	1,472.4	1,447.2	1,433.3	5.3	4.1	142.26	-175.3	-196.2	421.8	414.4	7.38	57.161			
1,600.0	1,569.6	1,543.2	1,528.1	5.8	4.4	142.38	-189.3	-203.3	449.6	441.6	7.95	56.536			
1,700.0	1,666.9	1,639.3	1,622.9	6.2	4.7	142.48	-203.2	-210.3	477.3	468.8	8.52	55.993			
1,800.0	1,764.1	1,735.4	1,717.7	6.7	5.0	142.57	-217.2	-217.4	505.1	496.0	9.10	55.517			
1,900.0	1,861.4	1,831.4	1,812.5	7.1	5.4	142.65	-231.2	-224.5	532.8	523.2	9.67	55.096			
2,000.0	1,958.6	1,927.5	1,907.2	7.6	5.7	142.72	-245.1	-231.5	560.6	550.4	10.24	54.721			
2,100.0	2,055.9	2,023.6	2,002.0	8.0	6.0	142.79	-259.1	-238.6	588.4	577.5	10.82	54.385			
2,200.0	2,153.1	2,119.6	2,096.8	8.5	6.3	142.85	-273.0	-245.7	616.1	604.7	11.39	54.083			
2,300.0	2,250.3	2,215.7	2,191.6	8.9	6.6	142.90	-287.0	-252.7	643.9	631.9	11.97	53.809			
2,400.0	2,347.6	2,311.8	2,286.4	9.4	7.0	142.95	-300.9	-259.8	671.6	659.1	12.54	53.560			
2,500.0	2,444.8	2,407.9	2,381.2	9.8	7.3	143.00	-314.9	-266.9	699.4	686.3	13.11	53.332			
2,600.0	2,542.1	2,503.9	2,475.9	10.3	7.6	143.04	-328.9	-273.9	727.2	713.5	13.69	53.124			
2,700.0	2,639.3	2,600.0	2,570.7	10.7	7.9	143.08	-342.8	-281.0	754.9	740.7	14.26	52.931			
2,800.0	2,736.5	2,696.1	2,665.5	11.2	8.3	143.12	-356.8	-288.0	782.7	767.9	14.84	52.754			
2,900.0	2,833.8	2,792.1	2,760.3	11.6	8.6	143.15	-370.7	-295.1	810.5	795.0	15.41	52.590	SF		

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Benjamin Fee 28-15A
Project:	Mamm Creek	TVD Reference:	WELL @ 5965.0ft (Original Well Elev)
Reference Site:	K28NW Pad	MD Reference:	WELL @ 5965.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Benjamin Fee 28-15A	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													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	-94.44	-8.4	-108.0	108.3						
100.0	100.0	100.0	100.0	0.1	0.1	-94.44	-8.4	-108.0	108.3	108.0	0.27	397.823			
200.0	200.0	200.0	200.0	0.3	0.3	-94.44	-8.4	-108.0	108.3	107.7	0.62	174.327 CC, ES			
300.0	300.0	297.6	297.5	0.5	0.5	146.36	-10.7	-108.8	111.6	110.6	0.98	114.418			
400.0	399.6	394.5	394.2	0.7	0.7	145.01	-17.7	-111.4	121.3	120.0	1.37	88.736			
500.0	498.8	490.2	489.1	1.0	1.0	143.15	-29.0	-115.5	137.7	135.8	1.83	75.393			
600.0	597.1	583.9	581.4	1.4	1.3	141.13	-44.5	-121.2	160.4	158.1	2.37	67.740			
649.6	645.5	630.3	626.6	1.6	1.5	140.14	-53.7	-124.5	174.1	171.4	2.66	65.486			
700.0	694.5	678.5	673.7	1.8	1.7	139.56	-63.4	-128.1	188.6	185.6	2.97	63.477			
800.0	791.7	774.2	767.2	2.2	2.0	138.63	-82.8	-135.2	217.4	213.8	3.60	60.316			
900.0	889.0	869.9	860.6	2.7	2.4	137.93	-102.2	-142.3	246.3	242.0	4.25	57.952			
1,000.0	986.2	965.6	954.1	3.1	2.8	137.37	-121.6	-149.4	275.1	270.2	4.90	56.133			
1,100.0	1,083.4	1,061.3	1,047.5	3.5	3.2	136.91	-141.0	-156.4	304.1	298.5	5.56	54.699			
1,200.0	1,180.7	1,157.0	1,141.0	4.0	3.6	136.54	-160.4	-163.5	333.0	326.8	6.22	53.543			
1,300.0	1,277.9	1,252.7	1,234.4	4.4	4.0	136.22	-179.8	-170.6	361.9	355.0	6.88	52.592			
1,400.0	1,375.2	1,348.4	1,327.9	4.9	4.4	135.96	-199.2	-177.7	390.8	383.3	7.55	51.798			
1,500.0	1,472.4	1,444.1	1,421.3	5.3	4.8	135.72	-218.6	-184.8	419.8	411.6	8.21	51.125			
1,600.0	1,569.6	1,539.8	1,514.8	5.8	5.2	135.52	-238.0	-191.9	448.7	439.9	8.88	50.548			
1,700.0	1,666.9	1,635.6	1,608.2	6.2	5.6	135.35	-257.4	-198.9	477.7	468.1	9.54	50.048			
1,800.0	1,764.1	1,731.3	1,701.7	6.7	6.0	135.19	-276.8	-206.0	506.6	496.4	10.21	49.610			
1,900.0	1,861.4	1,827.0	1,795.2	7.1	6.4	135.05	-296.2	-213.1	535.6	524.7	10.88	49.225			
2,000.0	1,958.6	1,922.7	1,888.6	7.6	6.8	134.92	-315.6	-220.2	564.6	553.0	11.55	48.882			
2,100.0	2,055.9	2,018.4	1,982.1	8.0	7.2	134.81	-335.0	-227.3	593.5	581.3	12.22	48.575			
2,200.0	2,153.1	2,114.1	2,075.5	8.5	7.6	134.71	-354.4	-234.4	622.5	609.6	12.89	48.300			
2,300.0	2,250.3	2,209.8	2,169.0	8.9	8.0	134.62	-373.8	-241.5	651.5	637.9	13.56	48.050			
2,400.0	2,347.6	2,305.5	2,262.4	9.4	8.4	134.53	-393.2	-248.5	680.4	666.2	14.23	47.824			
2,500.0	2,444.8	2,401.2	2,355.9	9.8	8.8	134.45	-412.6	-255.6	709.4	694.5	14.90	47.617			
2,600.0	2,542.1	2,496.9	2,449.3	10.3	9.2	134.38	-432.0	-262.7	738.4	722.8	15.57	47.428			
2,700.0	2,639.3	2,592.6	2,542.8	10.7	9.6	134.31	-451.4	-269.8	767.4	751.1	16.24	47.254			
2,800.0	2,736.5	2,688.3	2,636.2	11.2	10.0	134.25	-470.8	-276.9	796.3	779.4	16.91	47.094			
2,900.0	2,833.8	2,784.0	2,729.7	11.6	10.4	134.19	-490.2	-284.0	825.3	807.7	17.58	46.945 SF			

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Benjamin Fee 28-15A
Project:	Mamm Creek	TVD Reference:	WELL @ 5965.0ft (Original Well Elev)
Reference Site:	K28NW Pad	MD Reference:	WELL @ 5965.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Benjamin Fee 28-15A	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													Offset Site Error:	0.0 ft
K28NW Pad - Benjamin Federal 28-16C - DD - Plan #2													Offset Well Error:	0.0 ft
Survey Program: 0-MWD														
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	-180.00	-16.8	0.0	16.8					
100.0	100.0	100.0	100.0	0.1	0.1	-180.00	-16.8	0.0	16.8	16.5	0.27	61.538		
200.0	200.0	200.0	200.0	0.3	0.3	-180.00	-16.8	0.0	16.8	16.1	0.62	26.966	CC, ES	
300.0	300.0	299.4	299.4	0.5	0.5	62.55	-18.5	1.9	17.3	16.3	0.98	17.605		
400.0	399.6	398.8	398.4	0.7	0.7	65.88	-23.8	7.6	18.8	17.4	1.40	13.489		
500.0	498.8	498.1	496.9	1.0	1.0	70.31	-32.5	17.1	21.6	19.7	1.93	11.196		
600.0	597.1	597.4	594.5	1.4	1.4	74.85	-44.7	30.3	25.6	23.0	2.62	9.754		
649.6	645.5	646.6	642.6	1.6	1.6	76.94	-52.0	38.2	28.0	25.0	3.04	9.236		
700.0	694.5	696.6	691.0	1.8	1.8	77.77	-60.3	47.2	31.0	27.5	3.46	8.966	SF	
800.0	791.7	795.4	785.8	2.2	2.3	73.81	-79.2	67.7	38.6	34.4	4.29	9.011		
900.0	889.0	893.5	878.3	2.7	2.9	66.19	-101.2	91.5	49.4	44.4	5.02	9.845		
1,000.0	986.2	992.4	970.9	3.1	3.6	59.65	-124.9	117.2	62.3	56.7	5.63	11.055		
1,100.0	1,083.4	1,091.4	1,063.5	3.5	4.2	55.39	-148.7	142.9	75.7	69.5	6.23	12.145		
1,200.0	1,180.7	1,190.4	1,156.1	4.0	4.9	52.42	-172.4	168.6	89.4	82.6	6.83	13.094		
1,300.0	1,277.9	1,289.3	1,248.6	4.4	5.5	50.24	-196.1	194.3	103.3	95.9	7.43	13.916		
1,400.0	1,375.2	1,388.3	1,341.2	4.9	6.2	48.58	-219.8	220.1	117.3	109.3	8.02	14.630		
1,500.0	1,472.4	1,487.3	1,433.8	5.3	6.8	47.28	-243.6	245.8	131.4	122.8	8.62	15.252		
1,600.0	1,569.6	1,586.2	1,526.4	5.8	7.5	46.23	-267.3	271.5	145.6	136.4	9.21	15.798		
1,700.0	1,666.9	1,685.2	1,618.9	6.2	8.1	45.36	-291.0	297.2	159.7	149.9	9.81	16.281		
1,800.0	1,764.1	1,784.1	1,711.5	6.7	8.8	44.64	-314.7	322.9	174.0	163.5	10.41	16.710		
1,900.0	1,861.4	1,883.1	1,804.1	7.1	9.4	44.02	-338.5	348.6	188.2	177.2	11.01	17.093		
2,000.0	1,958.6	1,982.1	1,896.6	7.6	10.1	43.49	-362.2	374.3	202.4	190.8	11.61	17.438		
2,100.0	2,055.9	2,081.0	1,989.2	8.0	10.7	43.03	-385.9	400.0	216.7	204.5	12.21	17.749		
2,200.0	2,153.1	2,180.0	2,081.8	8.5	11.4	42.63	-409.6	425.7	231.0	218.2	12.81	18.032		
2,300.0	2,250.3	2,279.0	2,174.4	8.9	12.0	42.28	-433.4	451.4	245.3	231.8	13.41	18.290		
2,400.0	2,347.6	2,377.9	2,266.9	9.4	12.7	41.96	-457.1	477.2	259.5	245.5	14.01	18.525		
2,500.0	2,444.8	2,476.9	2,359.5	9.8	13.3	41.68	-480.8	502.9	273.8	259.2	14.61	18.742		
2,600.0	2,542.1	2,575.9	2,452.1	10.3	14.0	41.42	-504.5	528.6	288.2	272.9	15.21	18.941		
2,700.0	2,639.3	2,674.8	2,544.7	10.7	14.6	41.19	-528.3	554.3	302.5	286.6	15.81	19.126		
2,800.0	2,736.5	2,773.8	2,637.2	11.2	15.3	40.98	-552.0	580.0	316.8	300.4	16.42	19.297		
2,900.0	2,833.8	2,872.7	2,729.8	11.6	15.9	40.79	-575.7	605.7	331.1	314.1	17.02	19.455		
3,000.0	2,931.0	2,971.7	2,822.4	12.1	16.6	40.61	-599.4	631.4	345.4	327.8	17.62	19.603		
3,100.0	3,028.3	3,070.7	2,915.0	12.5	17.2	40.45	-623.2	657.1	359.7	341.5	18.22	19.742		
3,200.0	3,125.5	3,169.6	3,007.5	13.0	17.9	40.30	-646.9	682.8	374.1	355.2	18.82	19.871		
3,300.0	3,222.8	3,268.6	3,100.1	13.4	18.5	40.16	-670.6	708.5	388.4	369.0	19.43	19.993		
3,400.0	3,320.0	3,367.6	3,192.7	13.9	19.2	40.03	-694.3	734.3	402.7	382.7	20.03	20.107		
3,500.0	3,417.2	3,466.5	3,285.3	14.3	19.8	39.91	-718.1	760.0	417.1	396.4	20.63	20.214		
3,600.0	3,514.5	3,565.5	3,377.8	14.8	20.5	39.80	-741.8	785.7	431.4	410.2	21.24	20.316		
3,700.0	3,611.7	3,664.5	3,470.4	15.2	21.2	39.70	-765.5	811.4	445.7	423.9	21.84	20.412		
3,800.0	3,709.0	3,763.4	3,563.0	15.7	21.8	39.60	-789.2	837.1	460.1	437.6	22.44	20.502		
3,900.0	3,806.2	3,862.4	3,655.6	16.1	22.5	39.51	-813.0	862.8	474.4	451.4	23.04	20.588		
4,000.0	3,903.4	3,961.3	3,748.1	16.6	23.1	39.42	-836.7	888.5	488.8	465.1	23.65	20.670		
4,100.0	4,000.7	4,060.3	3,840.7	17.0	23.8	39.34	-860.4	914.2	503.1	478.9	24.25	20.747		
4,200.0	4,097.9	4,159.3	3,933.3	17.5	24.4	39.26	-884.1	939.9	517.4	492.6	24.85	20.821		
4,300.0	4,195.2	4,258.2	4,025.8	17.9	25.1	39.19	-907.9	965.6	531.8	506.3	25.46	20.891		
4,400.0	4,292.4	4,357.2	4,118.4	18.4	25.7	39.12	-931.6	991.4	546.1	520.1	26.06	20.958		
4,500.0	4,389.7	4,456.2	4,211.0	18.8	26.4	39.05	-955.3	1,017.1	560.5	533.8	26.66	21.022		
4,600.0	4,486.9	4,555.1	4,303.6	19.3	27.0	38.99	-979.0	1,042.8	574.8	547.6	27.26	21.083		
4,700.0	4,584.1	4,654.1	4,396.1	19.7	27.7	38.93	-1,002.8	1,068.5	589.2	561.3	27.87	21.142		
4,800.0	4,681.4	4,753.1	4,488.7	20.2	28.3	38.87	-1,026.5	1,094.2	603.5	575.1	28.47	21.198		
4,900.0	4,778.6	4,852.0	4,581.3	20.6	29.0	38.82	-1,050.2	1,119.9	617.9	588.8	29.07	21.251		
5,000.0	4,875.9	4,951.0	4,673.9	21.1	29.7	38.77	-1,073.9	1,145.6	632.2	602.5	29.68	21.303		

