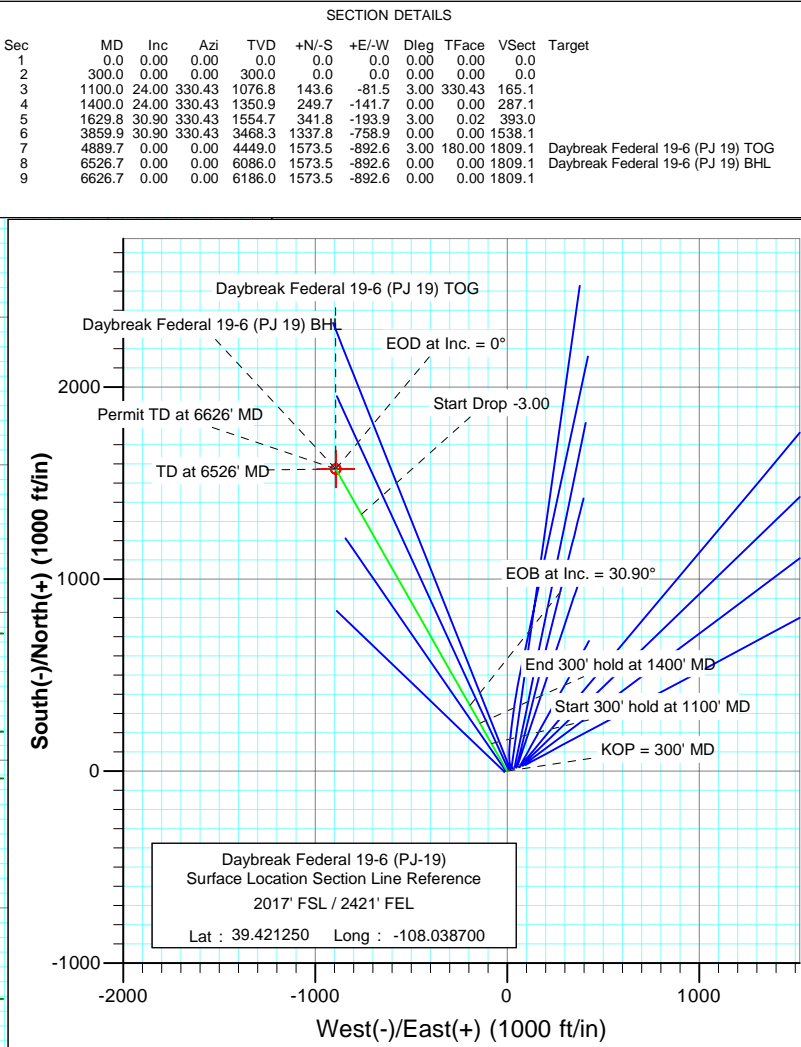
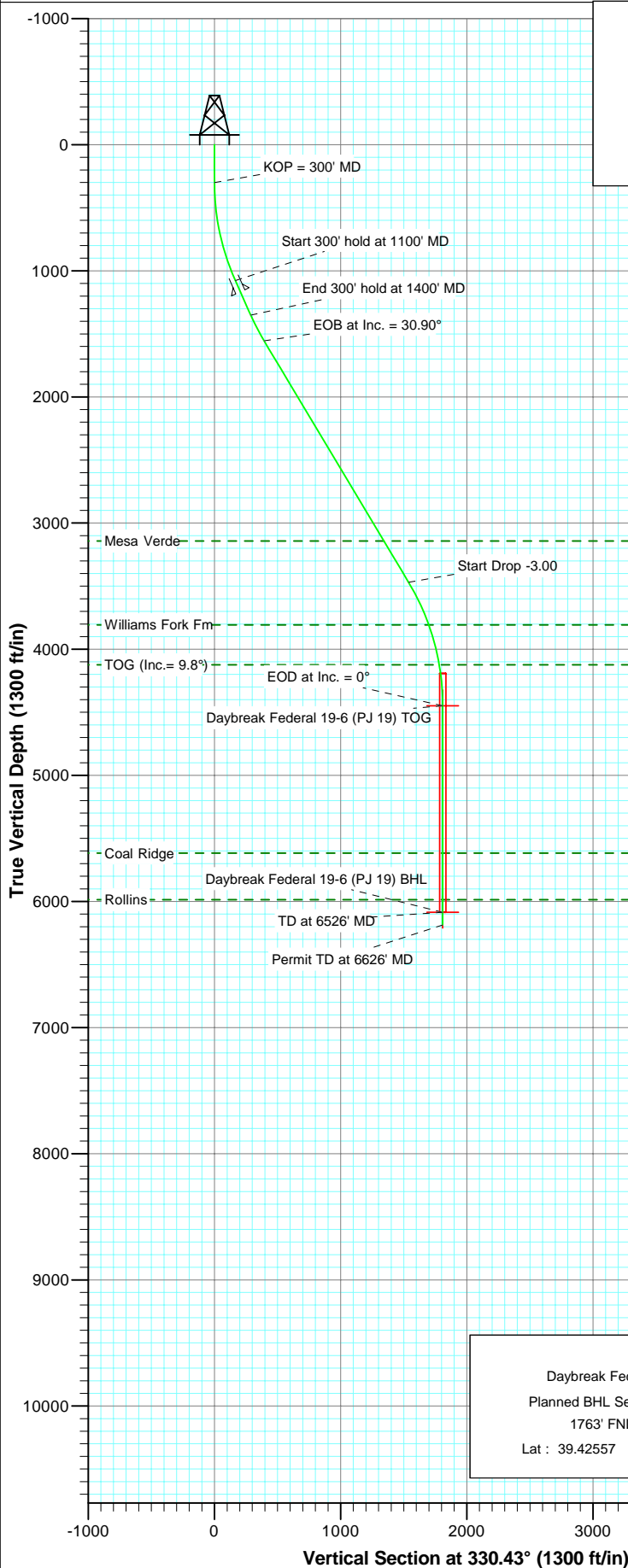




