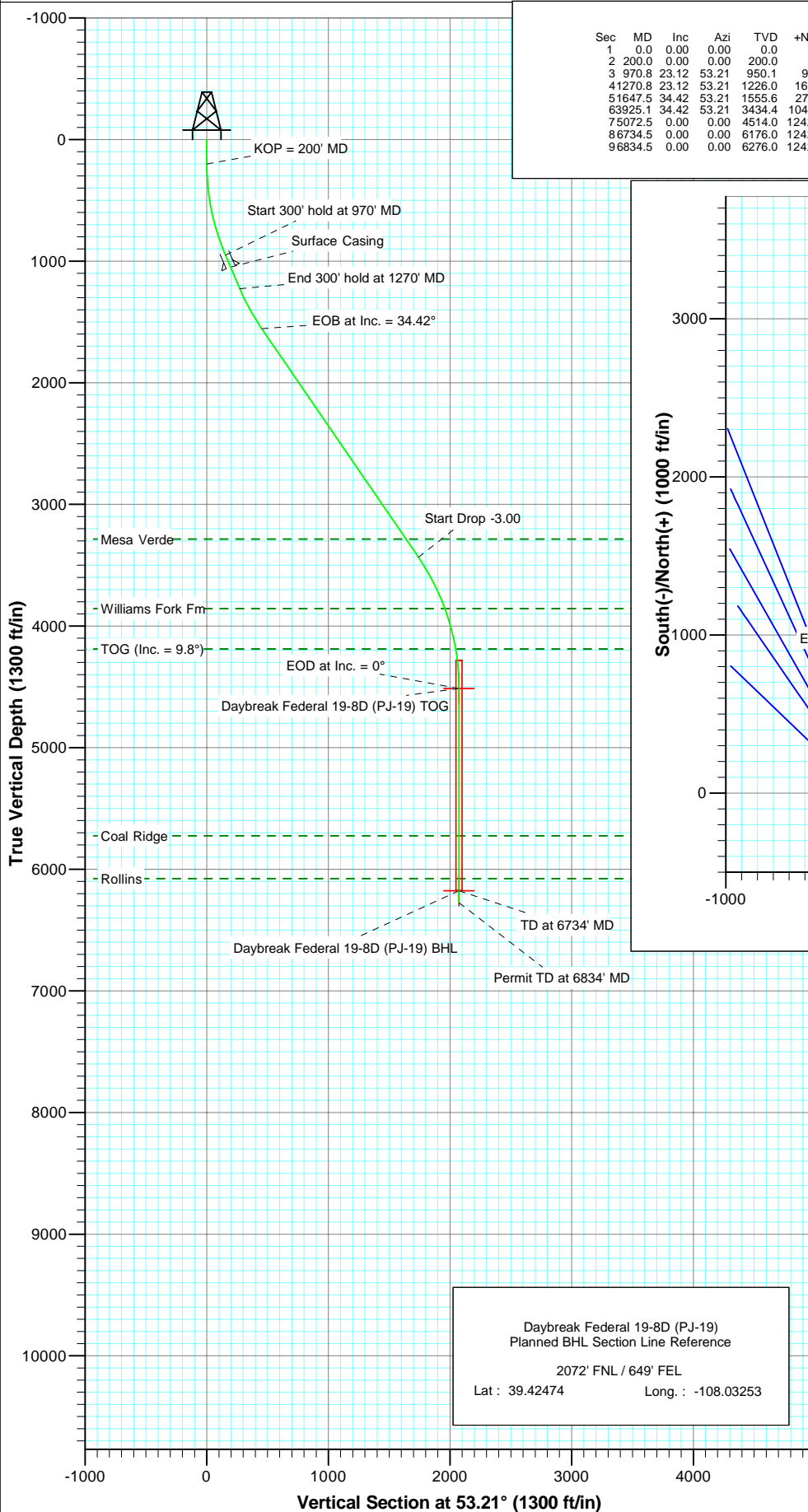
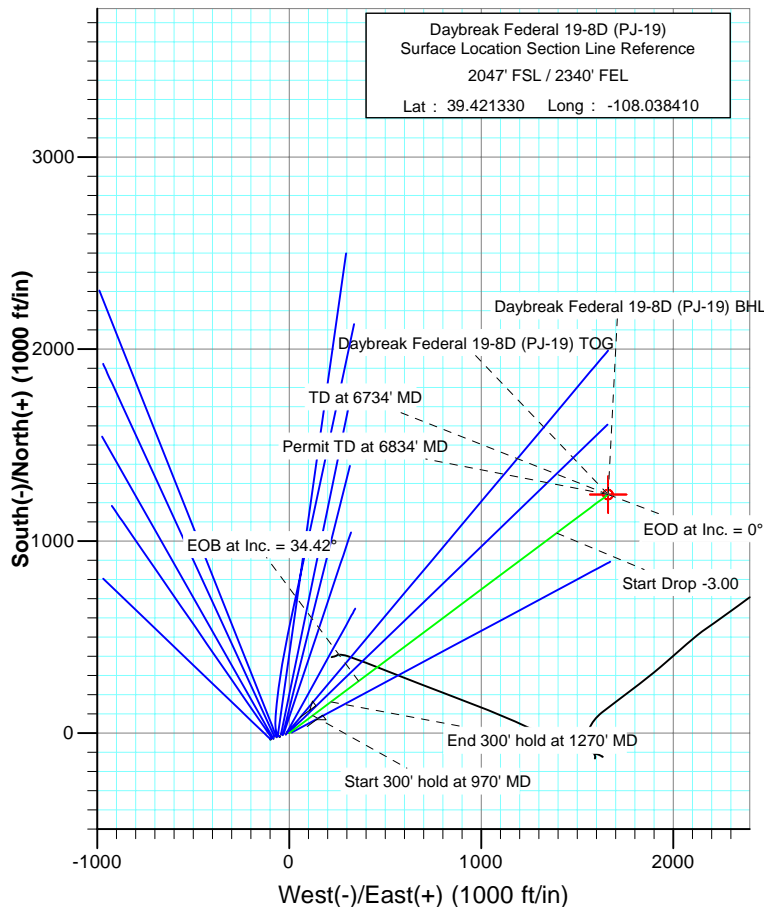




Project: S. Piceance
Site: NWSE S19-T7S-R95W (PJ-19 Pad)
Well: Daybreak Federal 19-8D (PJ-19)
Wellbore: DD
Plan: Plan #2



SECTION DETAILS											
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VFace	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	970.8	23.12	53.21	950.1	91.9	122.9	3.00	53.21	153.4		
4	1270.8	23.12	53.21	1226.0	162.4	217.2	0.00	0.00	271.2		
5	1647.5	34.42	53.21	1555.6	270.8	362.2	3.00	0.00	452.2		
6	3925.1	34.42	53.21	3434.4	1041.8	1393.2	0.00	0.00	1739.7		
7	5072.5	0.00	0.00	4514.0	1242.1	1661.0	3.00	180.00	2074.1	Daybreak Federal 19-8D (PJ-19) TOG	
8	6734.5	0.00	0.00	6176.0	1242.1	1661.0	0.00	0.00	2074.1	Daybreak Federal 19-8D (PJ-19) BHL	
9	6834.5	0.00	0.00	6276.0	1242.1	1661.0	0.00	0.00	2074.1		



FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
3286.0	3745.2	Mesa Verde
3857.0	4401.7	Williams Fork Fm
4189.0	4745.9	TOG (Inc. = 9.8°)
5724.0	6282.5	Coal Ridge
6076.0	6634.5	Rollins