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Benjamin Fee 28-15A
Project:	Mamm Creek	TVD Reference:	WELL @ 5965.0ft (Original Well Elev)
Reference Site:	K28NW Pad	MD Reference:	WELL @ 5965.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Benjamin Fee 28-15A	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													Offset Site Error:	0.0 ft	
Survey Program: 0-MWD													Offset Well Error:		0.0 ft
Reference													Warning		
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			
5,100.0	4,973.1	5,049.9	4,766.4	21.5	30.3	38.72	-1,097.7	1,171.3	646.6	616.3	30.28	21.352			
5,200.0	5,070.3	5,148.9	4,859.0	22.0	31.0	38.67	-1,121.4	1,197.0	660.9	630.0	30.88	21.400			
5,300.0	5,167.6	5,247.9	4,951.6	22.4	31.6	38.63	-1,145.1	1,222.7	675.3	643.8	31.49	21.446			
5,400.0	5,264.8	5,346.8	5,044.2	22.9	32.3	38.58	-1,168.8	1,248.5	689.6	657.5	32.09	21.490			
5,500.0	5,362.1	5,445.8	5,136.7	23.3	32.9	38.54	-1,192.6	1,274.2	704.0	671.3	32.69	21.532			
5,600.0	5,459.3	5,544.8	5,229.3	23.8	33.6	38.50	-1,216.3	1,299.9	718.3	685.0	33.30	21.573			
5,700.0	5,556.6	5,643.7	5,321.9	24.2	34.2	38.46	-1,240.0	1,325.6	732.7	698.8	33.90	21.612			
5,800.0	5,653.8	5,742.7	5,414.5	24.7	34.9	38.43	-1,263.7	1,351.3	747.0	712.5	34.50	21.650			
5,900.0	5,751.0	5,861.9	5,526.4	25.1	35.6	38.42	-1,291.5	1,381.4	760.5	725.3	35.18	21.619			
5,983.0	5,831.8	5,970.9	5,630.1	25.5	36.2	38.55	-1,314.3	1,406.1	768.8	733.0	35.83	21.457			
6,000.0	5,848.3	5,993.2	5,651.5	25.6	36.3	38.61	-1,318.6	1,410.8	770.2	734.2	35.97	21.410			
6,100.0	5,946.1	6,125.2	5,778.9	26.0	36.9	38.91	-1,341.9	1,436.0	777.6	740.8	36.74	21.163			
6,200.0	6,044.5	6,257.6	5,908.2	26.3	37.5	39.18	-1,361.2	1,456.9	783.4	746.0	37.41	20.940			
6,300.0	6,143.5	6,390.3	6,039.0	26.6	37.9	39.40	-1,376.5	1,473.5	787.9	749.9	37.99	20.737			
6,400.0	6,242.9	6,523.3	6,171.0	26.8	38.2	39.58	-1,387.7	1,485.6	790.8	752.3	38.47	20.555			
6,500.0	6,342.6	6,656.5	6,303.7	26.9	38.4	39.71	-1,394.7	1,493.2	792.2	753.4	38.85	20.389			
6,600.0	6,442.5	6,789.6	6,436.8	27.0	38.5	39.81	-1,397.5	1,496.3	792.2	753.0	39.14	20.237			
6,657.5	6,500.0	6,852.9	6,500.0	27.1	38.5	158.54	-1,397.6	1,496.3	791.8	752.5	39.26	20.169			
6,700.0	6,542.5	6,895.4	6,542.5	27.1	38.5	158.54	-1,397.6	1,496.3	791.8	752.4	39.35	20.124			
6,800.0	6,642.5	6,995.4	6,642.5	27.2	38.6	158.54	-1,397.6	1,496.3	791.8	752.2	39.56	20.016			
6,900.0	6,742.5	7,095.4	6,742.5	27.3	38.6	158.54	-1,397.6	1,496.3	791.8	752.0	39.77	19.909			
7,000.0	6,842.5	7,195.4	6,842.5	27.3	38.7	158.54	-1,397.6	1,496.3	791.8	751.8	39.98	19.802			
7,100.0	6,942.5	7,295.4	6,942.5	27.4	38.7	158.54	-1,397.6	1,496.3	791.8	751.6	40.20	19.696			
7,200.0	7,042.5	7,395.4	7,042.5	27.5	38.8	158.54	-1,397.6	1,496.3	791.8	751.4	40.42	19.589			
7,300.0	7,142.5	7,495.4	7,142.5	27.6	38.9	158.54	-1,397.6	1,496.3	791.8	751.1	40.64	19.483			
7,400.0	7,242.5	7,595.4	7,242.5	27.7	38.9	158.54	-1,397.6	1,496.3	791.8	750.9	40.86	19.377			
7,500.0	7,342.5	7,695.4	7,342.5	27.7	39.0	158.54	-1,397.6	1,496.3	791.8	750.7	41.09	19.272			
7,600.0	7,442.5	7,795.4	7,442.5	27.8	39.0	158.54	-1,397.6	1,496.3	791.8	750.5	41.31	19.167			
7,700.0	7,542.5	7,895.4	7,542.5	27.9	39.1	158.54	-1,397.6	1,496.3	791.8	750.2	41.54	19.062			
7,800.0	7,642.5	7,995.4	7,642.5	28.0	39.2	158.54	-1,397.6	1,496.3	791.8	750.0	41.77	18.957			
7,900.0	7,742.5	8,095.4	7,742.5	28.1	39.2	158.54	-1,397.6	1,496.3	791.8	749.8	42.00	18.853			
8,000.0	7,842.5	8,195.4	7,842.5	28.2	39.3	158.54	-1,397.6	1,496.3	791.8	749.6	42.23	18.749			
8,100.0	7,942.5	8,295.4	7,942.5	28.2	39.4	158.54	-1,397.6	1,496.3	791.8	749.3	42.46	18.646			
8,200.0	8,042.5	8,395.4	8,042.5	28.3	39.4	158.54	-1,397.6	1,496.3	791.8	749.1	42.70	18.543			
8,300.0	8,142.5	8,495.4	8,142.5	28.4	39.5	158.54	-1,397.6	1,496.3	791.8	748.8	42.94	18.441			
8,400.0	8,242.5	8,595.4	8,242.5	28.5	39.5	158.54	-1,397.6	1,496.3	791.8	748.6	43.17	18.339			
8,500.0	8,342.5	8,695.4	8,342.5	28.6	39.6	158.54	-1,397.6	1,496.3	791.8	748.4	43.41	18.238			
8,600.0	8,442.5	8,795.4	8,442.5	28.7	39.7	158.54	-1,397.6	1,496.3	791.8	748.1	43.66	18.137			
8,682.5	8,525.0	8,877.9	8,525.0	28.8	39.7	158.54	-1,397.6	1,496.3	791.8	747.9	43.86	18.054			
8,700.0	8,542.5	8,895.4	8,542.5	28.8	39.7	158.54	-1,397.6	1,496.3	791.8	747.9	43.90	18.037			
8,800.0	8,642.5	8,995.4	8,642.5	28.9	39.8	158.54	-1,397.6	1,496.3	791.8	747.6	44.14	17.937			
8,900.0	8,742.5	9,095.4	8,742.5	29.0	39.9	158.54	-1,397.6	1,496.3	791.8	747.4	44.39	17.838			
8,982.5	8,825.0	9,177.9	8,825.0	29.0	39.9	158.54	-1,397.6	1,496.3	791.8	747.2	44.59	17.756			