Project: S. Piceance  
Site: NWSE S19-T7S-R95W (PJ-19 Pad)  
Well: Daybreak Federal 19-6 (PJ-19)  
Wellbore: DD  
Plan: Plan #1



SECTION DETAILS				
Sec	MD	Inc	Azi	TVD
1	0.0	0.00	0.00	0.0
2	300.0	0.00	0.00	300.0
3	1100.0	24.00	330.43	1076.8
4	1400.0	24.00	330.43	1350.9
5	1629.8	30.90	330.43	1554.7
6	3859.9	30.90	330.43	3468.3
7	4889.7	0.00	0.00	4449.0
8	6526.7	0.00	0.00	6086.0
9	6626.7	0.00	0.00	6186.0
				+N/-S
				+E/-W
				Dleg
				TFace
				VFace
				Target
				Daybreak Federal 19-6 (PJ 19) TOG
				Daybreak Federal 19-6 (PJ 19) BHL

FORMATION TOP DETAILS				
TVDPath	MDPath	Formation		
3142.0	3479.6	Mesa Verde		
3807.0	4235.0	Williams Fork Fm		
4124.0	4563.1	TOG (Inc. = 9.8°)		
5616.0	6056.7	Coal Ridge		
5986.0	6426.7	Rollins		

Daybreak Federal 19-6 (PJ-19)  
Planned BHL Section Line Reference  
1763' FNL / 1946' FWL  
Lat : 39.42557 Long. : -108.04186

Daybreak Federal 19-6 (PJ-19)  
Surface Location Section Line Reference  
2017' FSL / 2421' FEL  
Lat : 39.421250 Long. : -108.038700

DESIGN DETAILS: Plan #1  
Job# 105XXX  
KBE @ 5449.0ft (Original Well Elev)