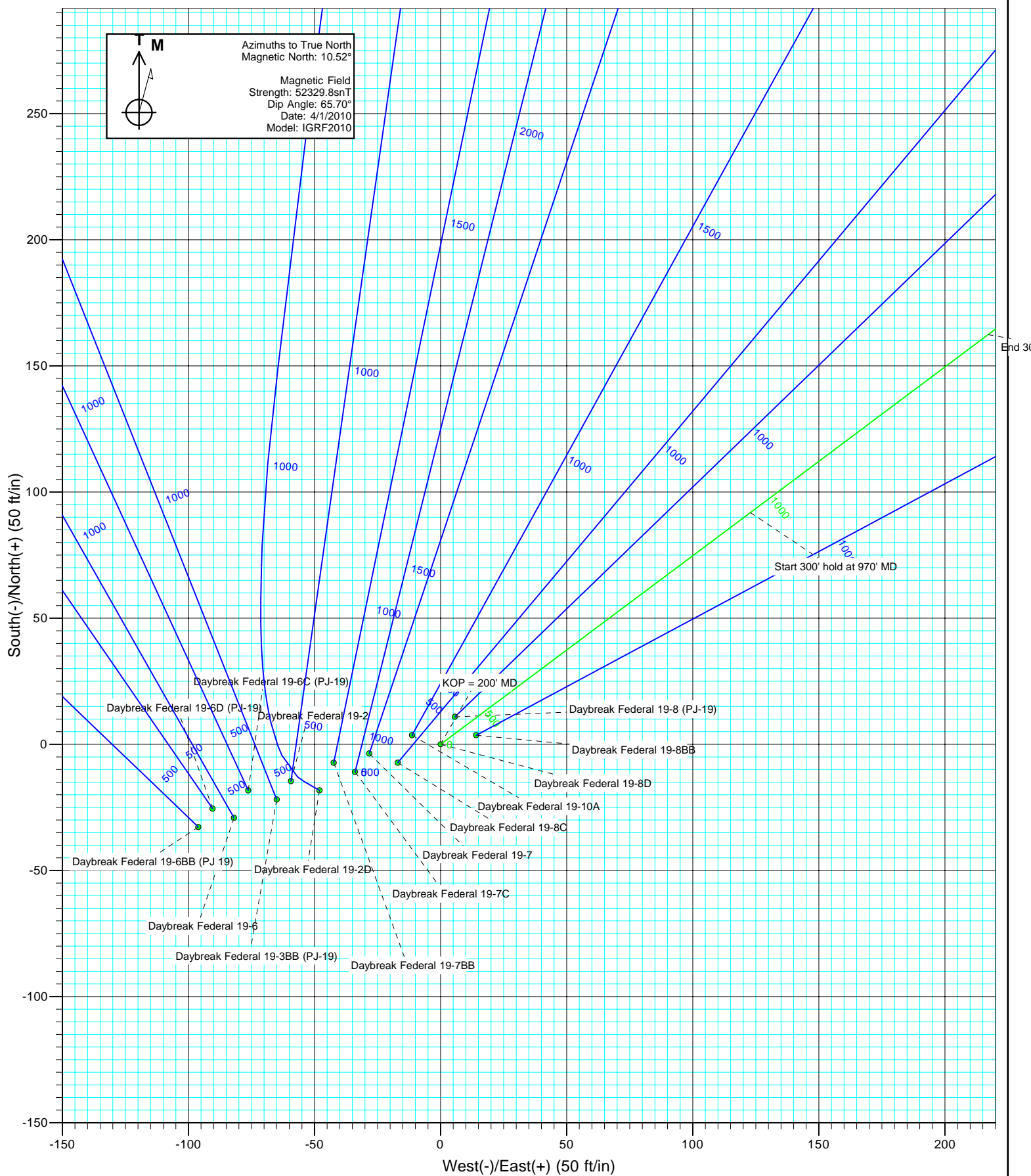


Azimuths to True North
Magnetic North: 10.52°
Magnetic Field
Strength: 52329.8snT
Dip Angle: 65.70°
Date: 4/1/2010
Model: IGRF2010

DESIGN DETAILS: Plan #2				
Job # 105XXX				
KBE @ 5449.0ft (Original Well Elev)				
Target	Azimuth	Origin Type	N/S	E/W
Daybreak Federal 19-8D (PJ-19) BHL	3.21	Slot	0.0	0.0

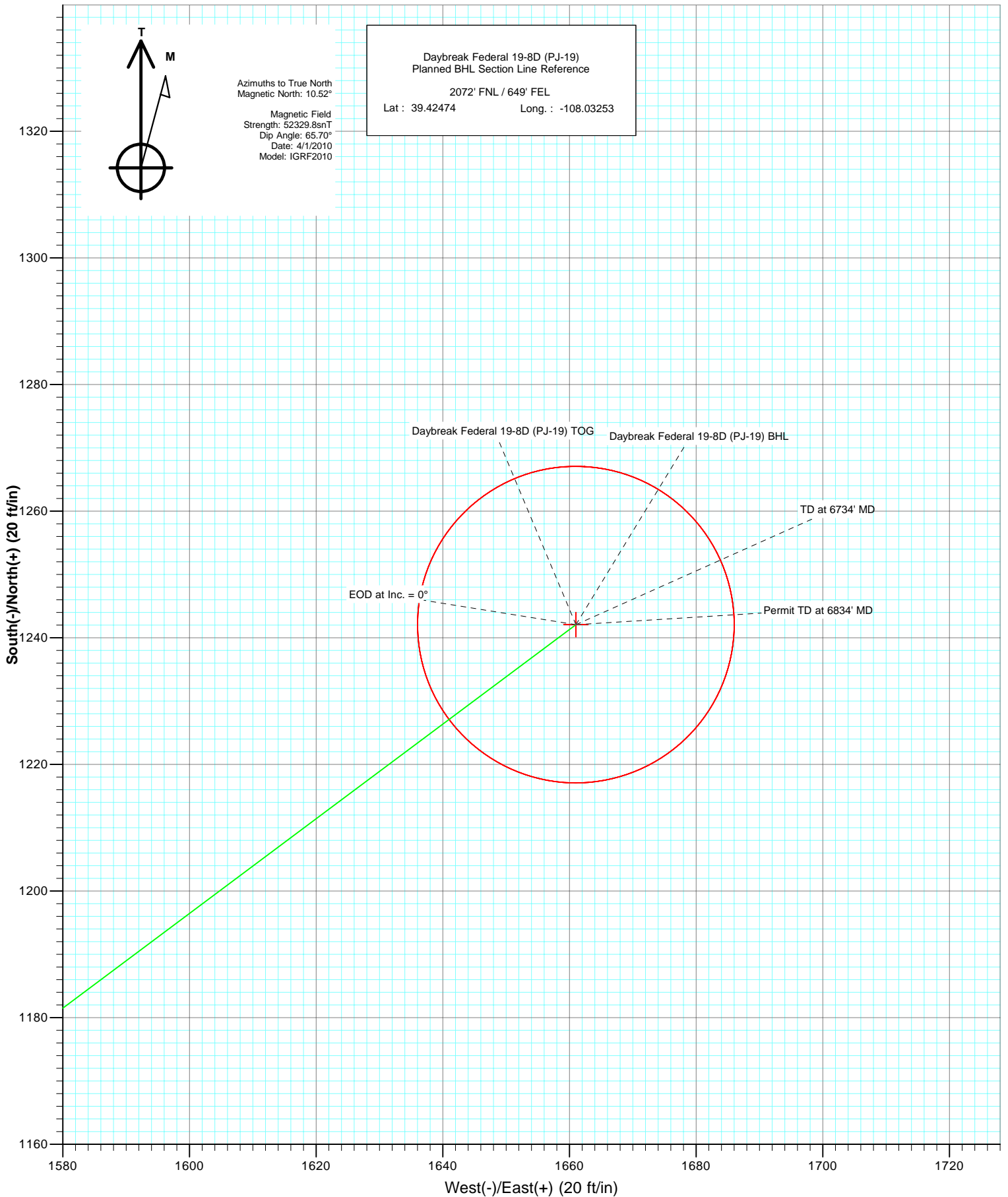


Project: S. Piceance
Site: NWSE S19-T7S-R95W (PJ-19 Pad)
Well: Daybreak Federal 19-8D (PJ-19)
Wellbore: DD
Design: Plan #2





Project: S. Piceance
Site: NWSE S19-T7S-R95W (PJ-19 Pad)
Well: Daybreak Federal 19-8D (PJ-19)
Wellbore: DD
Plan: Plan #2



Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Daybreak Federal 19-8D (PJ-19)
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KBE @ 5449.0ft (Original Well Elev)
Project:	S. Piceance	MD Reference:	KBE @ 5449.0ft (Original Well Elev)
Site:	NWSE S19-T7S-R95W (PJ-19 Pad)	North Reference:	True
Well:	Daybreak Federal 19-8D (PJ-19)	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #2		

Project	S. Piceance, Garfield County, CO		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		

Site		NWSE S19-T7S-R95W (PJ-19 Pad)			
Site Position:		Northing:	1,588,373.67 ft	Latitude:	39.421340
From:	Lat/Long	Easting:	2,283,011.65 ft	Longitude:	-108.038360
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	-1.60 °