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Benjamin Fee 28-15A
Project:	Mamm Creek	TVD Reference:	WELL @ 5965.0ft (Original Well Elev)
Reference Site:	K28NW Pad	MD Reference:	WELL @ 5965.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Benjamin Fee 28-15A	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													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	-103.28	-25.5	-108.0	111.0						
100.0	100.0	100.0	100.0	0.1	0.1	-103.28	-25.5	-108.0	111.0	110.7	0.27	407.537			
200.0	200.0	200.0	200.0	0.3	0.3	-103.28	-25.5	-108.0	111.0	110.3	0.62	178.584	CC, ES		
300.0	300.0	299.1	299.1	0.5	0.5	138.00	-27.2	-108.0	113.3	112.3	0.98	116.118			
400.0	399.6	397.9	397.7	0.7	0.7	137.96	-32.3	-108.0	120.3	119.0	1.36	88.358			
500.0	498.8	495.1	494.5	1.0	0.9	137.83	-40.8	-108.2	132.2	130.4	1.80	73.554			
600.0	597.1	589.8	588.4	1.4	1.2	137.34	-53.4	-109.6	150.2	147.9	2.32	64.778			
649.6	645.5	636.1	634.0	1.6	1.3	136.99	-61.1	-110.9	161.5	158.9	2.61	61.808			
700.0	694.5	682.7	679.8	1.8	1.5	136.70	-70.0	-112.5	174.1	171.2	2.92	59.526			
800.0	791.7	774.1	768.7	2.2	1.9	135.40	-90.4	-116.7	200.9	197.3	3.60	55.782			
900.0	889.0	863.7	854.9	2.7	2.3	133.51	-114.3	-122.2	230.4	226.1	4.34	53.095			
1,000.0	986.2	952.4	939.0	3.1	2.8	131.28	-141.7	-128.8	262.8	257.6	5.11	51.397			
1,100.0	1,083.4	1,046.1	1,027.4	3.5	3.4	129.20	-171.9	-136.3	296.3	290.4	5.92	50.037			
1,200.0	1,180.7	1,139.8	1,115.8	4.0	3.9	127.54	-202.0	-143.8	330.2	323.4	6.73	49.060			
1,300.0	1,277.9	1,233.5	1,204.2	4.4	4.5	126.18	-232.2	-151.3	364.2	356.7	7.54	48.332			
1,400.0	1,375.2	1,327.2	1,292.6	4.9	5.0	125.06	-262.4	-158.7	398.4	390.1	8.34	47.774			
1,500.0	1,472.4	1,420.9	1,381.0	5.3	5.6	124.12	-292.5	-166.2	432.7	423.6	9.14	47.337			
1,600.0	1,569.6	1,514.6	1,469.4	5.8	6.2	123.31	-322.7	-173.7	467.1	457.2	9.94	46.987			
1,700.0	1,666.9	1,608.3	1,557.8	6.2	6.7	122.61	-352.9	-181.2	501.6	490.8	10.74	46.703			
1,800.0	1,764.1	1,702.1	1,646.2	6.7	7.3	122.01	-383.1	-188.7	536.1	524.6	11.54	46.469			
1,900.0	1,861.4	1,795.8	1,734.6	7.1	7.9	121.47	-413.2	-196.1	570.7	558.3	12.33	46.273			
2,000.0	1,958.6	1,889.5	1,823.0	7.6	8.4	121.00	-443.4	-203.6	605.3	592.2	13.13	46.108			
2,100.0	2,055.9	1,983.2	1,911.4	8.0	9.0	120.58	-473.6	-211.1	639.9	626.0	13.92	45.966			
2,200.0	2,153.1	2,076.9	1,999.8	8.5	9.5	120.20	-503.8	-218.6	674.6	659.9	14.71	45.845			
2,300.0	2,250.3	2,170.6	2,088.2	8.9	10.1	119.86	-533.9	-226.1	709.3	693.8	15.51	45.739			
2,400.0	2,347.6	2,264.3	2,176.6	9.4	10.7	119.55	-564.1	-233.5	744.0	727.7	16.30	45.646			
2,500.0	2,444.8	2,358.0	2,265.0	9.8	11.2	119.27	-594.3	-241.0	778.7	761.6	17.09	45.565			
2,600.0	2,542.1	2,451.7	2,353.4	10.3	11.8	119.01	-624.5	-248.5	813.5	795.6	17.88	45.492	SF		

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Benjamin Fee 28-15A
Project:	Mamm Creek	TVD Reference:	WELL @ 5965.0ft (Original Well Elev)
Reference Site:	K28NW Pad	MD Reference:	WELL @ 5965.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Benjamin Fee 28-15A	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													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	-90.00	0.0	-116.0	116.0						
100.0	100.0	100.0	100.0	0.1	0.1	-90.00	0.0	-116.0	116.0	115.7	0.27	425.999			
200.0	200.0	200.0	200.0	0.3	0.3	-90.00	0.0	-116.0	116.0	115.4	0.62	186.674	CC, ES		
300.0	300.0	295.6	295.5	0.5	0.5	151.04	-1.6	-117.7	120.1	119.2	0.97	124.129			
400.0	399.6	390.1	389.8	0.7	0.7	150.35	-6.4	-122.9	132.5	131.2	1.34	99.232			
500.0	498.8	482.8	481.8	1.0	0.9	149.40	-14.1	-131.4	153.0	151.2	1.74	87.980			
600.0	597.1	572.8	570.4	1.4	1.3	148.36	-24.5	-142.7	181.3	179.1	2.19	82.852			
649.6	645.5	616.1	612.8	1.6	1.4	147.84	-30.6	-149.2	198.2	195.8	2.43	81.710			
700.0	694.5	659.4	655.0	1.8	1.6	147.55	-37.2	-156.5	216.7	214.0	2.69	80.694			
800.0	791.7	743.4	736.1	2.2	2.0	146.66	-52.0	-172.5	255.8	252.6	3.22	79.413			
900.0	889.0	824.6	813.6	2.7	2.5	145.54	-68.5	-190.5	298.0	294.3	3.78	78.800	SF		
1,000.0	986.2	900.0	884.4	3.1	3.0	144.38	-85.9	-209.4	343.4	339.0	4.35	78.964			
1,100.0	1,083.4	978.5	957.1	3.5	3.6	143.10	-105.9	-231.2	391.7	386.7	4.96	78.943			
1,200.0	1,180.7	1,051.0	1,023.1	4.0	4.1	141.91	-126.2	-253.3	442.9	437.3	5.57	79.532			
1,300.0	1,277.9	1,120.4	1,085.2	4.4	4.7	140.77	-147.2	-276.1	496.9	490.7	6.18	80.459			
1,400.0	1,375.2	1,186.8	1,143.5	4.9	5.3	139.69	-168.7	-299.5	553.6	546.8	6.78	81.594			
1,500.0	1,472.4	1,263.9	1,210.3	5.3	6.1	138.54	-194.8	-327.9	612.1	604.6	7.44	82.318			
1,600.0	1,569.6	1,344.4	1,279.9	5.8	6.8	137.54	-222.1	-357.5	670.7	662.6	8.10	82.855			
1,700.0	1,666.9	1,424.8	1,349.6	6.2	7.6	136.69	-249.3	-387.1	729.5	720.8	8.75	83.362			
1,800.0	1,764.1	1,505.3	1,419.3	6.7	8.3	135.97	-276.5	-416.8	788.4	779.0	9.40	83.837			

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Benjamin Fee 28-15A
Project:	Mamm Creek	TVD Reference:	WELL @ 5965.0ft (Original Well Elev)
Reference Site:	K28NW Pad	MD Reference:	WELL @ 5965.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Benjamin Fee 28-15A	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													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	0.00	17.1	0.0	17.1						
100.0	100.0	100.0	100.0	0.1	0.1	0.00	17.1	0.0	17.1	16.8	0.27	62.876			
200.0	200.0	200.0	200.0	0.3	0.3	0.00	17.1	0.0	17.1	16.5	0.62	27.552 CC, ES			
300.0	300.0	299.9	299.9	0.5	0.5	-117.68	17.2	2.6	18.5	17.5	0.99	18.772			
400.0	399.6	399.8	399.4	0.7	0.7	-115.36	17.6	10.4	22.7	21.2	1.42	15.978			
500.0	498.8	499.3	498.1	1.0	1.0	-112.91	18.2	23.4	29.6	27.6	1.97	15.040			
600.0	597.1	598.7	595.9	1.4	1.3	-111.31	19.0	41.1	39.3	36.7	2.65	14.840			
649.6	645.5	648.0	644.2	1.6	1.5	-112.32	19.4	50.5	44.9	41.9	3.01	14.922			
700.0	694.5	698.0	693.4	1.8	1.7	-113.93	19.8	60.0	50.9	47.5	3.38	15.066			
800.0	791.7	797.3	790.8	2.2	2.1	-116.21	20.7	78.8	62.9	58.7	4.12	15.263			
900.0	889.0	896.5	888.3	2.7	2.4	-117.76	21.5	97.6	74.9	70.0	4.86	15.398			
1,000.0	986.2	995.8	985.7	3.1	2.8	-118.88	22.4	116.5	86.9	81.3	5.61	15.497			
1,100.0	1,083.4	1,095.0	1,083.2	3.5	3.2	-119.73	23.2	135.3	99.0	92.7	6.36	15.572			
1,200.0	1,180.7	1,194.3	1,180.6	4.0	3.5	-120.39	24.1	154.2	111.1	104.0	7.11	15.632			
1,300.0	1,277.9	1,293.5	1,278.1	4.4	3.9	-120.92	24.9	173.0	123.2	115.4	7.86	15.681			
1,400.0	1,375.2	1,392.8	1,375.5	4.9	4.3	-121.36	25.8	191.8	135.4	126.8	8.61	15.721			
1,500.0	1,472.4	1,492.1	1,473.0	5.3	4.7	-121.72	26.6	210.7	147.5	138.1	9.36	15.755			
1,600.0	1,569.6	1,591.3	1,570.4	5.8	5.0	-122.03	27.5	229.5	159.6	149.5	10.11	15.784			
1,700.0	1,666.9	1,690.6	1,667.9	6.2	5.4	-122.30	28.3	248.3	171.8	160.9	10.87	15.809			
1,800.0	1,764.1	1,789.8	1,765.3	6.7	5.8	-122.53	29.2	267.2	183.9	172.3	11.62	15.830			
1,900.0	1,861.4	1,889.1	1,862.8	7.1	6.2	-122.73	30.0	286.0	196.1	183.7	12.37	15.850			
2,000.0	1,958.6	1,988.3	1,960.2	7.6	6.5	-122.91	30.9	304.8	208.2	195.1	13.12	15.867			
2,100.0	2,055.9	2,087.6	2,057.7	8.0	6.9	-123.07	31.7	323.7	220.4	206.5	13.87	15.882			
2,200.0	2,153.1	2,186.9	2,155.1	8.5	7.3	-123.21	32.6	342.5	232.5	217.9	14.63	15.895			
2,300.0	2,250.3	2,286.1	2,252.6	8.9	7.7	-123.34	33.4	361.4	244.7	229.3	15.38	15.908			
2,400.0	2,347.6	2,385.4	2,350.0	9.4	8.0	-123.46	34.3	380.2	256.8	240.7	16.13	15.919			
2,500.0	2,444.8	2,484.6	2,447.5	9.8	8.4	-123.56	35.1	399.0	269.0	252.1	16.88	15.929			
2,600.0	2,542.1	2,583.9	2,544.9	10.3	8.8	-123.66	36.0	417.9	281.1	263.5	17.64	15.939			
2,700.0	2,639.3	2,683.1	2,642.4	10.7	9.2	-123.75	36.8	436.7	293.3	274.9	18.39	15.947			
2,800.0	2,736.5	2,782.4	2,739.8	11.2	9.6	-123.83	37.7	455.5	305.4	286.3	19.14	15.955			
2,900.0	2,833.8	2,881.7	2,837.3	11.6	9.9	-123.90	38.5	474.4	317.6	297.7	19.90	15.962			
3,000.0	2,931.0	2,980.9	2,934.7	12.1	10.3	-123.97	39.4	493.2	329.7	309.1	20.65	15.969			
3,100.0	3,028.3	3,080.2	3,032.2	12.5	10.7	-124.04	40.2	512.1	341.9	320.5	21.40	15.976			
3,200.0	3,125.5	3,179.4	3,129.6	13.0	11.1	-124.10	41.1	530.9	354.1	331.9	22.15	15.982			
3,300.0	3,222.8	3,278.7	3,227.1	13.4	11.4	-124.16	41.9	549.7	366.2	343.3	22.91	15.987			
3,400.0	3,320.0	3,378.0	3,324.5	13.9	11.8	-124.21	42.8	568.6	378.4	354.7	23.66	15.992			
3,500.0	3,417.2	3,477.2	3,422.0	14.3	12.2	-124.26	43.6	587.4	390.5	366.1	24.41	15.997			
3,600.0	3,514.5	3,576.5	3,519.4	14.8	12.6	-124.30	44.5	606.2	402.7	377.5	25.17	16.002			
3,700.0	3,611.7	3,675.7	3,616.9	15.2	12.9	-124.35	45.3	625.1	414.8	388.9	25.92	16.006			
3,800.0	3,709.0	3,775.0	3,714.3	15.7	13.3	-124.39	46.2	643.9	427.0	400.3	26.67	16.010			
3,900.0	3,806.2	3,874.2	3,811.8	16.1	13.7	-124.43	47.0	662.7	439.2	411.7	27.42	16.014			
4,000.0	3,903.4	3,973.5	3,909.2	16.6	14.1	-124.46	47.9	681.6	451.3	423.2	28.18	16.018			
4,100.0	4,000.7	4,072.8	4,006.7	17.0	14.5	-124.50	48.7	700.4	463.5	434.6	28.93	16.021			
4,200.0	4,097.9	4,172.0	4,104.1	17.5	14.8	-124.53	49.6	719.3	475.6	446.0	29.68	16.024			
4,300.0	4,195.2	4,271.3	4,201.6	17.9	15.2	-124.56	50.5	738.1	487.8	457.4	30.44	16.027			
4,400.0	4,292.4	4,370.5	4,299.0	18.4	15.6	-124.59	51.3	756.9	500.0	468.8	31.19	16.030			
4,500.0	4,389.7	4,469.8	4,396.5	18.8	16.0	-124.62	52.2	775.8	512.1	480.2	31.94	16.033			
4,600.0	4,486.9	4,569.0	4,493.9	19.3	16.3	-124.65	53.0	794.6	524.3	491.6	32.69	16.036			
4,700.0	4,584.1	4,668.3	4,591.4	19.7	16.7	-124.68	53.9	813.4	536.5	503.0	33.45	16.039			
4,800.0	4,681.4	4,767.6	4,688.8	20.2	17.1	-124.70	54.7	832.3	548.6	514.4	34.20	16.041			
4,900.0	4,778.6	4,866.8	4,786.3	20.6	17.5	-124.72	55.6	851.1	560.8	525.8	34.95	16.043			
5,000.0	4,875.9	4,966.1	4,883.7	21.1	17.8	-124.75	56.4	869.9	572.9	537.2	35.71	16.046			