Target  
Daybreak Federal 19-6 (PJ 19) BHL

Azimuth  
330.43

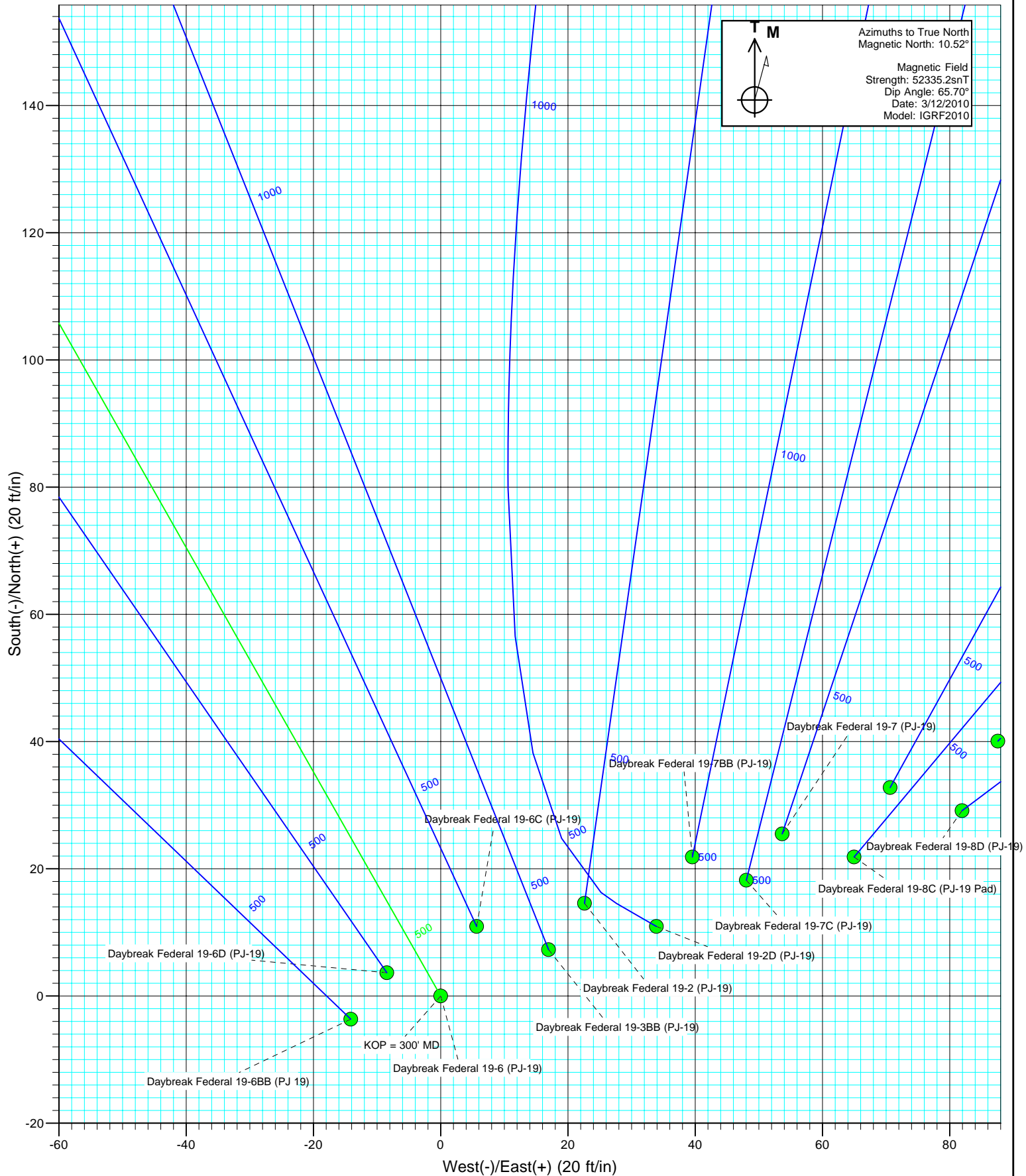
Origin Type  
Slot

N/S  
0.0

E/W  
0.0