Well	Daybreak Federal 19-8D (PJ-19)					
Well Position	+N/-S	0.0 ft	Northing:	1,588,370.41 ft	Latitude:	39.421330
	+E/-W	0.0 ft	Easting:	2,282,997.43 ft	Longitude:	-108.038410
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,427.0 ft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF2010	4/1/2010	10.52	65.70	52,330

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	53.21

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	
970.8	23.12	53.21	950.1	91.9	122.9	3.00	3.00	0.00	53.21	
1,270.8	23.12	53.21	1,226.0	162.4	217.2	0.00	0.00	0.00	0.00	
1,647.5	34.42	53.21	1,555.6	270.8	362.2	3.00	3.00	0.00	0.00	
3,925.1	34.42	53.21	3,434.4	1,041.8	1,393.2	0.00	0.00	0.00	0.00	
5,072.5	0.00	0.00	4,514.0	1,242.1	1,661.0	3.00	-3.00	0.00	180.00	Daybreak Federal 19-
6,734.5	0.00	0.00	6,176.0	1,242.1	1,661.0	0.00	0.00	0.00	0.00	Daybreak Federal 19-
6,834.5	0.00	0.00	6,276.0	1,242.1	1,661.0	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 Daybreak Federal 19-8D (PJ-19)
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KBE @ 5449.0ft (Original Well Elev)
Project:	S. Piceance	MD Reference:	KBE @ 5449.0ft (Original Well Elev)
Site:	NWSE S19-T7S-R95W (PJ-19 Pad)	North Reference:	True
Well:	Daybreak Federal 19-8D (PJ-19)	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	53.21	300.0	1.6	2.1	2.6	3.00	3.00	
400.0	6.00	53.21	399.6	6.3	8.4	10.5	3.00	3.00	
500.0	9.00	53.21	498.8	14.1	18.8	23.5	3.00	3.00	
600.0	12.00	53.21	597.1	25.0	33.4	41.7	3.00	3.00	
700.0	15.00	53.21	694.3	39.0	52.1	65.1	3.00	3.00	
800.0	18.00	53.21	790.2	56.0	74.8	93.5	3.00	3.00	
900.0	21.00	53.21	884.4	76.0	101.6	126.8	3.00	3.00	
970.8	23.12	53.21	950.1	91.9	122.9	153.4	3.00	3.00	Start 300' hold at 970' MD
1,000.0	23.12	53.21	976.9	98.7	132.0	164.9	0.00	0.00	
1,079.5	23.12	53.21	1,050.0	117.4	157.0	196.1	0.00	0.00	Surface Casing
1,100.0	23.12	53.21	1,068.9	122.3	163.5	204.1	0.00	0.00	
1,200.0	23.12	53.21	1,160.8	145.8	194.9	243.4	0.00	0.00	
1,270.8	23.12	53.21	1,226.0	162.4	217.2	271.2	0.00	0.00	End 300' hold at 1270' MD
1,300.0	24.00	53.21	1,252.7	169.4	226.5	282.9	3.00	3.00	
1,400.0	27.00	53.21	1,343.0	195.2	261.0	325.9	3.00	3.00	
1,500.0	30.00	53.21	1,430.8	223.8	299.2	373.6	3.00	3.00	
1,600.0	33.00	53.21	1,516.1	255.0	341.1	425.9	3.00	3.00	
1,647.5	34.42	53.21	1,555.6	270.8	362.2	452.2	3.00	3.00	EOB at Inc. = 34.42°
1,700.0	34.42	53.21	1,598.9	288.6	385.9	481.9	0.00	0.00	
1,800.0	34.42	53.21	1,681.4	322.5	431.2	538.4	0.00	0.00	
1,900.0	34.42	53.21	1,763.9	356.3	476.5	595.0	0.00	0.00	
2,000.0	34.42	53.21	1,846.4	390.2	521.7	651.5	0.00	0.00	
2,100.0	34.42	53.21	1,928.9	424.0	567.0	708.0	0.00	0.00	
2,200.0	34.42	53.21	2,011.4	457.9	612.3	764.5	0.00	0.00	
2,300.0	34.42	53.21	2,093.9	491.7	657.5	821.1	0.00	0.00	
2,400.0	34.42	53.21	2,176.4	525.6	702.8	877.6	0.00	0.00	
2,500.0	34.42	53.21	2,258.9	559.4	748.1	934.1	0.00	0.00	
2,600.0	34.42	53.21	2,341.3	593.3	793.4	990.6	0.00	0.00	
2,700.0	34.42	53.21	2,423.8	627.1	838.6	1,047.2	0.00	0.00	
2,800.0	34.42	53.21	2,506.3	661.0	883.9	1,103.7	0.00	0.00	
2,900.0	34.42	53.21	2,588.8	694.8	929.2	1,160.2	0.00	0.00	
3,000.0	34.42	53.21	2,671.3	728.7	974.4	1,216.8	0.00	0.00	
3,100.0	34.42	53.21	2,753.8	762.5	1,019.7	1,273.3	0.00	0.00	
3,200.0	34.42	53.21	2,836.3	796.4	1,065.0	1,329.8	0.00	0.00	
3,300.0	34.42	53.21	2,918.8	830.2	1,110.2	1,386.3	0.00	0.00	
3,400.0	34.42	53.21	3,001.3	864.1	1,155.5	1,442.9	0.00	0.00	
3,500.0	34.42	53.21	3,083.8	897.9	1,200.8	1,499.4	0.00	0.00	
3,600.0	34.42	53.21	3,166.3	931.8	1,246.1	1,555.9	0.00	0.00	
3,700.0	34.42	53.21	3,248.7	965.6	1,291.3	1,612.4	0.00	0.00	
3,745.2	34.42	53.21	3,286.0	980.9	1,311.8	1,638.0	0.00	0.00	Mesa Verde
3,800.0	34.42	53.21	3,331.2	999.5	1,336.6	1,669.0	0.00	0.00	
3,900.0	34.42	53.21	3,413.7	1,033.3	1,381.9	1,725.5	0.00	0.00	
3,925.1	34.42	53.21	3,434.4	1,041.8	1,393.2	1,739.7	0.00	0.00	Start Drop -3.00
4,000.0	32.17	53.21	3,497.0	1,066.5	1,426.1	1,780.8	3.00	-3.00	
4,100.0	29.17	53.21	3,583.0	1,097.0	1,467.0	1,831.8	3.00	-3.00	
4,200.0	26.17	53.21	3,671.6	1,124.8	1,504.2	1,878.2	3.00	-3.00	
4,300.0	23.17	53.21	3,762.4	1,149.8	1,537.6	1,920.0	3.00	-3.00	
4,400.0	20.17	53.21	3,855.4	1,171.9	1,567.2	1,956.9	3.00	-3.00	
4,401.7	20.12	53.21	3,857.0	1,172.3	1,567.7	1,957.5	3.00	-3.00	Williams Fork Fm