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Benjamin Fee 28-15A
Project:	Mamm Creek	TVD Reference:	WELL @ 5965.0ft (Original Well Elev)
Reference Site:	K28NW Pad	MD Reference:	WELL @ 5965.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Benjamin Fee 28-15A	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													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		
5,100.0	4,973.1	5,065.3	4,981.2	21.5	18.2	-124.77	57.3	888.8	585.1	548.6	36.46	16.048			
5,200.0	5,070.3	5,164.6	5,078.6	22.0	18.6	-124.79	58.1	907.6	597.3	560.0	37.21	16.050			
5,300.0	5,167.6	5,263.8	5,176.1	22.4	19.0	-124.81	59.0	926.5	609.4	571.5	37.97	16.052			
5,400.0	5,264.8	5,363.1	5,273.5	22.9	19.4	-124.83	59.8	945.3	621.6	582.9	38.72	16.054			
5,500.0	5,362.1	5,462.4	5,371.0	23.3	19.7	-124.85	60.7	964.1	633.7	594.3	39.47	16.056			
5,600.0	5,459.3	5,561.6	5,468.4	23.8	20.1	-124.86	61.5	983.0	645.9	605.7	40.22	16.057			
5,700.0	5,556.6	5,660.9	5,565.9	24.2	20.5	-124.88	62.4	1,001.8	658.1	617.1	40.98	16.059			
5,800.0	5,653.8	5,760.1	5,663.3	24.7	20.9	-124.90	63.2	1,020.6	670.2	628.5	41.73	16.061			
5,900.0	5,751.0	5,859.4	5,760.8	25.1	21.2	-124.91	64.1	1,039.5	682.4	639.9	42.48	16.062			
5,983.0	5,831.8	5,941.8	5,841.7	25.5	21.6	-124.93	64.8	1,055.1	692.5	649.4	43.11	16.064			
6,000.0	5,848.3	5,958.6	5,858.2	25.6	21.6	-124.96	64.9	1,058.3	694.5	651.3	43.24	16.063			
6,100.0	5,946.1	6,058.0	5,955.8	26.0	22.0	-125.00	65.8	1,077.2	705.3	661.4	43.98	16.039			
6,200.0	6,044.5	6,156.6	6,052.6	26.3	22.3	-124.83	66.6	1,095.3	714.2	669.6	44.68	15.987			
6,300.0	6,143.5	6,254.7	6,149.6	26.6	22.6	-124.66	67.3	1,110.3	721.4	676.1	45.27	15.935			
6,400.0	6,242.9	6,353.0	6,247.2	26.8	22.9	-124.50	67.8	1,122.0	726.8	681.0	45.76	15.883			
6,500.0	6,342.6	6,451.5	6,345.3	26.9	23.0	-124.37	68.2	1,130.4	730.4	684.3	46.13	15.832			
6,600.0	6,442.5	6,550.1	6,443.8	27.0	23.2	-124.24	68.4	1,135.4	732.2	685.8	46.41	15.779			
6,657.5	6,500.0	6,606.8	6,500.5	27.1	23.2	-5.48	68.5	1,136.7	732.5	686.0	46.53	15.743			
6,700.0	6,542.5	6,648.9	6,542.5	27.1	23.3	-5.46	68.5	1,137.0	732.5	685.9	46.61	15.716			
6,800.0	6,642.5	6,748.9	6,642.5	27.2	23.4	-5.46	68.5	1,137.0	732.5	685.7	46.78	15.657			
6,900.0	6,742.5	6,848.9	6,742.5	27.3	23.5	-5.46	68.5	1,137.0	732.5	685.5	46.96	15.599			
7,000.0	6,842.5	6,948.9	6,842.5	27.3	23.5	-5.46	68.5	1,137.0	732.5	685.3	47.14	15.539			
7,100.0	6,942.5	7,048.9	6,942.5	27.4	23.6	-5.46	68.5	1,137.0	732.5	685.2	47.32	15.480			
7,200.0	7,042.5	7,148.9	7,042.5	27.5	23.7	-5.46	68.5	1,137.0	732.5	685.0	47.50	15.421			
7,300.0	7,142.5	7,248.9	7,142.5	27.6	23.8	-5.46	68.5	1,137.0	732.5	684.8	47.68	15.361			
7,400.0	7,242.5	7,348.9	7,242.5	27.7	23.9	-5.46	68.5	1,137.0	732.5	684.6	47.87	15.301			
7,500.0	7,342.5	7,448.9	7,342.5	27.7	24.0	-5.46	68.5	1,137.0	732.5	684.4	48.06	15.241			
7,600.0	7,442.5	7,548.9	7,442.5	27.8	24.1	-5.46	68.5	1,137.0	732.5	684.2	48.25	15.181			
7,700.0	7,542.5	7,648.9	7,542.5	27.9	24.2	-5.46	68.5	1,137.0	732.5	684.0	48.44	15.121			
7,800.0	7,642.5	7,748.9	7,642.5	28.0	24.3	-5.46	68.5	1,137.0	732.5	683.8	48.63	15.061			
7,900.0	7,742.5	7,848.9	7,742.5	28.1	24.4	-5.46	68.5	1,137.0	732.5	683.7	48.83	15.001			
8,000.0	7,842.5	7,948.9	7,842.5	28.2	24.5	-5.46	68.5	1,137.0	732.5	683.5	49.03	14.941			
8,100.0	7,942.5	8,048.9	7,942.5	28.2	24.6	-5.46	68.5	1,137.0	732.5	683.3	49.22	14.881			
8,200.0	8,042.5	8,148.9	8,042.5	28.3	24.7	-5.46	68.5	1,137.0	732.5	683.1	49.42	14.820			
8,300.0	8,142.5	8,248.9	8,142.5	28.4	24.8	-5.46	68.5	1,137.0	732.5	682.9	49.63	14.760			
8,400.0	8,242.5	8,348.9	8,242.5	28.5	24.9	-5.46	68.5	1,137.0	732.5	682.6	49.83	14.700			
8,500.0	8,342.5	8,448.9	8,342.5	28.6	25.0	-5.46	68.5	1,137.0	732.5	682.4	50.03	14.639			
8,600.0	8,442.5	8,548.9	8,442.5	28.7	25.1	-5.46	68.5	1,137.0	732.5	682.2	50.24	14.579			
8,682.5	8,525.0	8,631.3	8,525.0	28.8	25.2	-5.46	68.5	1,137.0	732.5	682.1	50.41	14.530			
8,700.0	8,542.5	8,648.9	8,542.5	28.8	25.2	-5.46	68.5	1,137.0	732.5	682.0	50.45	14.519			
8,800.0	8,642.5	8,748.9	8,642.5	28.9	25.3	-5.46	68.5	1,137.0	732.5	681.8	50.66	14.459			
8,900.0	8,742.5	8,848.9	8,742.5	29.0	25.4	-5.46	68.5	1,137.0	732.5	681.6	50.87	14.399			
8,982.5	8,825.0	8,931.3	8,825.0	29.0	25.5	-5.46	68.5	1,137.0	732.5	681.4	51.05	14.349 SF			

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Benjamin Fee 28-15A
Project:	Mamm Creek	TVD Reference:	WELL @ 5965.0ft (Original Well Elev)
Reference Site:	K28NW Pad	MD Reference:	WELL @ 5965.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Benjamin Fee 28-15A	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													Offset Site Error:	0.0 ft	
Survey Program: 0-MWD													Offset Well Error:		0.0 ft
K28NW Pad - Benjamin Fee 28-11A - DD - Plan #2															
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	-17.80	25.5	-8.2	26.8						
100.0	100.0	100.0	100.0	0.1	0.1	-17.80	25.5	-8.2	26.8	26.5	0.27	98.351			
200.0	200.0	200.0	200.0	0.3	0.3	-17.80	25.5	-8.2	26.8	26.2	0.62	43.097 CC, ES			
300.0	300.0	298.7	298.7	0.5	0.5	-142.90	26.8	-10.4	30.8	29.8	0.97	31.647 SF			
400.0	399.6	395.8	395.5	0.7	0.7	-154.45	30.6	-16.8	44.3	43.0	1.33	33.358			
500.0	498.8	492.4	491.5	1.0	0.9	-162.80	36.1	-26.1	66.9	65.3	1.67	40.123			
600.0	597.1	588.1	586.5	1.4	1.2	-167.58	41.6	-35.3	95.3	93.3	2.00	47.720			
649.6	645.5	634.9	633.1	1.6	1.3	-169.19	44.2	-39.9	111.3	109.2	2.16	51.641			
700.0	694.5	682.3	680.2	1.8	1.4	-170.55	47.0	-44.4	128.3	126.0	2.32	55.229			
800.0	791.7	776.3	773.6	2.2	1.7	-172.39	52.3	-53.5	162.1	159.5	2.66	61.055			
900.0	889.0	870.3	867.0	2.7	1.9	-173.60	57.7	-62.6	196.0	193.1	2.99	65.615			
1,000.0	986.2	964.3	960.4	3.1	2.2	-174.46	63.1	-71.7	230.0	226.7	3.32	69.275			
1,100.0	1,083.4	1,058.3	1,053.8	3.5	2.4	-175.09	68.5	-80.8	264.0	260.4	3.65	72.275			
1,200.0	1,180.7	1,152.3	1,147.2	4.0	2.6	-175.58	73.9	-89.9	298.0	294.1	3.99	74.778			
1,300.0	1,277.9	1,246.3	1,240.6	4.4	2.9	-175.97	79.2	-99.0	332.1	327.8	4.32	76.896			
1,400.0	1,375.2	1,340.3	1,334.0	4.9	3.1	-176.28	84.6	-108.1	366.1	361.5	4.65	78.713			
1,500.0	1,472.4	1,434.4	1,427.4	5.3	3.4	-176.55	90.0	-117.2	400.2	395.2	4.98	80.287			
1,600.0	1,569.6	1,528.4	1,520.9	5.8	3.6	-176.77	95.4	-126.3	434.3	428.9	5.32	81.664			
1,700.0	1,666.9	1,622.4	1,614.3	6.2	3.9	-176.96	100.7	-135.4	468.3	462.7	5.65	82.878			
1,800.0	1,764.1	1,716.4	1,707.7	6.7	4.1	-177.12	106.1	-144.4	502.4	496.4	5.98	83.958			
1,900.0	1,861.4	1,810.4	1,801.1	7.1	4.4	-177.26	111.5	-153.5	536.5	530.2	6.32	84.924			
2,000.0	1,958.6	1,904.4	1,894.5	7.6	4.6	-177.39	116.9	-162.6	570.6	563.9	6.65	85.792			
2,100.0	2,055.9	1,998.4	1,987.9	8.0	4.9	-177.50	122.3	-171.7	604.7	597.7	6.98	86.578			
2,200.0	2,153.1	2,092.4	2,081.3	8.5	5.1	-177.60	127.6	-180.8	638.7	631.4	7.32	87.292			
2,300.0	2,250.3	2,186.4	2,174.7	8.9	5.4	-177.69	133.0	-189.9	672.8	665.2	7.65	87.944			
2,400.0	2,347.6	2,280.4	2,268.1	9.4	5.6	-177.77	138.4	-199.0	706.9	698.9	7.98	88.542			
2,500.0	2,444.8	2,374.4	2,361.6	9.8	5.8	-177.85	143.8	-208.1	741.0	732.7	8.32	89.091			
2,600.0	2,542.1	2,468.4	2,455.0	10.3	6.1	-177.91	149.2	-217.2	775.1	766.4	8.65	89.598			
2,700.0	2,639.3	2,562.4	2,548.4	10.7	6.3	-177.97	154.5	-226.3	809.2	800.2	8.98	90.068			