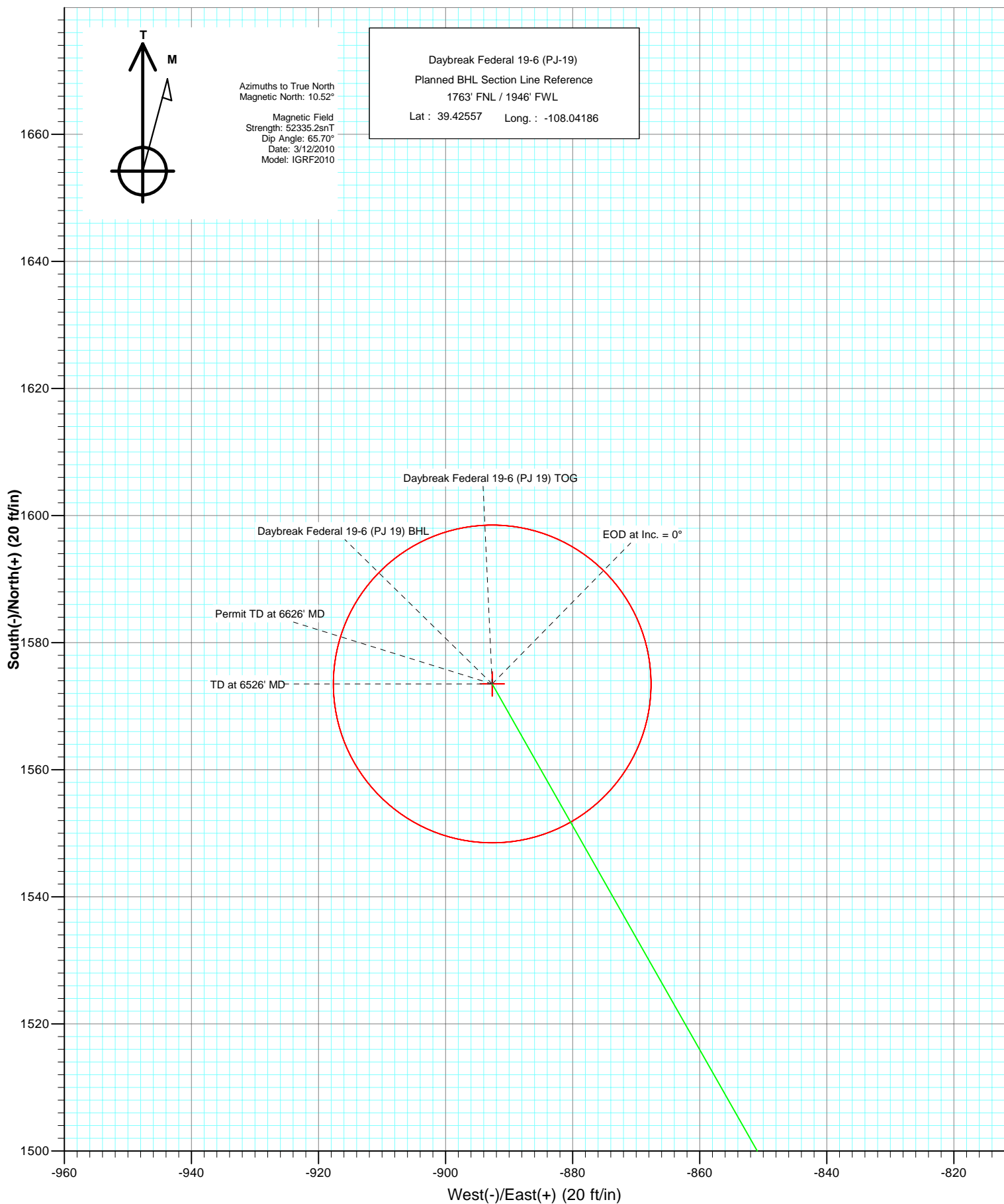


Project: S. Piceance  
Site: NWSE S19-T7S-R95W (PJ-19 Pad)  
Well: Daybreak Federal 19-6 (PJ-19)  
Wellbore: DD  
Design: Plan #1