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Daybreak Federal 19-8D (PJ-19)
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KBE @ 5449.0ft (Original Well Elev)
Project:	S. Piceance	MD Reference:	KBE @ 5449.0ft (Original Well Elev)
Site:	NWSE S19-T7S-R95W (PJ-19 Pad)	North Reference:	True
Well:	Daybreak Federal 19-8D (PJ-19)	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
4,500.0	17.17	53.21	3,950.1	1,191.1	1,592.8	1,988.9	3.00	-3.00	
4,600.0	14.17	53.21	4,046.4	1,207.3	1,614.5	2,015.9	3.00	-3.00	
4,700.0	11.17	53.21	4,143.9	1,220.4	1,632.0	2,037.9	3.00	-3.00	
4,745.9	9.80	53.21	4,189.0	1,225.4	1,638.7	2,046.2	3.00	-3.00	TOG (Inc. = 9.8°)
4,800.0	8.17	53.21	4,242.5	1,230.5	1,645.5	2,054.7	3.00	-3.00	
4,900.0	5.17	53.21	4,341.8	1,237.4	1,654.8	2,066.3	3.00	-3.00	
5,000.0	2.17	53.21	4,441.6	1,241.3	1,659.9	2,072.7	3.00	-3.00	
5,072.5	0.00	0.00	4,514.0	1,242.1	1,661.0	2,074.1	3.00	-3.00	EOD at Inc. = 0° - Daybreak Federal 19-8D (PJ-19)
5,100.0	0.00	0.00	4,541.5	1,242.1	1,661.0	2,074.1	0.00	0.00	
5,200.0	0.00	0.00	4,641.5	1,242.1	1,661.0	2,074.1	0.00	0.00	
5,300.0	0.00	0.00	4,741.5	1,242.1	1,661.0	2,074.1	0.00	0.00	
5,400.0	0.00	0.00	4,841.5	1,242.1	1,661.0	2,074.1	0.00	0.00	
5,500.0	0.00	0.00	4,941.5	1,242.1	1,661.0	2,074.1	0.00	0.00	
5,600.0	0.00	0.00	5,041.5	1,242.1	1,661.0	2,074.1	0.00	0.00	
5,700.0	0.00	0.00	5,141.5	1,242.1	1,661.0	2,074.1	0.00	0.00	
5,800.0	0.00	0.00	5,241.5	1,242.1	1,661.0	2,074.1	0.00	0.00	
5,900.0	0.00	0.00	5,341.5	1,242.1	1,661.0	2,074.1	0.00	0.00	
6,000.0	0.00	0.00	5,441.5	1,242.1	1,661.0	2,074.1	0.00	0.00	
6,100.0	0.00	0.00	5,541.5	1,242.1	1,661.0	2,074.1	0.00	0.00	
6,200.0	0.00	0.00	5,641.5	1,242.1	1,661.0	2,074.1	0.00	0.00	
6,282.5	0.00	0.00	5,724.0	1,242.1	1,661.0	2,074.1	0.00	0.00	Coal Ridge
6,300.0	0.00	0.00	5,741.5	1,242.1	1,661.0	2,074.1	0.00	0.00	
6,400.0	0.00	0.00	5,841.5	1,242.1	1,661.0	2,074.1	0.00	0.00	
6,500.0	0.00	0.00	5,941.5	1,242.1	1,661.0	2,074.1	0.00	0.00	
6,600.0	0.00	0.00	6,041.5	1,242.1	1,661.0	2,074.1	0.00	0.00	
6,634.5	0.00	0.00	6,076.0	1,242.1	1,661.0	2,074.1	0.00	0.00	Rollins
6,700.0	0.00	0.00	6,141.5	1,242.1	1,661.0	2,074.1	0.00	0.00	
6,734.5	0.00	0.00	6,176.0	1,242.1	1,661.0	2,074.1	0.00	0.00	TD at 6734' MD - Daybreak Federal 19-8D (PJ-19)
6,800.0	0.00	0.00	6,241.5	1,242.1	1,661.0	2,074.1	0.00	0.00	
6,834.5	0.00	0.00	6,276.0	1,242.1	1,661.0	2,074.1	0.00	0.00	Permit TD at 6834' MD

Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
Daybreak Federal 19-8C	0.00	0.00	6,176.0	1,242.1	1,661.0	1,589,565.62	2,284,692.50	39.424740	-108.032530
- plan hits target center									
- Circle (radius 25.0)									
Daybreak Federal 19-8C	0.00	0.00	4,514.0	1,242.1	1,661.0	1,589,565.62	2,284,692.50	39.424740	-108.032530
- plan hits target center									
- Point									

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
1,079.5	1,050.0	Surface Casing	5.500	6.000

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well Daybreak Federal 19-8D (PJ-19)
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KBE @ 5449.0ft (Original Well Elev)
Project:	S. Piceance	MD Reference:	KBE @ 5449.0ft (Original Well Elev)
Site:	NWSE S19-T7S-R95W (PJ-19 Pad)	North Reference:	True
Well:	Daybreak Federal 19-8D (PJ-19)	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #2		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
3,745.2	3,286.0	Mesa Verde		0.00		
4,401.7	3,857.0	Williams Fork Fm		0.00		
4,745.9	4,189.0	TOG (Inc. = 9.8°)		0.00		
6,282.5	5,724.0	Coal Ridge		0.00		
6,634.5	6,076.0	Rollins		0.00		

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
200.0	200.0	0.0	0.0	KOP = 200' MD	
970.8	950.1	91.9	122.9	Start 300' hold at 970' MD	
1,270.8	1,226.0	162.4	217.2	End 300' hold at 1270' MD	
1,647.5	1,555.6	270.8	362.2	EOB at Inc. = 34.42°	
3,925.1	3,434.4	1,041.8	1,393.2	Start Drop -3.00	
5,072.5	4,514.0	1,242.1	1,661.0	EOD at Inc. = 0°	
6,734.5	6,176.0	1,242.1	1,661.0	TD at 6734' MD	
6,834.5	6,276.0	1,242.1	1,661.0	Permit TD at 6834' MD	

EnCana Oil & Gas (USA) Inc

S. Piceance

NWSE S19-T7S-R95W (PJ-19 Pad)

Daybreak Federal 19-8D (PJ-19)

DD

Plan #2

Anticollision Report

01 April, 2010

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Daybreak Federal 19-8D (PJ-19)
Project:	S. Piceance	TVD Reference:	KBE @ 5449.0ft (Original Well Elev)
Reference Site:	NWSE S19-T7S-R95W (PJ-19 Pad)	MD Reference:	KBE @ 5449.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Daybreak Federal 19-8D (PJ-19)	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 999,999.0ft	Scan Method:	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 100.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program	Date	4/1/2010		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.0	6,834.5	Plan #2 (DD)	MWD	Geolink MWD

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Daybreak Federal 19-8D (PJ-19)
Project:	S. Piceance	TVD Reference:	KBE @ 5449.0ft (Original Well Elev)
Reference Site:	NWSE S19-T7S-R95W (PJ-19 Pad)	MD Reference:	KBE @ 5449.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Daybreak Federal 19-8D (PJ-19)	Survey Calculation Method:	Minimum Curvature
Well Error:	0.0ft	Output errors are at	2.00 sigma
Reference Wellbore	DD	Database:	EDM 5000.1 US Multi Users DB
Reference Design:	Plan #2	Offset TVD Reference:	Offset Datum

Summary

Site Name Offset Well - Wellbore - Design	Reference	Offset	Distance		Separation	Warning
	Measured Depth (ft)	Measured Depth (ft)	Between Centres (ft)	Between Ellipses (ft)		
NESE S19-T7S-R95W (PI-19 PAD)						
Federal 19-10BB - DD - DD						Out of range
Federal 19-10BB - DD - Plan #2						Out of range
Federal 20-5 - DD - DD						Out of range
Federal 20-5 - DD - Plan #3						Out of range
NWSE S19-T7S-R95W (PJ-19 Pad)						
Daybreak Federal 19-10A (PJ-19) - DD - Plan #1	200.0	200.0	11.9	11.2	19.106	CC, ES
Daybreak Federal 19-10A (PJ-19) - DD - Plan #1	600.0	599.7	28.9	26.2	10.761	SF
Daybreak Federal 19-2 (PJ-19) - DD - Plan #1	200.0	200.0	61.1	60.5	98.318	CC, ES
Daybreak Federal 19-2 (PJ-19) - DD - Plan #1	600.0	602.2	86.9	84.4	34.641	SF
Daybreak Federal 19-2D (PJ-19) - DD - Plan #1	200.0	200.0	51.4	50.7	82.664	CC, ES
Daybreak Federal 19-2D (PJ-19) - DD - Plan #1	500.0	497.3	83.7	82.0	47.491	SF
Daybreak Federal 19-3BB (PJ-19) - DD - Plan #1	200.0	200.0	68.6	67.9	110.330	CC, ES
Daybreak Federal 19-3BB (PJ-19) - DD - Plan #1	500.0	498.3	91.5	89.8	53.179	SF
Daybreak Federal 19-6 (PJ-19) - DD - Plan #1	200.0	200.0	87.0	86.3	139.945	CC, ES
Daybreak Federal 19-6 (PJ-19) - DD - Plan #1	400.0	398.8	97.4	96.1	73.517	SF
Daybreak Federal 19-6BB (PJ-19) - DD - Plan #2						Out of range
Daybreak Federal 19-6C (PJ-19) - DD - Plan #1	200.0	200.0	78.4	77.8	126.210	CC, ES
Daybreak Federal 19-6C (PJ-19) - DD - Plan #1	400.0	397.6	90.2	88.9	65.699	SF
Daybreak Federal 19-6D (PJ-19) - DD - Plan #1	200.0	200.0	93.9	93.3	151.169	CC, ES
Daybreak Federal 19-6D (PJ-19) - DD - Plan #1	300.0	298.3	97.2	96.2	99.666	SF
Daybreak Federal 19-7 (PJ-19) - DD - Plan #1	200.0	200.0	28.5	27.9	45.843	CC, ES
Daybreak Federal 19-7 (PJ-19) - DD - Plan #1	900.0	896.6	98.4	92.8	17.571	SF
Daybreak Federal 19-7BB (PJ-19) - DD - Plan #1	200.0	200.0	43.0	42.4	69.200	CC, ES
Daybreak Federal 19-7BB (PJ-19) - DD - Plan #1	500.0	498.8	64.8	63.2	38.726	SF
Daybreak Federal 19-7C (PJ-19) - DD - Plan #2	200.0	200.0	35.6	35.0	57.324	CC, ES
Daybreak Federal 19-7C (PJ-19) - DD - Plan #2	400.0	399.6	45.6	44.3	34.602	SF
Daybreak Federal 19-8 (PJ-19) - DD - Plan #1	200.0	200.0	12.3	11.7	19.798	CC
Daybreak Federal 19-8 (PJ-19) - DD - Plan #1	300.0	299.4	12.4	11.4	12.777	ES
Daybreak Federal 19-8 (PJ-19) - DD - Plan #1	1,000.0	994.8	27.4	20.5	3.959	SF
Daybreak Federal 19-8BB (PJ-19) - DD - Plan #1	200.0	200.0	14.6	14.0	23.477	CC
Daybreak Federal 19-8BB (PJ-19) - DD - Plan #1	300.0	299.3	14.7	13.7	15.141	ES
Daybreak Federal 19-8BB (PJ-19) - DD - Plan #1	1,900.0	1,886.8	93.7	70.1	3.968	SF
Daybreak Federal 19-8C (PJ-19 Pad) - DD - Plan #2	200.0	200.0	18.4	17.8	29.693	CC
Daybreak Federal 19-8C (PJ-19 Pad) - DD - Plan #2	300.0	300.9	18.6	17.7	19.143	ES
Daybreak Federal 19-8C (PJ-19 Pad) - DD - Plan #2	1,500.0	1,503.3	93.9	78.9	6.259	SF