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Benjamin Fee 28-15A
Project:	Mamm Creek	TVD Reference:	WELL @ 5965.0ft (Original Well Elev)
Reference Site:	K28NW Pad	MD Reference:	WELL @ 5965.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Benjamin Fee 28-15A	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													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	-10.87	42.6	-8.2	43.4						
100.0	100.0	100.0	100.0	0.1	0.1	-10.87	42.6	-8.2	43.4	43.1	0.27	159.381			
200.0	200.0	200.0	200.0	0.3	0.3	-10.87	42.6	-8.2	43.4	42.8	0.62	69.841	CC, ES		
300.0	300.0	297.8	297.8	0.5	0.5	-133.43	44.5	-9.8	47.4	46.4	0.97	48.721			
400.0	399.6	394.2	393.8	0.7	0.7	-141.67	50.0	-14.7	60.3	58.9	1.33	45.185	SF		
500.0	498.8	487.6	486.5	1.0	1.0	-149.33	58.8	-22.5	83.2	81.5	1.69	49.273			
600.0	597.1	582.2	580.0	1.4	1.2	-154.92	69.4	-31.9	114.0	111.9	2.04	55.893			
649.6	645.5	628.5	625.8	1.6	1.4	-156.98	74.6	-36.5	131.2	129.0	2.21	59.411			
700.0	694.5	675.3	672.1	1.8	1.5	-158.85	79.8	-41.2	149.4	147.0	2.38	62.706			
800.0	791.7	768.1	763.9	2.2	1.8	-161.48	90.2	-50.4	185.8	183.1	2.73	68.129			
900.0	889.0	861.0	855.7	2.7	2.1	-163.25	100.6	-59.7	222.5	219.4	3.07	72.418			
1,000.0	986.2	953.8	947.5	3.1	2.4	-164.53	111.0	-68.9	259.3	255.9	3.42	75.880			
1,100.0	1,083.4	1,046.7	1,039.3	3.5	2.7	-165.48	121.5	-78.1	296.1	292.4	3.76	78.728			
1,200.0	1,180.7	1,139.6	1,131.1	4.0	3.0	-166.22	131.9	-87.4	333.1	329.0	4.11	81.107			
1,300.0	1,277.9	1,232.4	1,222.9	4.4	3.2	-166.82	142.3	-96.6	370.0	365.6	4.45	83.123			
1,400.0	1,375.2	1,325.3	1,314.7	4.9	3.5	-167.31	152.7	-105.8	407.0	402.2	4.80	84.853			
1,500.0	1,472.4	1,418.1	1,406.5	5.3	3.8	-167.71	163.1	-115.1	444.1	438.9	5.14	86.351			
1,600.0	1,569.6	1,511.0	1,498.3	5.8	4.1	-168.06	173.5	-124.3	481.1	475.6	5.49	87.662			
1,700.0	1,666.9	1,603.8	1,590.1	6.2	4.4	-168.35	183.9	-133.5	518.1	512.3	5.83	88.819			
1,800.0	1,764.1	1,696.7	1,681.9	6.7	4.7	-168.61	194.3	-142.8	555.2	549.0	6.18	89.846			
1,900.0	1,861.4	1,789.5	1,773.7	7.1	5.0	-168.83	204.7	-152.0	592.3	585.7	6.53	90.764			
2,000.0	1,958.6	1,882.4	1,865.5	7.6	5.3	-169.03	215.1	-161.2	629.3	622.5	6.87	91.590			
2,100.0	2,055.9	1,975.2	1,957.4	8.0	5.6	-169.20	225.5	-170.5	666.4	659.2	7.22	92.337			
2,200.0	2,153.1	2,068.1	2,049.2	8.5	5.9	-169.36	235.9	-179.7	703.5	695.9	7.56	93.016			
2,300.0	2,250.3	2,160.9	2,141.0	8.9	6.2	-169.50	246.4	-188.9	740.6	732.7	7.91	93.635			
2,400.0	2,347.6	2,253.8	2,232.8	9.4	6.5	-169.63	256.8	-198.2	777.7	769.4	8.26	94.202			
2,500.0	2,444.8	2,346.7	2,324.6	9.8	6.7	-169.74	267.2	-207.4	814.8	806.2	8.60	94.724			

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Benjamin Fee 28-15A
Project:	Mamm Creek	TVD Reference:	WELL @ 5965.0ft (Original Well Elev)
Reference Site:	K28NW Pad	MD Reference:	WELL @ 5965.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Benjamin Fee 28-15A	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													Offset Site Error:	0.0 ft	
Survey Program: 0-MWD													Offset Well Error:		0.0 ft
K28NW Pad - Benjamin Fee 28-6C - DD - Plan #2															
Reference		Offset		Semi Major Axis			Offset Wellbore Centre		Distance		Total	Separation	Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	+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	0.00	51.0	0.0	51.0						
100.0	100.0	100.0	100.0	0.1	0.1	0.00	51.0	0.0	51.0	50.7	0.27	187.290			
200.0	200.0	200.0	200.0	0.3	0.3	0.00	51.0	0.0	51.0	50.4	0.62	82.071 CC, ES			
300.0	300.0	297.5	297.5	0.5	0.5	-122.36	53.1	-1.3	54.5	53.6	0.97	56.002			
400.0	399.6	393.6	393.3	0.7	0.7	-130.70	59.3	-5.2	66.2	64.9	1.34	49.247 SF			
500.0	498.8	486.9	485.9	1.0	1.0	-139.15	69.2	-11.4	87.6	85.9	1.72	50.961			
600.0	597.1	576.2	573.8	1.4	1.3	-145.50	82.3	-19.5	119.1	117.0	2.09	57.086			
649.6	645.5	621.8	618.5	1.6	1.4	-148.02	89.9	-24.3	137.7	135.4	2.27	60.747			
700.0	694.5	667.9	663.7	1.8	1.6	-150.35	97.6	-29.0	157.4	155.0	2.45	64.244			
800.0	791.7	759.3	753.3	2.2	1.9	-153.59	112.7	-38.5	197.0	194.2	2.81	70.022			
900.0	889.0	850.6	842.9	2.7	2.3	-155.75	127.9	-48.0	236.9	233.7	3.18	74.571			
1,000.0	986.2	942.0	932.5	3.1	2.6	-157.29	143.1	-57.4	277.0	273.5	3.54	78.218			
1,100.0	1,083.4	1,033.4	1,022.1	3.5	3.0	-158.44	158.3	-66.9	317.2	313.3	3.91	81.192			
1,200.0	1,180.7	1,124.8	1,111.7	4.0	3.3	-159.34	173.4	-76.4	357.6	353.3	4.27	83.658			
1,300.0	1,277.9	1,216.2	1,201.4	4.4	3.7	-160.05	188.6	-85.8	398.0	393.3	4.64	85.732			
1,400.0	1,375.2	1,307.5	1,291.0	4.9	4.0	-160.63	203.8	-95.3	438.4	433.4	5.01	87.498			
1,500.0	1,472.4	1,398.9	1,380.6	5.3	4.4	-161.11	219.0	-104.8	478.8	473.5	5.38	89.020			
1,600.0	1,569.6	1,490.3	1,470.2	5.8	4.7	-161.52	234.1	-114.2	519.3	513.6	5.75	90.343			
1,700.0	1,666.9	1,581.7	1,559.8	6.2	5.1	-161.87	249.3	-123.7	559.8	553.7	6.12	91.504			
1,800.0	1,764.1	1,673.1	1,649.4	6.7	5.4	-162.17	264.5	-133.2	600.3	593.8	6.49	92.531			
1,900.0	1,861.4	1,764.5	1,739.1	7.1	5.8	-162.44	279.7	-142.6	640.9	634.0	6.86	93.445			
2,000.0	1,958.6	1,855.8	1,828.7	7.6	6.1	-162.67	294.8	-152.1	681.4	674.2	7.23	94.265			
2,100.0	2,055.9	1,947.2	1,918.3	8.0	6.5	-162.87	310.0	-161.5	721.9	714.3	7.60	95.003			
2,200.0	2,153.1	2,038.6	2,007.9	8.5	6.8	-163.06	325.2	-171.0	762.5	754.5	7.97	95.671			
2,300.0	2,250.3	2,130.0	2,097.5	8.9	7.2	-163.22	340.4	-180.5	803.1	794.7	8.34	96.279			