Project: S. Piceance  
Site: NWSE S19-T7S-R95W (PJ-19 Pad)  
Well: Daybreak Federal 19-6 (PJ-19)  
Wellbore: DD  
Plan: Plan #1



# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Daybreak Federal 19-6 (PJ-19)
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KBE @ 5449.0ft (Original Well Elev)
<b>Project:</b>	S. Piceance	<b>MD Reference:</b>	KBE @ 5449.0ft (Original Well Elev)
<b>Site:</b>	NWSE S19-T7S-R95W (PJ-19 Pad)	<b>North Reference:</b>	True
<b>Well:</b>	Daybreak Federal 19-6 (PJ-19)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #1		

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

Site		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 19-6 (PJ-19)					
Well Position	+N/-S	0.0 ft	Northing:	1,588,343.57 ft	Latitude:	39.421250
	+E/-W	0.0 ft	Easting:	2,282,914.72 ft	Longitude:	-108.038700
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,427.0 ft

<b>Wellbore</b>	DD				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	3/12/2010	10.52	65.70	52,335

<b>Design</b>	Plan #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	330.43

<b>Plan Sections</b>										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,100.0	24.00	330.43	1,076.8	143.6	-81.5	3.00	3.00	0.00	330.43	
1,400.0	24.00	330.43	1,350.9	249.7	-141.7	0.00	0.00	0.00	0.00	
1,629.8	30.90	330.43	1,554.7	341.8	-193.9	3.00	3.00	0.00	0.02	
3,859.9	30.90	330.43	3,468.3	1,337.8	-758.9	0.00	0.00	0.00	0.00	
4,889.7	0.00	0.00	4,449.0	1,573.5	-892.6	3.00	-3.00	0.00	180.00	Daybreak Federal 19-
6,526.7	0.00	0.00	6,086.0	1,573.5	-892.6	0.00	0.00	0.00	0.00	Daybreak Federal 19-
6,626.7	0.00	0.00	6,186.0	1,573.5	-892.6	0.00	0.00	0.00	0.00	

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Daybreak Federal 19-6 (PJ-19)
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KBE @ 5449.0ft (Original Well Elev)
<b>Project:</b>	S. Piceance	<b>MD Reference:</b>	KBE @ 5449.0ft (Original Well Elev)
<b>Site:</b>	NWSE S19-T7S-R95W (PJ-19 Pad)	<b>North Reference:</b>	True
<b>Well:</b>	Daybreak Federal 19-6 (PJ-19)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	KOP = 300' MD
400.0	3.00	330.43	400.0	2.3	-1.3	2.6	3.00	3.00	
500.0	6.00	330.43	499.6	9.1	-5.2	10.5	3.00	3.00	
600.0	9.00	330.43	598.8	20.5	-11.6	23.5	3.00	3.00	
700.0	12.00	330.43	697.1	36.3	-20.6	41.7	3.00	3.00	
800.0	15.00	330.43	794.3	56.6	-32.1	65.1	3.00	3.00	
900.0	18.00	330.43	890.2	81.3	-46.1	93.5	3.00	3.00	
1,000.0	21.00	330.43	984.4	110.3	-62.6	126.9	3.00	3.00	
1,100.0	24.00	330.43	1,076.8	143.6	-81.5	165.1	3.00	3.00	Start 300' hold at 1100' MD
1,200.0	24.00	330.43	1,168.2	179.0	-101.6	205.8	0.00	0.00	Surface Casing
1,300.0	24.00	330.43	1,259.5	214.4	-121.6	246.5	0.00	0.00	
1,400.0	24.00	330.43	1,350.9	249.7	-141.7	287.1	0.00	0.00	End 300' hold at 1400' MD
1,500.0	27.00	330.43	1,441.1	287.2	-162.9	330.2	3.00	3.00	
1,600.0	30.00	330.43	1,529.0	328.7	-186.5	377.9	3.00	3.00	
1,629.8	30.90	330.43	1,554.7	341.8	-193.9	393.0	3.00	3.00	EOB at Inc. = 30.90°
1,700.0	30.90	330.43	1,614.9	373.2	-211.7	429.0	0.00	0.00	
1,800.0	30.90	330.43	1,700.7	417.8	-237.1	480.4	0.00	0.00	
1,900.0	30.90	330.43	1,786.5	462.5	-262.4	531.7	0.00	0.00	
2,000.0	30.90	330.43	1,872.4	507.1	-287.7	583.1	0.00	0.00	
2,100.0	30.90	330.43	1,958.2	551.8	-313.1	634.4	0.00	0.00	
2,200.0	30.90	330.43	2,044.0	596.5	-338.4	685.8	0.00	0.00	
2,300.0	30.90	330.43	2,129.8	641.1	-363.7	737.1	0.00	0.00	
2,400.0	30.90	330.43	2,215.6	685.8	-389.1	788.5	0.00	0.00	
2,500.0	30.90	330.43	2,301.4	730.5	-414.4	839.8	0.00	0.00	
2,600.0	30.90	330.43	2,387.2	775.1	-439.7	891.2	0.00	0.00	
2,700.0	30.90	330.43	2,473.0	819.8	-465.1	942.5	0.00	0.00	
2,800.0	30.90	330.43	2,558.8	864.4	-490.4	993.9	0.00	0.00	
2,900.0	30.90	330.43	2,644.7	909.1	-515.7	1,045.2	0.00	0.00	
3,000.0	30.90	330.43	2,730.5	953.8	-541.1	1,096.6	0.00	0.00	
3,100.0	30.90	330.43	2,816.3	998.4	-566.4	1,147.9	0.00	0.00	
3,200.0	30.90	330.43	2,902.1	1,043.1	-591.7	1,199.2	0.00	0.00	
3,300.0	30.90	330.43	2,987.9	1,087.7	-617.1	1,250.6	0.00	0.00	
3,400.0	30.90	330.43	3,073.7	1,132.4	-642.4	1,301.9	0.00	0.00	
3,479.6	30.90	330.43	3,142.0	1,168.0	-662.6	1,342.8	0.00	0.00	Mesa Verde
3,500.0	30.90	330.43	3,159.5	1,177.1	-667.8	1,353.3	0.00	0.00	
3,600.0	30.90	330.43	3,245.3	1,221.7	-693.1	1,404.6	0.00	0.00	
3,700.0	30.90	330.43	3,331.1	1,266.4	-718.4	1,456.0	0.00	0.00	
3,800.0	30.90	330.43	3,416.9	1,311.1	-743.8	1,507.3	0.00	0.00	
3,859.9	30.90	330.43	3,468.3	1,337.8	-758.9	1,538.1	0.00	0.00	Start Drop -3.00
3,900.0	29.69	330.43	3,503.0	1,355.4	-768.9	1,558.3	3.00	-3.00	
4,000.0	26.69	330.43	3,591.1	1,396.5	-792.2	1,605.5	3.00	-3.00	
4,100.0	23.69	330.43	3,681.6	1,433.5	-813.2	1,648.1	3.00	-3.00	
4,200.0	20.69	330.43	3,774.2	1,466.4	-831.9	1,685.9	3.00	-3.00	
4,235.0	19.64	330.43	3,807.0	1,476.8	-837.8	1,697.9	3.00	-3.00	Williams Fork Fm
4,300.0	17.69	330.43	3,868.6	1,494.9	-848.1	1,718.7	3.00	-3.00	
4,400.0	14.69	330.43	3,964.6	1,519.2	-861.8	1,746.6	3.00	-3.00	
4,500.0	11.69	330.43	4,062.0	1,539.0	-873.1	1,769.4	3.00	-3.00	
4,563.1	9.80	330.43	4,124.0	1,549.3	-878.9	1,781.2	3.00	-3.00	TOG (Inc.= 9.8°)
4,567.6	9.66	330.43	4,128.4	1,549.9	-879.3	1,782.0	3.00	-3.00	Daybreak Federal 19-6 (PJ-19) TOG