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Daybreak Federal 19-8D (PJ-19)
Project:	S. Piceance	TVD Reference:	KBE @ 5449.0ft (Original Well Elev)
Reference Site:	NWSE S19-T7S-R95W (PJ-19 Pad)	MD Reference:	KBE @ 5449.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Daybreak Federal 19-8D (PJ-19)	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 NWSE S19-T7S-R95W (PJ-19 Pad) - Daybreak Federal 19-10A (PJ-19) - DD - Plan #1												Offset Site Error:	0.0 ft
Survey Program: 0-MWD												Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
0.0	0.0	0.0	0.0	0.0	0.0	-72.15	3.6	-11.3	11.9				
100.0	100.0	100.0	100.0	0.1	0.1	-72.15	3.6	-11.3	11.9	11.6	0.27	43.600	
200.0	200.0	200.0	200.0	0.3	0.3	-72.15	3.6	-11.3	11.9	11.2	0.62	19.106 CC, ES	
300.0	300.0	300.1	300.1	0.5	0.5	-123.39	5.9	-10.0	12.9	11.9	0.98	13.091	
400.0	399.6	400.1	399.8	0.7	0.7	-118.99	12.8	-6.2	16.0	14.6	1.42	11.312	
500.0	498.8	500.0	498.8	1.0	1.0	-114.54	24.2	0.1	21.3	19.4	1.97	10.835	
600.0	597.1	599.7	596.8	1.4	1.4	-111.05	40.1	8.8	28.9	26.2	2.68	10.761 SF	
700.0	694.3	699.2	694.1	1.8	1.7	-111.78	58.6	19.0	38.5	35.0	3.48	11.047	
800.0	790.2	798.4	791.0	2.4	2.1	-117.59	77.0	29.2	50.3	46.0	4.30	11.681	
900.0	884.4	897.0	887.3	3.0	2.5	-124.92	95.2	39.3	65.3	60.2	5.08	12.854	
970.8	950.1	966.2	955.0	3.5	2.8	-130.02	108.1	46.4	78.4	72.8	5.57	14.070	
1,000.0	976.9	994.7	982.8	3.7	2.9	-132.03	113.4	49.3	84.3	78.5	5.75	14.644	

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Daybreak Federal 19-8D (PJ-19)
Project:	S. Piceance	TVD Reference:	KBE @ 5449.0ft (Original Well Elev)
Reference Site:	NWSE S19-T7S-R95W (PJ-19 Pad)	MD Reference:	KBE @ 5449.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Daybreak Federal 19-8D (PJ-19)	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 NWSE S19-T7S-R95W (PJ-19 Pad) - Daybreak Federal 19-2 (PJ-19) - DD - Plan #1													Offset Site Error: 0.0 ft			
Survey Program: 0-MWD															Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor				
0.0	0.0	0.0	0.0	0.0	0.0	-103.80	-14.6	-59.3	61.1							
100.0	100.0	100.0	100.0	0.1	0.1	-103.80	-14.6	-59.3	61.1	60.8	0.27	224.368				
200.0	200.0	200.0	200.0	0.3	0.3	-103.80	-14.6	-59.3	61.1	60.5	0.62	98.318 CC, ES				
300.0	300.0	301.2	301.1	0.5	0.5	-155.66	-11.9	-58.9	62.5	61.5	0.98	63.725				
400.0	399.6	402.1	401.7	0.7	0.7	-151.98	-4.0	-57.8	67.0	65.6	1.38	48.399				
500.0	498.8	502.5	501.2	1.0	1.0	-146.86	9.1	-56.0	75.0	73.1	1.88	39.919				
600.0	597.1	602.2	599.2	1.4	1.4	-141.32	27.2	-53.4	86.9	84.4	2.51	34.641 SF				

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Daybreak Federal 19-8D (PJ-19)
Project:	S. Piceance	TVD Reference:	KBE @ 5449.0ft (Original Well Elev)
Reference Site:	NWSE S19-T7S-R95W (PJ-19 Pad)	MD Reference:	KBE @ 5449.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Daybreak Federal 19-8D (PJ-19)	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 NWSE S19-T7S-R95W (PJ-19 Pad) - Daybreak Federal 19-2D (PJ-19) - DD - Plan #1													Offset Site Error: 0.0 ft
Survey Program: 0-MWD													Offset Well Error: 0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
0.0	0.0	0.0	0.0	0.0	0.0	-110.77	-18.2	-48.0	51.4				
100.0	100.0	100.0	100.0	0.1	0.1	-110.77	-18.2	-48.0	51.4	51.1	0.27	188.643	
200.0	200.0	200.0	200.0	0.3	0.3	-110.77	-18.2	-48.0	51.4	50.7	0.62	82.664 CC, ES	
300.0	300.0	298.1	298.1	0.5	0.5	-162.65	-17.0	-50.2	55.5	54.5	0.97	57.116	
400.0	399.6	396.5	396.2	0.7	0.7	-159.59	-13.1	-56.5	67.8	66.4	1.34	50.560	
500.0	498.8	497.3	496.4	1.0	0.9	-155.77	-4.7	-62.8	83.7	82.0	1.76	47.491 SF	

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Daybreak Federal 19-8D (PJ-19)
Project:	S. Piceance	TVD Reference:	KBE @ 5449.0ft (Original Well Elev)
Reference Site:	NWSE S19-T7S-R95W (PJ-19 Pad)	MD Reference:	KBE @ 5449.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Daybreak Federal 19-8D (PJ-19)	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 NWSE S19-T7S-R95W (PJ-19 Pad) - Daybreak Federal 19-3BB (PJ-19) - DD - Plan #1													Offset Site Error: 0.0 ft
Survey Program: 0-MWD													Offset Well Error: 0.0 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-108.59	-21.9	-65.0	68.6				
100.0	100.0	100.0	100.0	0.1	0.1	-108.59	-21.9	-65.0	68.6	68.3	0.27	251.778	
200.0	200.0	200.0	200.0	0.3	0.3	-108.59	-21.9	-65.0	68.6	67.9	0.62	110.330 CC, ES	
300.0	300.0	300.0	300.0	0.5	0.5	-162.44	-21.9	-65.0	71.0	70.1	0.97	73.210	
400.0	399.6	399.5	399.5	0.7	0.7	-162.20	-19.4	-65.9	78.6	77.3	1.33	59.269	
500.0	498.8	498.3	498.0	1.0	0.9	-159.71	-12.3	-68.8	91.5	89.8	1.72	53.179 SF	