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Benjamin Fee 28-15A
Project:	Mamm Creek	TVD Reference:	WELL @ 5965.0ft (Original Well Elev)
Reference Site:	K28NW Pad	MD Reference:	WELL @ 5965.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Benjamin Fee 28-15A	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													Offset Site Error:	0.0 ft	
Survey Program: 0-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	0.00	34.2	0.0	34.2						
100.0	100.0	100.0	100.0	0.1	0.1	0.00	34.2	0.0	34.2	34.0	0.27	125.752			
200.0	200.0	200.0	200.0	0.3	0.3	0.00	34.2	0.0	34.2	33.6	0.62	55.105 CC, ES			
300.0	300.0	299.3	299.2	0.5	0.5	-118.47	35.2	2.4	36.5	35.5	0.98	37.110			
400.0	399.6	398.3	397.9	0.7	0.7	-117.90	38.1	9.5	43.2	41.8	1.40	30.731			
500.0	498.8	496.7	495.5	1.0	1.0	-117.20	42.9	21.3	54.3	52.4	1.93	28.137			
600.0	597.1	594.2	591.4	1.4	1.3	-116.52	49.5	37.6	69.8	67.2	2.58	27.000			
649.6	645.5	642.2	638.3	1.6	1.5	-116.20	53.4	47.2	79.0	76.1	2.96	26.743			
700.0	694.5	690.9	685.5	1.8	1.8	-115.80	57.8	58.1	89.2	85.9	3.34	26.683			
800.0	791.7	788.7	780.3	2.2	2.2	-114.85	67.0	80.7	109.8	105.7	4.14	26.508			
900.0	889.0	886.6	875.1	2.7	2.7	-114.20	76.1	103.2	130.4	125.4	4.95	26.326			
1,000.0	986.2	984.4	969.8	3.1	3.1	-113.73	85.3	125.8	151.0	145.2	5.77	26.162			
1,100.0	1,083.4	1,082.3	1,064.6	3.5	3.6	-113.37	94.5	148.3	171.5	165.0	6.59	26.022			
1,200.0	1,180.7	1,180.1	1,159.4	4.0	4.0	-113.09	103.6	170.9	192.1	184.7	7.42	25.902			
1,300.0	1,277.9	1,278.0	1,254.2	4.4	4.5	-112.86	112.8	193.4	212.7	204.5	8.25	25.800			
1,400.0	1,375.2	1,375.9	1,348.9	4.9	5.0	-112.67	121.9	216.0	233.4	224.3	9.08	25.712			
1,500.0	1,472.4	1,473.7	1,443.7	5.3	5.4	-112.52	131.1	238.6	254.0	244.1	9.91	25.636			
1,600.0	1,569.6	1,571.6	1,538.5	5.8	5.9	-112.38	140.3	261.1	274.6	263.8	10.74	25.570			
1,700.0	1,666.9	1,669.4	1,633.3	6.2	6.4	-112.27	149.4	283.7	295.2	283.6	11.57	25.512			
1,800.0	1,764.1	1,767.3	1,728.0	6.7	6.8	-112.17	158.6	306.2	315.8	303.4	12.40	25.461			
1,900.0	1,861.4	1,865.1	1,822.8	7.1	7.3	-112.08	167.7	328.8	336.4	323.2	13.24	25.415			
2,000.0	1,958.6	1,963.0	1,917.6	7.6	7.8	-112.00	176.9	351.3	357.0	342.9	14.07	25.374			
2,100.0	2,055.9	2,060.8	2,012.4	8.0	8.2	-111.93	186.1	373.9	377.6	362.7	14.90	25.337			
2,200.0	2,153.1	2,158.7	2,107.1	8.5	8.7	-111.87	195.2	396.5	398.2	382.5	15.74	25.304			
2,300.0	2,250.3	2,256.5	2,201.9	8.9	9.2	-111.82	204.4	419.0	418.8	402.3	16.57	25.274			
2,400.0	2,347.6	2,354.4	2,296.7	9.4	9.6	-111.77	213.5	441.6	439.5	422.1	17.41	25.246			
2,500.0	2,444.8	2,452.2	2,391.5	9.8	10.1	-111.72	222.7	464.1	460.1	441.8	18.24	25.221			
2,600.0	2,542.1	2,550.1	2,486.2	10.3	10.6	-111.68	231.9	486.7	480.7	461.6	19.08	25.197			
2,700.0	2,639.3	2,647.9	2,581.0	10.7	11.0	-111.64	241.0	509.2	501.3	481.4	19.91	25.176			
2,800.0	2,736.5	2,745.8	2,675.8	11.2	11.5	-111.60	250.2	531.8	521.9	501.2	20.75	25.156			
2,900.0	2,833.8	2,843.6	2,770.6	11.6	12.0	-111.57	259.3	554.4	542.5	521.0	21.58	25.138			
3,000.0	2,931.0	2,941.5	2,865.3	12.1	12.4	-111.54	268.5	576.9	563.1	540.7	22.42	25.121			
3,100.0	3,028.3	3,039.3	2,960.1	12.5	12.9	-111.51	277.6	599.5	583.8	560.5	23.25	25.105			
3,200.0	3,125.5	3,137.2	3,054.9	13.0	13.4	-111.49	286.8	622.0	604.4	580.3	24.09	25.090			
3,300.0	3,222.8	3,235.0	3,149.7	13.4	13.8	-111.46	296.0	644.6	625.0	600.1	24.92	25.076			
3,400.0	3,320.0	3,332.9	3,244.4	13.9	14.3	-111.44	305.1	667.1	645.6	619.9	25.76	25.063			
3,500.0	3,417.2	3,430.7	3,339.2	14.3	14.8	-111.42	314.3	689.7	666.2	639.6	26.60	25.050			
3,600.0	3,514.5	3,528.6	3,434.0	14.8	15.2	-111.40	323.4	712.3	686.8	659.4	27.43	25.039			
3,700.0	3,611.7	3,626.4	3,528.8	15.2	15.7	-111.38	332.6	734.8	707.5	679.2	28.27	25.028			
3,800.0	3,709.0	3,724.3	3,623.5	15.7	16.2	-111.36	341.8	757.4	728.1	699.0	29.10	25.017			
3,900.0	3,806.2	3,822.1	3,718.3	16.1	16.7	-111.34	350.9	779.9	748.7	718.8	29.94	25.007			
4,000.0	3,903.4	3,920.0	3,813.1	16.6	17.1	-111.33	360.1	802.5	769.3	738.5	30.77	24.998			
4,100.0	4,000.7	4,017.8	3,907.9	17.0	17.6	-111.31	369.2	825.0	789.9	758.3	31.61	24.989			
4,200.0	4,097.9	4,115.7	4,002.6	17.5	18.1	-111.30	378.4	847.6	810.5	778.1	32.45	24.981 SF			

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Benjamin Fee 28-15A
Project:	Mamm Creek	TVD Reference:	WELL @ 5965.0ft (Original Well Elev)
Reference Site:	K28NW Pad	MD Reference:	WELL @ 5965.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Benjamin Fee 28-15A	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													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	Warning									
0.0	0.0	0.0	0.0	0.0	0.0	-85.37	8.7	-108.0	108.3													
100.0	100.0	100.0	100.0	0.1	0.1	-85.37	8.7	-108.0	108.3	108.1	0.27	397.930										
200.0	200.0	200.0	200.0	0.3	0.3	-85.37	8.7	-108.0	108.3	107.7	0.62	174.374	CC, ES									
300.0	300.0	300.0	300.0	0.5	0.5	156.45	8.7	-108.0	110.7	109.8	0.97	114.043										
400.0	399.6	399.6	399.6	0.7	0.7	157.89	8.7	-108.0	118.0	116.7	1.32	89.130										
500.0	498.8	505.8	505.7	1.0	0.9	160.30	8.7	-105.1	127.5	125.8	1.69	75.403										
600.0	597.1	611.4	611.0	1.4	1.1	163.32	8.3	-96.6	136.8	134.8	2.06	66.574										
649.6	645.5	663.3	662.6	1.6	1.2	164.44	6.7	-91.0	141.9	139.7	2.23	63.515										
700.0	694.5	716.3	715.1	1.8	1.3	165.21	3.8	-84.6	146.8	144.4	2.42	60.574										
800.0	791.7	822.0	819.3	2.2	1.6	165.49	-5.7	-69.5	153.5	150.7	2.81	54.527										
900.0	889.0	928.1	922.8	2.7	2.1	164.25	-20.2	-51.4	156.2	153.0	3.26	47.986										
1,000.0	986.2	1,033.8	1,024.6	3.1	2.6	161.50	-39.5	-30.4	155.2	151.4	3.80	40.828										
1,100.0	1,083.4	1,138.5	1,123.7	3.5	3.2	157.07	-63.3	-6.8	151.1	146.6	4.55	33.233										
1,200.0	1,180.7	1,241.6	1,219.5	4.0	3.9	150.64	-91.4	19.2	145.0	139.4	5.62	25.810										
1,300.0	1,277.9	1,341.6	1,310.4	4.4	4.6	142.10	-122.5	46.7	138.7	131.6	7.07	19.617										
1,400.0	1,375.2	1,438.9	1,398.4	4.9	5.3	132.79	-153.8	73.9	135.4	126.7	8.74	15.497										
1,434.3	1,408.5	1,472.2	1,428.6	5.0	5.6	129.54	-164.4	83.3	135.2	125.8	9.33	14.483										
1,500.0	1,472.4	1,536.2	1,486.4	5.3	6.1	123.31	-185.0	101.2	136.0	125.5	10.48	12.985										
1,600.0	1,569.6	1,633.5	1,574.5	5.8	6.8	114.15	-216.2	128.5	140.5	128.3	12.13	11.578										
1,700.0	1,666.9	1,730.8	1,662.5	6.2	7.6	105.73	-247.4	155.8	148.4	134.8	13.61	10.905										
1,800.0	1,764.1	1,828.1	1,750.5	6.7	8.3	98.27	-278.6	183.0	159.3	144.5	14.88	10.710	SF									
1,900.0	1,861.4	1,925.4	1,838.5	7.1	9.1	91.82	-309.9	210.3	172.7	156.7	15.95	10.824										
2,000.0	1,958.6	2,022.7	1,926.6	7.6	9.9	86.33	-341.1	237.6	187.9	171.0	16.87	11.136										
2,100.0	2,055.9	2,120.0	2,014.6	8.0	10.6	81.67	-372.3	264.8	204.6	186.9	17.68	11.572										
2,200.0	2,153.1	2,217.3	2,102.6	8.5	11.4	77.72	-403.5	292.1	222.4	204.0	18.40	12.084										
2,300.0	2,250.3	2,314.6	2,190.7	8.9	12.2	74.36	-434.7	319.4	241.1	222.1	19.08	12.639										
2,400.0	2,347.6	2,411.9	2,278.7	9.4	12.9	71.48	-466.0	346.7	260.6	240.8	19.72	13.216										
2,500.0	2,444.8	2,509.2	2,366.7	9.8	13.7	69.00	-497.2	373.9	280.5	260.2	20.33	13.799										
2,600.0	2,542.1	2,606.5	2,454.8	10.3	14.4	66.86	-528.4	401.2	300.9	280.0	20.93	14.380										
2,700.0	2,639.3	2,703.8	2,542.8	10.7	15.2	64.98	-559.6	428.5	321.7	300.2	21.52	14.951										
2,800.0	2,736.5	2,801.1	2,630.8	11.2	16.0	63.33	-590.8	455.8	342.8	320.7	22.10	15.509										
2,900.0	2,833.8	2,898.4	2,718.8	11.6	16.7	61.87	-622.1	483.0	364.1	341.4	22.68	16.051										
3,000.0	2,931.0	2,995.7	2,806.9	12.1	17.5	60.57	-653.3	510.3	385.6	362.3	23.26	16.576										
3,100.0	3,028.3	3,093.0	2,894.9	12.5	18.3	59.41	-684.5	537.6	407.3	383.4	23.84	17.082										
3,200.0	3,125.5	3,190.3	2,982.9	13.0	19.1	58.37	-715.7	564.9	429.1	404.7	24.42	17.570										
3,300.0	3,222.8	3,287.6	3,071.0	13.4	19.8	57.42	-746.9	592.1	451.1	426.1	25.01	18.039										
3,400.0	3,320.0	3,384.9	3,159.0	13.9	20.6	56.57	-778.2	619.4	473.1	447.5	25.59	18.490										
3,500.0	3,417.2	3,482.2	3,247.0	14.3	21.4	55.79	-809.4	646.7	495.3	469.1	26.17	18.923										
3,600.0	3,514.5	3,579.5	3,335.1	14.8	22.1	55.07	-840.6	674.0	517.5	490.7	26.76	19.339										
3,700.0	3,611.7	3,676.8	3,423.1	15.2	22.9	54.42	-871.8	701.2	539.8	512.5	27.35	19.739										
3,800.0	3,709.0	3,774.1	3,511.1	15.7	23.7	53.82	-903.0	728.5	562.2	534.2	27.94	20.123										
3,900.0	3,806.2	3,871.4	3,599.2	16.1	24.4	53.26	-934.3	755.8	584.6	556.0	28.53	20.492										
4,000.0	3,903.4	3,968.7	3,687.2	16.6	25.2	52.74	-965.5	783.0	607.0	577.9	29.12	20.846										
4,100.0	4,000.7	4,066.1	3,775.2	17.0	26.0	52.26	-996.7	810.3	629.5	599.8	29.71	21.187										
4,200.0	4,097.9	4,163.4	3,863.2	17.5	26.7	51.82	-1,027.9	837.6	652.1	621.8	30.31	21.515										
4,300.0	4,195.2	4,260.7	3,951.3	17.9	27.5	51.40	-1,059.1	864.9	674.7	643.8	30.91	21.830										
4,400.0	4,292.4	4,358.0	4,039.3	18.4	28.3	51.01	-1,090.4	892.1	697.3	665.8	31.50	22.134										
4,500.0	4,389.7	4,455.3	4,127.3	18.8	29.0	50.65	-1,121.6	919.4	719.9	687.8	32.10	22.426										
4,600.0	4,486.9	4,552.6	4,215.4	19.3	29.8	50.30	-1,152.8	946.7	742.6	709.9	32.70	22.708										
4,700.0	4,584.1	4,649.9	4,303.4	19.7	30.6	49.98	-1,184.0	974.0	765.3	732.0	33.30	22.979										
4,800.0	4,681.4	4,747.2	4,391.4	20.2	31.4	49.68	-1,215.2	1,001.2	788.0	754.1	33.91	23.241										
4,900.0	4,778.6	4,844.5	4,479.5	20.6	32.1	49.39	-1,246.5	1,028.5	810.7	776.2	34.51	23.494										