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Daybreak Federal 19-6 (PJ-19)
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KBE @ 5449.0ft (Original Well Elev)
<b>Project:</b>	S. Piceance	<b>MD Reference:</b>	KBE @ 5449.0ft (Original Well Elev)
<b>Site:</b>	NWSE S19-T7S-R95W (PJ-19 Pad)	<b>North Reference:</b>	True
<b>Well:</b>	Daybreak Federal 19-6 (PJ-19)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #1		

### Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
4,600.0	8.69	330.43	4,160.4	1,554.4	-881.8	1,787.1	3.00	-3.00	
4,700.0	5.69	330.43	4,259.6	1,565.3	-888.0	1,799.7	3.00	-3.00	
4,800.0	2.69	330.43	4,359.3	1,571.7	-891.6	1,807.0	3.00	-3.00	
4,889.7	0.00	0.00	4,449.0	1,573.5	-892.6	1,809.1	3.00	-3.00	EOD at Inc. = 0° - Daybreak Federal 19-6 (PJ 1
4,900.0	0.00	0.00	4,459.3	1,573.5	-892.6	1,809.1	0.00	0.00	
5,000.0	0.00	0.00	4,559.3	1,573.5	-892.6	1,809.1	0.00	0.00	
5,100.0	0.00	0.00	4,659.3	1,573.5	-892.6	1,809.1	0.00	0.00	
5,200.0	0.00	0.00	4,759.3	1,573.5	-892.6	1,809.1	0.00	0.00	
5,300.0	0.00	0.00	4,859.3	1,573.5	-892.6	1,809.1	0.00	0.00	
5,400.0	0.00	0.00	4,959.3	1,573.5	-892.6	1,809.1	0.00	0.00	
5,500.0	0.00	0.00	5,059.3	1,573.5	-892.6	1,809.1	0.00	0.00	
5,600.0	0.00	0.00	5,159.3	1,573.5	-892.6	1,809.1	0.00	0.00	
5,700.0	0.00	0.00	5,259.3	1,573.5	-892.6	1,809.1	0.00	0.00	
5,800.0	0.00	0.00	5,359.3	1,573.5	-892.6	1,809.1	0.00	0.00	
5,900.0	0.00	0.00	5,459.3	1,573.5	-892.6	1,809.1	0.00	0.00	
6,000.0	0.00	0.00	5,559.3	1,573.5	-892.6	1,809.1	0.00	0.00	
6,056.7	0.00	0.00	5,616.0	1,573.5	-892.6	1,809.1	0.00	0.00	Coal Ridge
6,100.0	0.00	0.00	5,659.3	1,573.5	-892.6	1,809.1	0.00	0.00	
6,200.0	0.00	0.00	5,759.3	1,573.5	-892.6	1,809.1	0.00	0.00	
6,300.0	0.00	0.00	5,859.3	1,573.5	-892.6	1,809.1	0.00	0.00	
6,400.0	0.00	0.00	5,959.3	1,573.5	-892.6	1,809.1	0.00	0.00	
6,426.7	0.00	0.00	5,986.0	1,573.5	-892.6	1,809.1	0.00	0.00	Rollins
6,500.0	0.00	0.00	6,059.3	1,573.5	-892.6	1,809.1	0.00	0.00	
6,526.7	0.00	0.00	6,086.0	1,573.5	-892.6	1,809.1	0.00	0.00	TD at 6526' MD - Daybreak Federal 19-6 (PJ 19
6,600.0	0.00	0.00	6,159.3	1,573.5	-892.6	1,809.1	0.00	0.00	
6,626.7	0.00	0.00	6,186.0	1,573.5	-892.6	1,809.1	0.00	0.00	Permit TD at 6626' 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 19-6 (	0.00	0.00	6,086.0	1,573.5	-892.6	1,589,941.41	2,282,066.39	39.425570	-108.041860
- plan hits target center									
- Circle (radius 25.0)									
Daybreak Federal 19-6 (	0.00	0.00	4,124.0	1,573.5	-892.6	1,589,941.41	2,282,066.39	39.425570	-108.041860
- plan misses target center by 27.5ft at 4567.6ft MD (4128.4 TVD, 1549.9 N, -879.3 E)									
- Point									
Daybreak Federal 19-6 (	0.00	0.00	4,449.0	1,573.5	-892.6	1,589,941.41	2,282,066.39	39.425570	-108.041860
- plan hits target center									
- Point									
Daybreak Federal 19-6 (	0.00	0.00	6,086.0	1,573.5	-892.6	1,589,941.41	2,282,066.39	39.425570	-108.041860
- plan hits target center									
- Circle (radius 25.0)									

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Daybreak Federal 19-6 (PJ-19)
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KBE @ 5449.0ft (Original Well Elev)
<b>Project:</b>	S. Piceance	<b>MD Reference:</b>	KBE @ 5449.0ft (Original Well Elev)
<b>Site:</b>	NWSE S19-T7S-R95W (PJ-19 Pad)	<b>North Reference:</b>	True
<b>Well:</b>	Daybreak Federal 19-6 (PJ-19)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #1		

### Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
1,200.0	1,168.2	Surface Casing	5.500	6.000

### Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
3,479.6	3,142.0	Mesa Verde		0.00	
4,235.0	3,807.0	Williams Fork Fm		0.00	
4,563.1	4,124.0	TOG (Inc.= 9.8°)		0.00	
6,056.7	5,616.0	Coal Ridge		0.00	
6,426.7	5,986.0	Rollins		0.00	

### Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
300.0	300.0	0.0	0.0	KOP = 300' MD
1,100.0	1,076.8	143.6	-81.5	Start 300' hold at 1100' MD
1,400.0	1,350.9	249.7	-141.7	End 300' hold at 1400' MD
1,629.8	1,554.7	341.8	-193.9	EOB at Inc. = 30.90°
3,859.9	3,468.3	1,337.8	-758.9	Start Drop -3.00
4,889.7	4,449.0	1,573.5	-892.6	EOD at Inc. = 0°
6,526.7	6,086.0	1,573.5	-892.6	TD at 6526' MD
6,626.7	6,186.0	1,573.5	-892.6	Permit TD at 6626' MD

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

**S. Piceance**

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

**Daybreak Federal 19-6 (PJ-19)**

**DD**

**Plan #1**

## **Anticollision Report**

**22 March, 2010**



# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Daybreak Federal 19-6 (PJ-19)
<b>Project:</b>	S. Piceance	<b>TVD Reference:</b>	KBE @ 5449.0ft (Original Well Elev)
<b>Reference Site:</b>	NWSE S19-T7S-R95W (PJ-19 Pad)	<b>MD Reference:</b>	KBE @ 5449.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Daybreak Federal 19-6 (PJ-19)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Reference	Plan #1		
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 100.0ft	Error Surface:	Elliptical Conic
Warning Levels Evaluated at:	2.00 Sigma		

Survey Tool Program		Date	3/22/2010		
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
0.0	6,626.7	Plan #1 (DD)	MWD	Geolink MWD	