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Daybreak Federal 19-8D (PJ-19)
Project:	S. Piceance	TVD Reference:	KBE @ 5449.0ft (Original Well Elev)
Reference Site:	NWSE S19-T7S-R95W (PJ-19 Pad)	MD Reference:	KBE @ 5449.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Daybreak Federal 19-8D (PJ-19)	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 NWSE S19-T7S-R95W (PJ-19 Pad) - Daybreak Federal 19-6 (PJ-19) - DD - Plan #1													Offset Site Error: 0.0 ft
Survey Program: 0-MWD													Offset Well Error: 0.0 ft
Reference		Offset		Semi Major Axis				Distance					
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-109.58	-29.1	-81.9	87.0				
100.0	100.0	100.0	100.0	0.1	0.1	-109.58	-29.1	-81.9	87.0	86.7	0.27	319.360	
200.0	200.0	200.0	200.0	0.3	0.3	-109.58	-29.1	-81.9	87.0	86.3	0.62	139.945 CC, ES	
300.0	300.0	300.0	300.0	0.5	0.5	-163.26	-29.1	-81.9	89.5	88.5	0.97	92.192	
400.0	399.6	398.8	398.8	0.7	0.7	-163.03	-26.9	-83.2	97.4	96.1	1.32	73.517 SF	

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Daybreak Federal 19-8D (PJ-19)
Project:	S. Piceance	TVD Reference:	KBE @ 5449.0ft (Original Well Elev)
Reference Site:	NWSE S19-T7S-R95W (PJ-19 Pad)	MD Reference:	KBE @ 5449.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Daybreak Federal 19-8D (PJ-19)	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 NWSE S19-T7S-R95W (PJ-19 Pad) - Daybreak Federal 19-6C (PJ-19) - DD - Plan #1													Offset Site Error: 0.0 ft	
Survey Program: 0-MWD													Offset Well Error: 0.0 ft	
Reference		Offset		Semi Major Axis			Distance							Warning
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty	Separation Factor		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	Axis			
0.0	0.0	0.0	0.0	0.0	0.0	-103.43	-18.2	-76.3	78.4					
100.0	100.0	100.0	100.0	0.1	0.1	-103.43	-18.2	-76.3	78.4	78.1	0.27	288.018		
200.0	200.0	200.0	200.0	0.3	0.3	-103.43	-18.2	-76.3	78.4	77.8	0.62	126.210	CC, ES	
300.0	300.0	299.1	299.1	0.5	0.5	-155.55	-15.9	-77.3	81.3	80.4	0.98	83.198		
400.0	399.6	397.6	397.2	0.7	0.7	-152.71	-8.9	-80.5	90.2	88.9	1.37	65.699	SF	

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Daybreak Federal 19-8D (PJ-19)
Project:	S. Piceance	TVD Reference:	KBE @ 5449.0ft (Original Well Elev)
Reference Site:	NWSE S19-T7S-R95W (PJ-19 Pad)	MD Reference:	KBE @ 5449.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Daybreak Federal 19-8D (PJ-19)	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 NWSE S19-T7S-R95W (PJ-19 Pad) - Daybreak Federal 19-6D (PJ-19) - DD - Plan #1													Offset Site Error: 0.0 ft
Survey Program: 0-MWD													Offset Well Error: 0.0 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	Warning
0.0	0.0	0.0	0.0	0.0	0.0	-105.75	-25.5	-90.4	93.9				
100.0	100.0	100.0	100.0	0.1	0.1	-105.75	-25.5	-90.4	93.9	93.7	0.27	344.975	
200.0	200.0	200.0	200.0	0.3	0.3	-105.75	-25.5	-90.4	93.9	93.3	0.62	151.169 CC, ES	
300.0	300.0	298.3	298.3	0.5	0.5	-158.06	-23.4	-91.8	97.2	96.2	0.98	99.666 SF	

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Daybreak Federal 19-8D (PJ-19)
Project:	S. Piceance	TVD Reference:	KBE @ 5449.0ft (Original Well Elev)
Reference Site:	NWSE S19-T7S-R95W (PJ-19 Pad)	MD Reference:	KBE @ 5449.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Daybreak Federal 19-8D (PJ-19)	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 NWSE S19-T7S-R95W (PJ-19 Pad) - Daybreak Federal 19-7 (PJ-19) - DD - Plan #1													Offset Site Error: 0.0 ft
Survey Program: 0-MWD													Offset Well Error: 0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
0.0	0.0	0.0	0.0	0.0	0.0	-97.35	-3.6	-28.3	28.5				
100.0	100.0	100.0	100.0	0.1	0.1	-97.35	-3.6	-28.3	28.5	28.2	0.27	104.616	
200.0	200.0	200.0	200.0	0.3	0.3	-97.35	-3.6	-28.3	28.5	27.9	0.62	45.843 CC, ES	
300.0	300.0	300.6	300.6	0.5	0.5	-148.43	-1.1	-27.4	29.6	28.7	0.98	30.218	
400.0	399.6	401.1	400.7	0.7	0.7	-142.96	6.4	-24.9	33.3	31.9	1.39	23.953	
500.0	498.8	501.3	500.0	1.0	1.0	-136.18	18.9	-20.7	39.9	38.0	1.91	20.902	
600.0	597.1	601.0	598.1	1.4	1.4	-129.79	36.1	-15.0	49.7	47.1	2.58	19.243	
700.0	694.3	700.2	694.5	1.8	1.8	-124.52	58.1	-7.6	62.7	59.3	3.43	18.306	
800.0	790.2	798.7	788.9	2.4	2.3	-120.41	84.6	1.2	79.0	74.6	4.45	17.774	
900.0	884.4	896.6	881.4	3.0	2.9	-117.48	115.1	11.4	98.4	92.8	5.60	17.571 SF	

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Daybreak Federal 19-8D (PJ-19)
Project:	S. Piceance	TVD Reference:	KBE @ 5449.0ft (Original Well Elev)
Reference Site:	NWSE S19-T7S-R95W (PJ-19 Pad)	MD Reference:	KBE @ 5449.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Daybreak Federal 19-8D (PJ-19)	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 NWSE S19-T7S-R95W (PJ-19 Pad) - Daybreak Federal 19-7BB (PJ-19) - DD - Plan #1													Offset Site Error: 0.0 ft
Survey Program: 0-MWD													Offset Well Error: 0.0 ft
Reference		Offset		Semi Major Axis			Distance						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
0.0	0.0	0.0	0.0	0.0	0.0	-99.75	-7.3	-42.4	43.0				
100.0	100.0	100.0	100.0	0.1	0.1	-99.75	-7.3	-42.4	43.0	42.7	0.27	157.918	
200.0	200.0	200.0	200.0	0.3	0.3	-99.75	-7.3	-42.4	43.0	42.4	0.62	69.200 CC, ES	
300.0	300.0	300.0	300.0	0.5	0.5	-154.44	-7.3	-42.4	45.3	44.4	0.97	46.684	
400.0	399.6	399.6	399.6	0.7	0.7	-158.05	-7.3	-42.4	52.5	51.2	1.32	39.690	
500.0	498.8	498.8	498.8	1.0	0.8	-162.25	-7.3	-42.4	64.8	63.2	1.67	38.726 SF	
600.0	597.1	599.4	599.4	1.4	1.0	-164.54	-4.7	-41.9	81.0	78.9	2.03	39.890	
700.0	694.3	700.4	700.0	1.8	1.2	-164.21	3.0	-40.3	99.3	96.9	2.41	41.117	

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Daybreak Federal 19-8D (PJ-19)
Project:	S. Piceance	TVD Reference:	KBE @ 5449.0ft (Original Well Elev)
Reference Site:	NWSE S19-T7S-R95W (PJ-19 Pad)	MD Reference:	KBE @ 5449.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Daybreak Federal 19-8D (PJ-19)	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 NWSE S19-T7S-R95W (PJ-19 Pad) - Daybreak Federal 19-7C (PJ-19) - DD - Plan #2													Offset Site Error:	0.0 ft		
Survey Program: 0-MWD															Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis			Distance							Warning		
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor				
0.0	0.0	0.0	0.0	0.0	0.0	-107.87	-10.9	-33.9	35.6							
100.0	100.0	100.0	100.0	0.1	0.1	-107.87	-10.9	-33.9	35.6	35.3	0.27	130.816				
200.0	200.0	200.0	200.0	0.3	0.3	-107.87	-10.9	-33.9	35.6	35.0	0.62	57.324 CC, ES				
300.0	300.0	300.0	300.0	0.5	0.5	-162.33	-10.9	-33.9	38.1	37.1	0.97	39.265				
400.0	399.6	399.6	399.6	0.7	0.7	-165.26	-10.9	-33.9	45.6	44.3	1.32	34.602 SF				
500.0	498.8	498.8	498.8	1.0	0.8	-168.44	-10.9	-33.9	58.4	56.7	1.66	35.071				
600.0	597.1	597.1	597.1	1.4	1.0	-171.10	-10.9	-33.9	76.3	74.3	2.00	38.107				
700.0	694.3	694.3	694.3	1.8	1.2	-173.10	-10.9	-33.9	99.4	97.1	2.33	42.633				