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Benjamin Fee 28-15A
Project:	Mamm Creek	TVD Reference:	WELL @ 5965.0ft (Original Well Elev)
Reference Site:	K28NW Pad	MD Reference:	WELL @ 5965.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Benjamin Fee 28-15A	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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Benjamin Fee 28-15A
Project:	Mamm Creek	TVD Reference:	WELL @ 5965.0ft (Original Well Elev)
Reference Site:	K28NW Pad	MD Reference:	WELL @ 5965.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Benjamin Fee 28-15A	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													Offset Site Error:	0.0 ft	
Survey Program: 140-MWD													Offset Well Error:		0.0 ft
K28NW Pad - GMR 28-7D Existing - DD - Schlumberger Surveys															
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	-112.57	-44.9	-108.0	116.9						
100.0	100.0	101.9	101.9	0.1	0.2	-112.23	-43.9	-107.5	116.1	115.9	0.29	397.886			
200.0	200.0	204.0	204.0	0.3	0.3	-111.33	-41.3	-105.8	113.7	113.0	0.65	175.887			
300.0	300.0	308.5	308.2	0.5	0.6	132.23	-37.4	-101.4	110.1	109.1	1.00	109.922			
400.0	399.6	410.9	410.3	0.7	0.8	137.07	-31.6	-93.7	106.7	105.4	1.39	76.764			
450.5	449.8	461.5	460.5	0.9	0.9	140.45	-28.2	-89.2	106.1	104.5	1.61	65.975	CC, ES		
500.0	498.8	510.5	509.1	1.0	1.1	144.60	-24.0	-84.9	106.8	105.0	1.82	58.634			
600.0	597.1	612.1	609.7	1.4	1.4	154.66	-13.7	-74.5	112.0	109.7	2.29	48.819			
649.6	645.5	661.0	657.9	1.6	1.6	159.81	-8.1	-68.6	116.8	114.2	2.54	46.015			
700.0	694.5	710.3	706.4	1.8	1.7	164.99	-1.9	-62.3	122.9	120.1	2.80	43.952			
800.0	791.7	807.1	801.2	2.2	2.1	174.71	12.6	-49.0	137.7	134.3	3.36	40.985			
900.0	889.0	903.5	894.9	2.7	2.6	-176.44	29.5	-34.1	155.6	151.6	4.00	38.857			
1,000.0	986.2	997.8	986.0	3.1	3.0	-168.76	48.4	-18.5	177.1	172.3	4.73	37.408			
1,100.0	1,083.4	1,093.3	1,077.3	3.5	3.6	-161.77	69.6	-0.4	201.1	195.5	5.57	36.105			
1,200.0	1,180.7	1,186.6	1,165.7	4.0	4.1	-155.71	92.2	19.0	227.7	221.2	6.47	35.219			
1,300.0	1,277.9	1,281.0	1,254.5	4.4	4.7	-150.37	115.9	40.4	256.2	248.8	7.42	34.531			
1,400.0	1,375.2	1,374.2	1,341.6	4.9	5.3	-145.78	140.0	63.1	286.3	278.0	8.35	34.296	SF		
1,500.0	1,472.4	1,466.1	1,427.9	5.3	5.9	-142.27	163.6	84.6	318.0	308.8	9.22	34.498			
1,600.0	1,569.6	1,560.8	1,516.8	5.8	6.5	-139.38	187.7	106.3	350.6	340.4	10.12	34.625			
1,700.0	1,666.9	1,654.8	1,604.8	6.2	7.1	-136.78	211.7	129.2	383.4	372.4	11.01	34.829			
1,800.0	1,764.1	1,747.8	1,691.9	6.7	7.7	-134.69	235.2	151.4	416.9	405.0	11.86	35.159			
1,900.0	1,861.4	1,840.1	1,778.8	7.1	8.3	-133.05	258.5	172.5	450.9	438.2	12.68	35.556			
2,000.0	1,958.6	1,932.6	1,865.7	7.6	8.9	-131.63	282.0	193.5	485.3	471.8	13.53	35.877			
2,100.0	2,055.9	2,025.2	1,952.1	8.0	9.5	-130.18	306.0	216.4	520.1	505.8	14.38	36.174			
2,200.0	2,153.1	2,118.9	2,039.6	8.5	10.1	-128.88	330.2	239.6	555.2	540.0	15.22	36.476			
2,300.0	2,250.3	2,211.2	2,125.9	8.9	10.7	-127.77	354.1	262.2	590.5	574.4	16.06	36.775			
2,400.0	2,347.6	2,305.1	2,213.6	9.4	11.3	-126.79	378.3	285.1	626.0	609.1	16.86	37.121			
2,500.0	2,444.8	2,400.6	2,303.4	9.8	11.9	-126.04	402.6	306.9	661.3	643.6	17.66	37.453			
2,600.0	2,542.1	2,497.0	2,394.5	10.3	12.5	-125.50	426.5	327.5	696.3	677.9	18.45	37.748			
2,700.0	2,639.3	2,593.9	2,486.3	10.7	13.1	-125.06	450.0	347.7	731.0	711.7	19.24	38.002			
2,800.0	2,736.5	2,691.2	2,578.7	11.2	13.6	-124.69	473.2	367.8	765.2	745.2	20.03	38.209			
2,900.0	2,833.8	2,784.2	2,667.0	11.6	14.2	-124.35	495.0	387.1	799.2	778.4	20.81	38.398			

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

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Benjamin Fee 28-15A
Project:	Mamm Creek	TVD Reference:	WELL @ 5965.0ft (Original Well Elev)
Reference Site:	K28NW Pad	MD Reference:	WELL @ 5965.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Benjamin Fee 28-15A	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													Offset Site Error:	0.0 ft		
Survey Program: 270-MWD													K28NW Pad - GMU 28-14D Existing - Schlumberger Surveys - Schlumberger Surveys		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	-123.32	-82.3	-125.2	149.9							
100.0	100.0	100.1	100.1	0.1	0.2	-123.30	-82.3	-125.2	149.8	149.5	0.30	505.029				
200.0	200.0	200.2	200.2	0.3	0.3	-123.24	-82.1	-125.2	149.7	149.1	0.63	236.997				
206.0	206.0	206.2	206.2	0.3	0.3	118.06	-82.1	-125.2	149.7	149.1	0.65	229.617	CC, ES			
300.0	300.0	300.1	300.1	0.5	0.5	118.98	-81.8	-125.2	150.8	149.8	0.98	154.375				
400.0	399.6	398.3	398.3	0.7	0.7	121.26	-82.2	-125.2	155.0	153.6	1.36	114.300				
500.0	498.8	495.1	495.1	1.0	0.8	124.73	-83.3	-126.6	163.9	162.1	1.77	92.521				
600.0	597.1	592.2	592.2	1.4	1.0	128.78	-85.4	-128.3	177.4	175.2	2.23	79.726				
649.6	645.5	640.0	639.9	1.6	1.1	130.74	-87.2	-129.1	186.0	183.5	2.46	75.687				
700.0	694.5	686.8	686.7	1.8	1.2	132.67	-89.5	-130.0	195.7	193.0	2.69	72.716				
800.0	791.7	780.5	780.1	2.2	1.4	135.73	-95.5	-133.0	217.0	213.8	3.15	68.815				
900.0	889.0	874.4	873.6	2.7	1.6	138.10	-102.4	-137.0	240.0	236.4	3.61	66.460				
1,000.0	986.2	964.5	963.3	3.1	1.8	139.98	-109.4	-142.4	265.1	261.0	4.07	65.211				
1,100.0	1,083.4	1,051.7	1,049.8	3.5	2.0	141.17	-118.2	-149.8	293.2	288.7	4.53	64.731				
1,200.0	1,180.7	1,137.3	1,134.1	4.0	2.3	141.82	-128.8	-159.4	324.4	319.3	5.01	64.698				
1,300.0	1,277.9	1,223.5	1,218.5	4.4	2.6	142.05	-141.7	-171.3	358.2	352.7	5.53	64.826				
1,400.0	1,375.2	1,313.6	1,306.2	4.9	2.9	141.93	-157.3	-184.6	393.4	387.3	6.08	64.667				
1,500.0	1,472.4	1,401.3	1,391.1	5.3	3.3	141.48	-175.0	-198.1	429.6	423.0	6.68	64.363	SF			
1,600.0	1,569.6	1,484.2	1,470.8	5.8	3.7	140.98	-192.9	-212.2	467.5	460.3	7.26	64.363				
1,700.0	1,666.9	1,568.8	1,551.8	6.2	4.2	140.54	-211.5	-228.2	507.3	499.5	7.85	64.602				
1,800.0	1,764.1	1,660.4	1,639.5	6.7	4.6	140.20	-231.0	-246.1	547.6	539.2	8.45	64.774				
1,900.0	1,861.4	1,751.1	1,726.4	7.1	5.1	140.01	-249.5	-264.0	587.9	578.9	9.05	64.938				
2,000.0	1,958.6	1,838.5	1,810.1	7.6	5.5	139.81	-267.7	-281.5	628.6	619.0	9.66	65.060				
2,100.0	2,055.9	1,925.7	1,893.3	8.0	6.0	139.56	-286.7	-299.4	669.9	659.6	10.27	65.220				
2,200.0	2,153.1	2,014.6	1,978.0	8.5	6.5	139.29	-306.6	-317.9	711.6	700.7	10.90	65.308				
2,300.0	2,250.3	2,103.0	2,062.0	8.9	7.0	139.03	-326.6	-336.4	753.6	742.0	11.52	65.430				
2,400.0	2,347.6	2,191.4	2,146.2	9.4	7.5	138.88	-345.8	-355.5	795.8	783.7	12.09	65.837				