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						
NWSE S19-T7S-R95W (PJ-19 Pad)						
Daybreak Federal 19-10A (PJ-19) - DD - Plan #1	200.0	200.0	77.9	77.2	125.311	CC, ES
Daybreak Federal 19-10A (PJ-19) - DD - Plan #1	500.0	488.7	97.1	95.3	55.684	SF
Daybreak Federal 19-2 (PJ-19) - DD - Plan #1	200.0	200.0	26.9	26.3	43.272	CC, ES
Daybreak Federal 19-2 (PJ-19) - DD - Plan #1	800.0	786.0	83.5	79.7	22.141	SF
Daybreak Federal 19-2D (PJ-19) - DD - Plan #1	477.3	477.6	28.7	27.0	16.755	CC
Daybreak Federal 19-2D (PJ-19) - DD - Plan #1	500.0	500.0	28.8	27.0	15.846	ES
Daybreak Federal 19-2D (PJ-19) - DD - Plan #1	800.0	795.0	48.3	44.4	12.454	SF
Daybreak Federal 19-3BB (PJ-19) - DD - Plan #1	300.0	300.0	18.4	17.5	19.012	CC
Daybreak Federal 19-3BB (PJ-19) - DD - Plan #1	400.0	400.0	18.8	17.5	14.123	ES
Daybreak Federal 19-3BB (PJ-19) - DD - Plan #1	1,800.0	1,796.6	85.4	66.4	4.497	SF
Daybreak Federal 19-6BB (PJ 19) - DD - Plan #1	200.0	200.0	14.6	14.0	23.479	CC, ES
Daybreak Federal 19-6BB (PJ 19) - DD - Plan #1	1,400.0	1,386.6	97.4	85.7	8.312	SF
Daybreak Federal 19-6C (PJ-19) - DD - Plan #1	200.0	200.0	12.3	11.7	19.798	CC, ES
Daybreak Federal 19-6C (PJ-19) - DD - Plan #1	1,200.0	1,182.8	63.4	57.7	11.087	SF
Daybreak Federal 19-6D (PJ-19) - DD - Plan #1	200.0	200.0	9.2	8.6	14.846	CC, ES
Daybreak Federal 19-6D (PJ-19) - DD - Plan #1	1,800.0	1,785.8	46.8	28.1	2.496	SF
Daybreak Federal 19-7 (PJ-19) - DD - Plan #1	200.0	200.0	59.4	58.8	95.637	CC, ES
Daybreak Federal 19-7 (PJ-19) - DD - Plan #1	600.0	588.1	89.5	87.2	39.038	SF
Daybreak Federal 19-7BB (PJ-19) - DD - Plan #1	300.0	300.0	45.2	44.2	46.564	CC
Daybreak Federal 19-7BB (PJ-19) - DD - Plan #1	400.0	400.0	45.3	44.0	34.165	ES
Daybreak Federal 19-7BB (PJ-19) - DD - Plan #1	700.0	696.6	62.4	59.8	23.908	SF
Daybreak Federal 19-7C (PJ-19) - DD - Plan #1	300.0	300.0	51.4	50.4	52.929	CC, ES
Daybreak Federal 19-7C (PJ-19) - DD - Plan #1	700.0	697.1	71.0	68.4	28.147	SF
Daybreak Federal 19-8 (PJ-19) - DD - Plan #1	200.0	200.0	96.3	95.7	154.996	CC, ES
Daybreak Federal 19-8 (PJ-19) - DD - Plan #1	300.0	295.4	98.7	97.7	102.040	SF
Daybreak Federal 19-8BB (PJ-19) - DD - Plan #1						Out of range
Daybreak Federal 19-8C (PJ-19 Pad) - DD - Plan #1	200.0	200.0	68.6	67.9	110.330	CC, ES
Daybreak Federal 19-8C (PJ-19 Pad) - DD - Plan #1	500.0	489.0	89.9	88.2	51.921	SF
Daybreak Federal 19-8D (PJ-19) - DD - Plan #1	200.0	200.0	87.0	86.3	139.945	CC, ES
Daybreak Federal 19-8D (PJ-19) - DD - Plan #1	400.0	391.0	97.0	95.7	73.765	SF

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Daybreak Federal 19-6 (PJ-19)
<b>Project:</b>	S. Piceance	<b>TVD Reference:</b>	KBE @ 5449.0ft (Original Well Elev)
<b>Reference Site:</b>	NWSE S19-T7S-R95W (PJ-19 Pad)	<b>MD Reference:</b>	KBE @ 5449.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Daybreak Federal 19-6 (PJ-19)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b>		NWSE S19-T7S-R95W (PJ-19 Pad) - Daybreak Federal 19-10A (PJ-19) - DD - Plan #1										<b>Offset Site Error:</b>	0.0 ft
Survey Program: 0-MWD												<b>Offset Well Error:</b>	0.0 ft
Reference		Offset		Semi Major Axis		Distance							
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre	Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor	Warning	
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)			
0.0	0.0	0.0	0.0	0.0	0.0	65.10	32.8	70.6	77.9				
100.0	100.0	100.0	100.0	0.1	0.1	65.10	32.8	70.6	77.9	77.6	0.27	285.965	
200.0	200.0	200.0	200.0	0.3	0.3	65.10	32.8	70.6	77.9	77.2	0.62	125.311	CC, ES
300.0	300.0	296.7	296.7	0.5	0.5	64.07	34.9	71.8	79.9	78.9	0.97	82.267	
400.0	400.0	393.1	392.7	0.7	0.7	92.32	41.3	75.3	86.3	85.0	1.33	64.872	
500.0	499.6	488.7	487.6	0.9	1.0	92.46	51.8	81.1	97.1	95.3	1.74	55.684	SF