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Daybreak Federal 19-8D (PJ-19)
Project:	S. Piceance	TVD Reference:	KBE @ 5449.0ft (Original Well Elev)
Reference Site:	NWSE S19-T7S-R95W (PJ-19 Pad)	MD Reference:	KBE @ 5449.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Daybreak Federal 19-8D (PJ-19)	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 NWSE S19-T7S-R95W (PJ-19 Pad) - Daybreak Federal 19-8 (PJ-19) - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	27.34	10.9	5.7	12.3					
100.0	100.0	100.0	100.0	0.1	0.1	27.34	10.9	5.7	12.3	12.0	0.27	45.180		
200.0	200.0	200.0	200.0	0.3	0.3	27.34	10.9	5.7	12.3	11.7	0.62	19.798 CC		
300.0	300.0	299.4	299.3	0.5	0.5	-27.28	12.7	7.5	12.4	11.4	0.97	12.777 ES		
400.0	399.6	398.8	398.4	0.7	0.7	-31.37	18.1	13.1	12.8	11.5	1.34	9.551		
500.0	498.8	498.2	496.9	1.0	1.0	-37.58	27.1	22.4	13.6	11.8	1.77	7.664		
600.0	597.1	597.5	594.7	1.4	1.4	-45.04	39.6	35.3	14.9	12.5	2.34	6.352		
700.0	694.3	696.9	691.3	1.8	1.8	-52.72	55.6	51.9	16.9	13.7	3.14	5.380		
800.0	790.2	796.2	786.6	2.4	2.3	-59.81	75.0	72.1	19.6	15.4	4.18	4.689		
900.0	884.4	895.5	880.2	3.0	3.0	-65.86	97.9	95.8	23.1	17.6	5.46	4.227		
970.8	950.1	965.8	945.4	3.5	3.5	-69.48	116.1	114.6	26.0	19.5	6.50	4.002		
1,000.0	976.9	994.8	972.0	3.7	3.7	-70.42	124.1	122.9	27.4	20.5	6.93	3.959 SF		
1,100.0	1,068.9	1,093.8	1,061.6	4.4	4.5	-67.81	153.6	153.4	33.7	25.5	8.20	4.110		
1,200.0	1,160.8	1,193.4	1,150.3	5.2	5.3	-62.57	185.0	185.9	41.6	32.3	9.22	4.507		
1,270.8	1,226.0	1,263.9	1,213.1	5.7	5.9	-59.92	207.2	209.0	47.3	37.4	9.93	4.760		
1,300.0	1,252.7	1,293.0	1,239.1	5.9	6.2	-59.16	216.4	218.5	49.6	39.3	10.25	4.835		
1,400.0	1,343.0	1,392.8	1,328.0	6.7	7.0	-59.98	247.8	251.1	55.6	43.9	11.75	4.735		
1,500.0	1,430.8	1,491.1	1,414.5	7.7	7.9	-63.21	280.2	284.5	60.5	46.8	13.70	4.416		
1,600.0	1,516.1	1,589.2	1,498.4	8.7	8.9	-66.22	315.4	321.1	66.0	50.2	15.86	4.164		
1,647.5	1,555.6	1,635.8	1,537.3	9.2	9.4	-67.56	333.2	339.5	68.9	51.9	16.94	4.065		
1,700.0	1,598.9	1,687.3	1,579.6	9.8	10.0	-68.54	353.7	360.7	72.4	54.3	18.10	4.003		
1,800.0	1,681.4	1,785.3	1,657.8	10.9	11.1	-67.73	394.7	403.2	81.0	61.0	20.00	4.052		
1,900.0	1,763.9	1,884.8	1,736.0	11.9	12.3	-65.97	437.5	447.5	90.6	68.9	21.73	4.168		

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Daybreak Federal 19-8D (PJ-19)
Project:	S. Piceance	TVD Reference:	KBE @ 5449.0ft (Original Well Elev)
Reference Site:	NWSE S19-T7S-R95W (PJ-19 Pad)	MD Reference:	KBE @ 5449.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Daybreak Federal 19-8D (PJ-19)	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 NWSE S19-T7S-R95W (PJ-19 Pad) - Daybreak Federal 19-8BB (PJ-19) - DD - Plan #1													Offset Site Error:	0.0 ft
Survey Program: 0-MWD													Offset Well Error:	0.0 ft
Reference		Offset		Semi Major Axis		Highside Toolface (°)	Distance		Total Uncertainty Axis	Separation Factor	Warning			
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)		Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)						
0.0	0.0	0.0	0.0	0.0	0.0	75.54	3.6	14.1	14.6					
100.0	100.0	100.0	100.0	0.1	0.1	75.54	3.6	14.1	14.6	14.3	0.27	53.575		
200.0	200.0	200.0	200.0	0.3	0.3	75.54	3.6	14.1	14.6	14.0	0.62	23.477 CC		
300.0	300.0	299.3	299.2	0.5	0.5	23.79	4.9	16.4	14.7	13.7	0.97	15.141 ES		
400.0	399.6	398.5	398.2	0.7	0.7	28.03	8.5	23.2	15.1	13.7	1.33	11.304		
500.0	498.8	497.8	496.6	1.0	1.0	34.56	14.6	34.5	15.9	14.1	1.75	9.069		
600.0	597.1	597.0	594.1	1.4	1.4	42.50	23.1	50.4	17.3	15.0	2.30	7.512		
700.0	694.3	696.2	690.6	1.8	1.8	50.76	33.9	70.6	19.5	16.5	3.08	6.341		
800.0	790.2	795.3	785.7	2.4	2.3	58.41	47.1	95.2	22.7	18.6	4.12	5.501		
900.0	884.4	894.5	879.2	3.0	3.0	64.95	62.6	124.2	26.8	21.3	5.42	4.941		
970.8	950.1	964.6	944.3	3.5	3.5	68.84	75.0	147.2	30.2	23.7	6.47	4.671		
1,000.0	976.9	993.5	970.9	3.7	3.7	69.95	80.4	157.3	31.8	24.9	6.89	4.616		
1,100.0	1,068.9	1,092.4	1,060.3	4.4	4.5	68.56	100.4	194.6	39.0	30.8	8.23	4.739		
1,200.0	1,160.8	1,191.9	1,148.9	5.2	5.4	64.52	121.7	234.4	47.7	38.4	9.35	5.101		
1,270.8	1,226.0	1,262.4	1,211.7	5.7	6.0	62.44	136.8	262.6	54.0	43.9	10.15	5.323		
1,300.0	1,252.7	1,291.5	1,237.7	5.9	6.2	61.86	143.0	274.2	56.5	46.0	10.49	5.386		
1,400.0	1,343.0	1,391.2	1,326.5	6.7	7.1	62.85	164.4	314.1	63.5	51.5	12.05	5.272		
1,500.0	1,430.8	1,489.3	1,412.9	7.7	8.0	65.99	186.3	355.0	69.5	55.5	14.03	4.955		
1,600.0	1,516.1	1,588.5	1,498.6	8.7	9.0	69.95	210.0	399.1	75.5	59.3	16.28	4.641		
1,647.5	1,555.6	1,635.8	1,539.4	9.2	9.4	72.86	221.2	420.1	78.0	60.5	17.49	4.459		
1,700.0	1,598.9	1,688.0	1,584.5	9.8	9.9	76.37	233.7	443.4	80.8	61.9	18.85	4.285		
1,800.0	1,681.4	1,787.4	1,670.3	10.9	10.9	82.39	257.4	487.7	86.8	65.5	21.31	4.074		
1,900.0	1,763.9	1,886.8	1,756.1	11.9	11.9	87.58	281.2	531.9	93.7	70.1	23.61	3.968 SF		

Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Daybreak Federal 19-8D (PJ-19)
Project:	S. Piceance	TVD Reference:	KBE @ 5449.0ft (Original Well Elev)
Reference Site:	NWSE S19-T7S-R95W (PJ-19 Pad)	MD Reference:	KBE @ 5449.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Daybreak Federal 19-8D (PJ-19)	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 NWSE S19-T7S-R95W (PJ-19 Pad) - Daybreak Federal 19-8C (PJ-19 Pad) - DD - Plan #2												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	-113.26	-7.3	-17.0	18.4				
100.0	100.0	100.0	100.0	0.1	0.1	-113.26	-7.3	-17.0	18.4	18.2	0.27	67.760	
200.0	200.0	200.0	200.0	0.3	0.3	-113.26	-7.3	-17.0	18.4	17.8	0.62	29.693 CC	
300.0	300.0	300.9	300.8	0.5	0.5	-164.68	-5.2	-15.2	18.6	17.7	0.97	19.143 ES	
400.0	399.6	401.7	401.3	0.7	0.7	-159.57	0.9	-10.1	19.3	18.0	1.34	14.377	
500.0	498.8	502.5	501.2	1.0	1.0	-151.93	11.0	-1.6	20.8	19.0	1.78	11.652	
600.0	597.1	603.2	600.2	1.4	1.4	-143.07	25.2	10.3	23.3	20.9	2.38	9.799	
700.0	694.3	703.8	698.0	1.8	1.8	-134.38	43.3	25.5	27.2	24.0	3.21	8.474	
800.0	790.2	804.4	794.3	2.4	2.4	-126.78	65.4	44.0	32.5	28.2	4.29	7.582	
900.0	884.4	904.7	888.8	3.0	3.0	-120.57	91.2	65.7	39.2	33.7	5.59	7.021	
970.8	950.1	975.7	954.5	3.5	3.5	-116.96	111.7	82.9	44.8	38.2	6.61	6.778	
1,000.0	976.9	1,004.8	981.3	3.7	3.7	-115.83	120.5	90.2	47.3	40.3	7.04	6.721	
1,100.0	1,068.9	1,104.3	1,072.9	4.4	4.4	-112.70	150.4	115.4	55.9	47.4	8.50	6.578	
1,200.0	1,160.8	1,203.9	1,164.5	5.2	5.1	-110.41	180.4	140.5	64.6	54.6	9.96	6.487	
1,270.8	1,226.0	1,274.5	1,229.3	5.7	5.6	-109.13	201.6	158.3	70.8	59.8	10.99	6.441	
1,300.0	1,252.7	1,303.7	1,256.1	5.9	5.9	-108.53	210.6	165.9	73.4	62.0	11.44	6.417	
1,400.0	1,343.0	1,403.6	1,346.1	6.7	6.7	-106.65	243.7	193.6	83.1	69.9	13.13	6.327	
1,500.0	1,430.8	1,503.3	1,433.7	7.7	7.6	-104.98	280.2	224.3	93.9	78.9	14.99	6.259 SF	

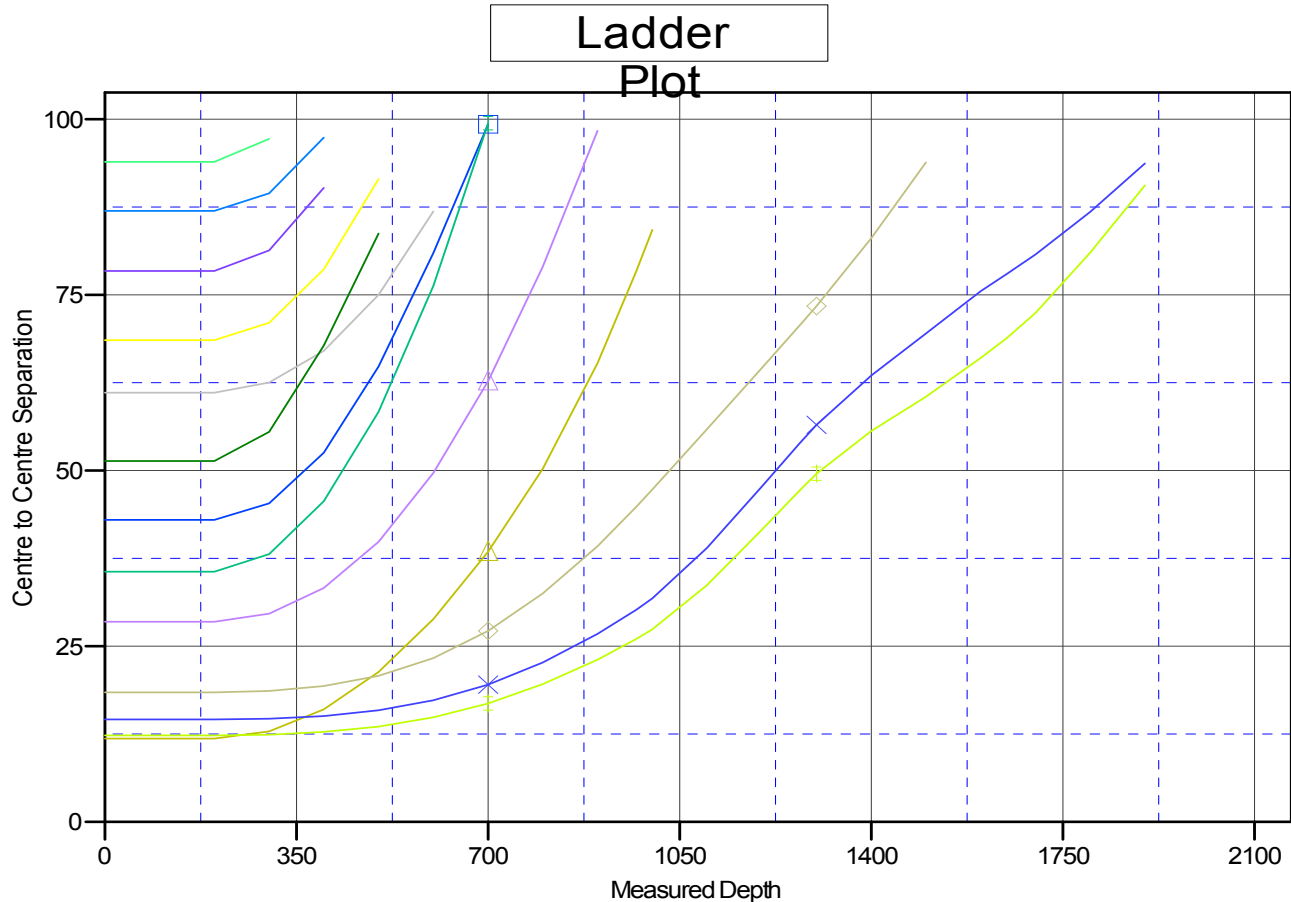
Cathedral Energy Services

Anticollision Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Daybreak Federal 19-8D (PJ-19)
Project:	S. Piceance	TVD Reference:	KBE @ 5449.0ft (Original Well Elev)
Reference Site:	NWSE S19-T7S-R95W (PJ-19 Pad)	MD Reference:	KBE @ 5449.0ft (Original Well Elev)
Site Error:	0.0ft	North Reference:	True
Reference Well:	Daybreak Federal 19-8D (PJ-19)	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 KBE @ 5449.0ft (Original Well Elev)
 Offset Depths are relative to Offset Datum
 Central Meridian is -105.500000 °

Coordinates are relative to: Daybreak Federal 19-8D (PJ-19)
 Coordinate System is US State Plane 1983, Colorado Central Zone
 Grid Convergence at Surface is: -1.60°



LEGEND

- Daybreak Federal 19-10A (PJ-19), DD, Plan #1 V0
- Daybreak Federal 19-2 (PJ-19), DD, Plan #1 V0
- Daybreak Federal 19-2D (PJ-19), DD, Plan #1 V0
- Daybreak Federal 19-3BB (PJ-19), DD, Plan #1 V0
- Daybreak Federal 19-6 (PJ-19), DD, Plan #1 V0
- Daybreak Federal 19-6C (PJ-19), DD, Plan #1 V0
- Daybreak Federal 19-6D (PJ-19), DD, Plan #1 V0
- Daybreak Federal 19-7 (PJ-19), DD, Plan #1 V0
- Daybreak Federal 19-7BB (PJ-19), DD, Plan #1 V0
- Daybreak Federal 19-7C (PJ-19), DD, Plan #2 V0
- Daybreak Federal 19-8 (PJ-19), DD, Plan #1 V0
- Daybreak Federal 19-8BB (PJ-19), DD, Plan #1 V0
- Daybreak Federal 19-8C (PJ-19 Pad), DD, Plan #1 V0