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Benjamin Fee 28-15A
Project:	Mamm Creek	TVD Reference:	WELL @ 5965.0ft (Original Well Elev)
Reference Site:	K28NW Pad	MD Reference:	WELL @ 5965.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Benjamin Fee 28-15A	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													Offset Site Error:	0.0 ft		
Survey Program: 348-MWD													SWSW S27-T6S-R93W (M27NW Pad) - GMR 28-10D (M27NW) Existing - DD - DD		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)						
4,900.0	4,778.6	5,890.8	5,522.4	20.6	36.8	-48.28	-288.9	1,658.7	802.0	766.9	35.07	22.866				
5,000.0	4,875.9	5,969.5	5,597.6	21.1	37.2	-50.30	-284.3	1,636.0	760.9	723.9	37.03	20.548				
5,100.0	4,973.1	6,052.3	5,676.9	21.5	37.7	-52.61	-279.3	1,613.0	721.9	682.7	39.22	18.407				
5,200.0	5,070.3	6,124.4	5,746.3	22.0	38.0	-54.78	-274.8	1,593.9	685.4	644.1	41.27	16.606				
5,300.0	5,167.6	6,208.7	5,827.9	22.4	38.4	-57.45	-269.9	1,572.9	651.5	607.8	43.68	14.917				
5,400.0	5,264.8	6,294.8	5,911.3	22.9	38.8	-60.31	-266.0	1,551.9	619.5	573.3	46.16	13.419				
5,500.0	5,362.1	6,374.5	5,988.8	23.3	39.2	-63.10	-262.7	1,533.9	590.4	541.9	48.53	12.165				
5,600.0	5,459.3	6,461.3	6,073.6	23.8	39.5	-66.29	-259.3	1,515.5	564.3	513.2	51.09	11.044				
5,700.0	5,556.6	6,545.1	6,155.6	24.2	39.9	-69.52	-256.3	1,498.6	541.0	487.4	53.57	10.098				
5,800.0	5,653.8	6,631.5	6,240.3	24.7	40.2	-73.07	-252.5	1,482.1	521.2	465.1	56.12	9.288				
5,900.0	5,751.0	6,719.7	6,326.9	25.1	40.5	-76.86	-248.7	1,465.9	504.6	446.0	58.61	8.609				
5,983.0	5,831.8	6,793.5	6,399.6	25.5	40.8	-80.11	-245.6	1,453.1	493.4	432.8	60.57	8.145				
6,000.0	5,848.3	6,810.3	6,416.1	25.6	40.8	-80.81	-244.9	1,450.2	491.4	430.4	60.97	8.059				
6,100.0	5,946.1	6,907.0	6,511.4	26.0	41.1	-84.64	-242.2	1,434.2	480.7	417.7	62.99	7.631				
6,200.0	6,044.5	7,001.9	6,605.0	26.3	41.4	-88.15	-240.1	1,418.8	472.3	407.7	64.64	7.307				
6,300.0	6,143.5	7,095.3	6,697.3	26.6	41.7	-91.21	-238.5	1,404.7	466.1	400.2	65.92	7.072				
6,400.0	6,242.9	7,193.9	6,795.1	26.8	42.0	-93.90	-237.4	1,391.7	461.7	394.8	66.90	6.901				
6,500.0	6,342.6	7,293.4	6,893.9	26.9	42.2	-96.03	-237.8	1,379.9	457.1	389.5	67.62	6.760				
6,600.0	6,442.5	7,390.3	6,990.2	27.0	42.4	-97.51	-238.4	1,370.2	453.1	385.0	68.09	6.655				
6,657.5	6,500.0	7,446.8	7,046.6	27.1	42.5	20.65	-239.1	1,365.5	450.9	382.6	68.28	6.603				
6,700.0	6,542.5	7,489.7	7,089.4	27.1	42.6	20.28	-239.7	1,362.3	449.2	380.8	68.42	6.566				
6,800.0	6,642.5	7,590.6	7,190.0	27.2	42.7	19.46	-241.3	1,354.9	445.2	376.4	68.72	6.478				
6,900.0	6,742.5	7,688.5	7,287.6	27.3	42.9	18.73	-243.1	1,348.3	441.3	372.3	69.00	6.395				
7,000.0	6,842.5	7,787.4	7,386.3	27.3	43.0	18.08	-244.8	1,342.5	437.8	368.5	69.25	6.322				
7,100.0	6,942.5	7,886.9	7,485.7	27.4	43.2	17.48	-246.5	1,337.1	434.5	365.0	69.49	6.252				
7,200.0	7,042.5	7,986.8	7,585.4	27.5	43.3	16.86	-248.2	1,331.6	431.2	361.5	69.72	6.185				
7,300.0	7,142.5	8,086.8	7,685.2	27.6	43.4	16.26	-250.0	1,326.5	428.0	358.1	69.92	6.121				
7,400.0	7,242.5	8,186.8	7,785.1	27.7	43.5	15.72	-252.0	1,321.7	424.8	354.7	70.12	6.058				
7,500.0	7,342.5	8,286.8	7,885.0	27.7	43.6	15.22	-254.1	1,317.3	421.6	351.3	70.32	5.996				
7,600.0	7,442.5	8,386.9	7,985.0	27.8	43.7	14.77	-256.3	1,313.3	418.4	347.9	70.51	5.934				
7,700.0	7,542.5	8,487.5	8,085.5	27.9	43.8	14.37	-258.8	1,309.6	415.1	344.4	70.70	5.872				
7,800.0	7,642.5	8,588.2	8,186.1	28.0	43.9	13.96	-261.4	1,305.9	411.7	340.8	70.89	5.808				
7,900.0	7,742.5	8,689.0	8,286.8	28.1	44.1	13.56	-264.3	1,302.2	408.0	337.0	71.07	5.741				
8,000.0	7,842.5	8,789.8	8,387.5	28.2	44.2	13.15	-267.4	1,298.6	404.2	332.9	71.25	5.673				
8,100.0	7,942.5	8,890.5	8,488.1	28.2	44.3	12.75	-270.7	1,294.9	400.2	328.7	71.44	5.601				
8,200.0	8,042.5	8,991.3	8,588.7	28.3	44.4	12.34	-274.3	1,291.2	395.9	324.3	71.62	5.528				
8,300.0	8,142.5	9,092.0	8,689.3	28.4	44.5	11.93	-278.1	1,287.5	391.5	319.7	71.80	5.452				
8,400.0	8,242.5	9,192.7	8,789.8	28.5	44.6	11.52	-282.1	1,283.8	386.9	314.9	71.99	5.374				
8,500.0	8,342.5	9,293.4	8,890.4	28.6	44.7	11.11	-286.3	1,280.2	382.0	309.9	72.17	5.294				
8,535.9	8,378.4	9,310.5	8,907.4	28.6	44.7	11.04	-287.0	1,279.6	380.7	308.5	72.22	5.272 CC, ES, SF				
8,600.0	8,442.5	9,310.5	8,907.4	28.7	44.7	11.04	-287.0	1,279.6	386.1	313.8	72.28	5.342				
8,682.5	8,525.0	9,310.5	8,907.4	28.8	44.7	11.04	-287.0	1,279.6	408.0	335.6	72.35	5.639				
8,700.0	8,542.5	9,310.5	8,907.4	28.8	44.7	11.04	-287.0	1,279.6	414.6	342.2	72.37	5.729				
8,800.0	8,642.5	9,310.5	8,907.4	28.9	44.7	11.04	-287.0	1,279.6	463.4	390.9	72.47	6.394				
8,900.0	8,742.5	9,310.5	8,907.4	29.0	44.7	11.04	-287.0	1,279.6	526.8	454.3	72.56	7.260				
8,982.5	8,825.0	9,310.5	8,907.4	29.0	44.7	11.04	-287.0	1,279.6	586.9	514.2	72.64	8.079				

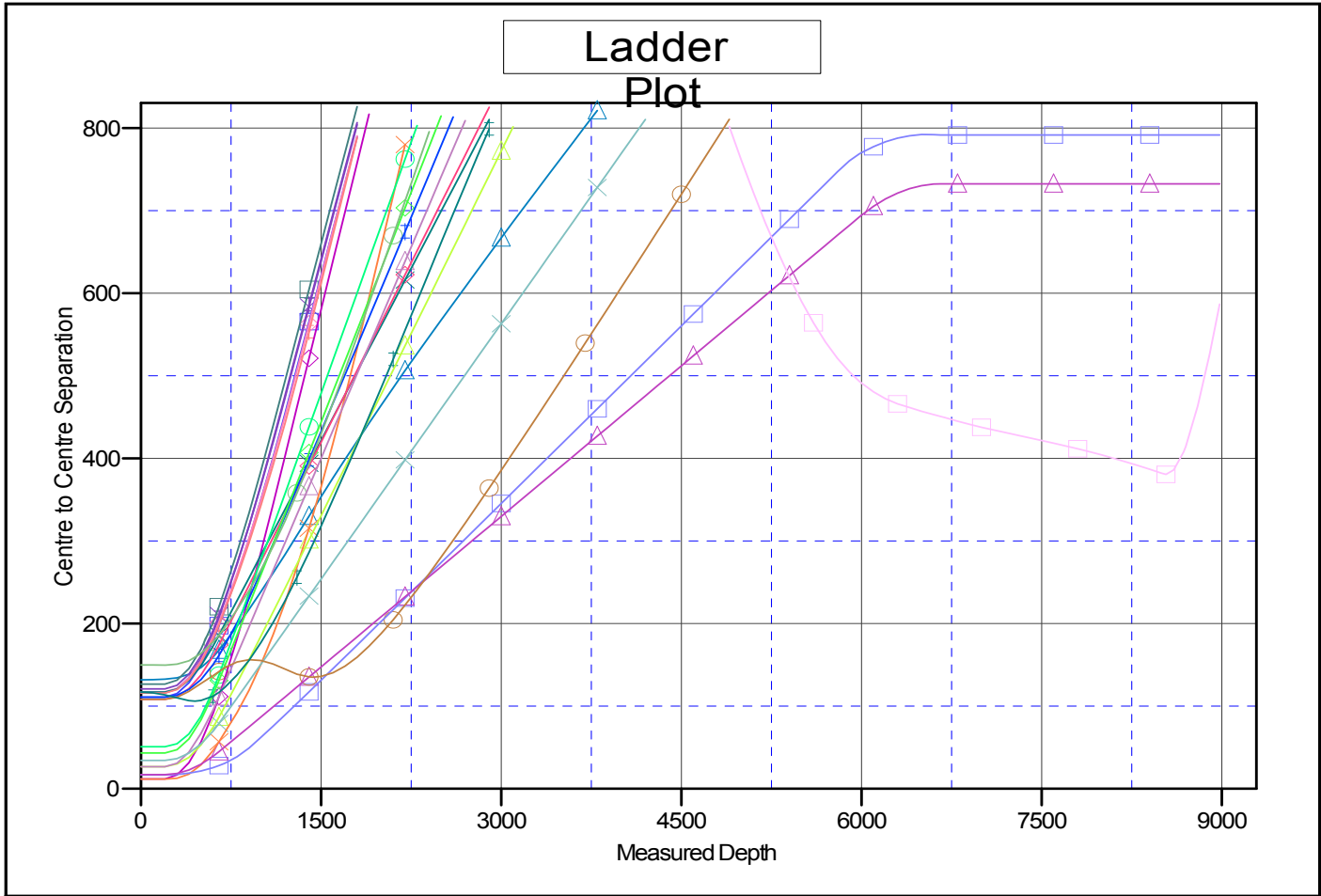
CC - Min centre to center distance or convergent point, SF - min separation factor, ES - min ellipse separation

Cathedral Energy Services

Anticollision Report

Company: EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference: Well Benjamin Fee 28-15A	
Project: Mamm Creek	TVD Reference: WELL @ 5965.0ft (Original Well Elev)	
Reference Site: K28NW Pad	MD Reference: WELL @ 5965.0ft (Original Well Elev)	
Site Error: 0.0ft	North Reference: True	
Reference Well: Benjamin Fee 28-15A	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 @ 5965.0ft (Original Well Elev) Coordinates are relative to: Benjamin Fee 28-15A
 Offset Depths are relative to Offset Datum Coordinate System is US State Plane 1983, Colorado Central Zone
 Central Meridian is -105.500000 ° Grid Convergence at Surface is: -1.44°



LEGEND

Existing, Existing V0	Benjamin Federal 28-14B1, DD, Plan #2 V0	Benjamin Fee 28-11B, DD, Plan #2 V0
2, DD, Plan #2 V0	Benjamin Federal 28-14B2, DD, Plan #2 V0	Benjamin Fee 28-6C, DD, Plan #2 V0
1, DD, Plan #2 V0	Benjamin Federal 28-14C, DD, Plan #2 V0	Benjamin Fee 28-9B, DD, Plan #2 V0
2, DD, Plan #2 V0	Benjamin Federal 28-16C, DD, Plan #2 V0	Benjamin Fee 33-1B, DD, Plan #2 V0
1, DD, Plan #2 V0	Benjamin Federal 33-3B, DD, Plan #2 V0	GMR 28-7D Existing, DD, Schlumberger
2, DD, Plan #2 V0	Benjamin Federal 33-4B, DD, Plan #2 V0	GMU 28-14D Existing, Schlumberger St
1, DD, Plan #2 V0	Benjamin Fee 28-10D2, DD, Plan #2 V0	GMR 28-10D (M27NW) Existing, DD, DC
2, DD, Plan #2 V0	Benjamin Fee 28-11A, DD, Plan #2 V0	

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