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Daybreak Federal 19-6 (PJ-19)
<b>Project:</b>	S. Piceance	<b>TVD Reference:</b>	KBE @ 5449.0ft (Original Well Elev)
<b>Reference Site:</b>	NWSE S19-T7S-R95W (PJ-19 Pad)	<b>MD Reference:</b>	KBE @ 5449.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Daybreak Federal 19-6 (PJ-19)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> NWSE S19-T7S-R95W (PJ-19 Pad) - Daybreak Federal 19-2 (PJ-19) - DD - Plan #1													<b>Offset Site Error:</b>	0.0 ft
Survey Program: 0-MWD													<b>Offset Well Error:</b>	0.0 ft
Reference		Offset		Semi Major Axis			Distance					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)	Total Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	57.20	14.6	22.6	26.9					
100.0	100.0	100.0	100.0	0.1	0.1	57.20	14.6	22.6	26.9	26.6	0.27	98.750		
200.0	200.0	200.0	200.0	0.3	0.3	57.20	14.6	22.6	26.9	26.3	0.62	43.272 CC, ES		
300.0	300.0	299.0	299.0	0.5	0.5	53.31	17.1	23.0	28.6	27.7	0.98	29.339		
400.0	400.0	397.6	397.3	0.7	0.7	77.86	24.7	24.0	33.9	32.6	1.34	25.231		
500.0	499.6	495.8	494.6	0.9	1.0	76.72	37.2	25.8	42.1	40.3	1.77	23.800		
600.0	598.8	593.3	590.6	1.1	1.3	77.80	54.5	28.3	53.1	50.8	2.29	23.151		
700.0	697.1	690.1	684.7	1.5	1.8	79.82	76.5	31.4	66.8	63.9	2.95	22.642		
800.0	794.3	786.0	776.8	1.9	2.3	82.05	102.9	35.1	83.5	79.7	3.77	22.141 SF		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Daybreak Federal 19-6 (PJ-19)
<b>Project:</b>	S. Piceance	<b>TVD Reference:</b>	KBE @ 5449.0ft (Original Well Elev)
<b>Reference Site:</b>	NWSE S19-T7S-R95W (PJ-19 Pad)	<b>MD Reference:</b>	KBE @ 5449.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Daybreak Federal 19-6 (PJ-19)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> NWSE S19-T7S-R95W (PJ-19 Pad) - Daybreak Federal 19-2D (PJ-19) - DD - Plan #1													<b>Offset Site Error:</b> 0.0 ft
Survey Program: 0-MWD													<b>Offset Well Error:</b> 0.0 ft
Reference		Offset		Semi Major Axis			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	72.13	10.9	33.9	35.6				
100.0	100.0	100.0	100.0	0.1	0.1	72.13	10.9	33.9	35.6	35.3	0.27	130.816	
200.0	200.0	200.0	200.0	0.3	0.3	72.13	10.9	33.9	35.6	35.0	0.62	57.324	
300.0	300.0	301.2	301.1	0.5	0.5	68.77	12.3	31.6	33.9	32.9	0.97	34.812	
400.0	400.0	401.3	400.9	0.7	0.7	91.56	16.4	25.1	29.9	28.6	1.36	21.962	
477.3	477.0	477.6	476.9	0.8	0.9	87.37	22.5	20.2	28.7	27.0	1.71	16.755 CC	
500.0	499.6	500.0	499.1	0.9	0.9	86.51	24.8	19.0	28.8	27.0	1.82	15.846 ES	
600.0	598.8	598.8	596.9	1.1	1.2	85.21	38.0	14.6	31.6	29.2	2.37	13.308	
700.0	697.1	697.2	693.6	1.5	1.6	87.22	56.0	11.8	38.0	35.0	3.05	12.462	
800.0	794.3	795.0	788.7	1.9	2.0	90.67	78.5	10.6	48.3	44.4	3.88	12.454 SF	
900.0	890.2	891.9	881.9	2.5	2.5	94.13	105.3	11.0	62.5	57.7	4.86	12.874	
1,000.0	984.4	987.8	972.6	3.1	3.0	97.00	136.2	13.1	80.8	74.8	5.99	13.498	

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Daybreak Federal 19-6 (PJ-19)
<b>Project:</b>	S. Piceance	<b>TVD Reference:</b>	KBE @ 5449.0ft (Original Well Elev)
<b>Reference Site:</b>	NWSE S19-T7S-R95W (PJ-19 Pad)	<b>MD Reference:</b>	KBE @ 5449.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Daybreak Federal 19-6 (PJ-19)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design 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						Warning
Measured Depth (ft)	Vertical Depth (ft)	Measured Depth (ft)	Vertical Depth (ft)	Reference (ft)	Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	+E/-W (ft)	Between Centres (ft)	Between Ellipses (ft)	Total Uncertainty Axis	Separation Factor	
0.0	0.0	0.0	0.0	0.0	0.0	66.74	7.3	17.0	18.4				
100.0	100.0	100.0	100.0	0.1	0.1	66.74	7.3	17.0	18.4	18.2	0.27	67.760	
200.0	200.0	200.0	200.0	0.3	0.3	66.74	7.3	17.0	18.4	17.8	0.62	29.693	
300.0	300.0	300.0	300.0	0.5	0.5	66.74	7.3	17.0	18.4	17.5	0.97	19.012 CC	
400.0	400.0	400.0	399.9	0.7	0.7	96.26	9.7	16.0	18.8	17.5	1.33	14.123 ES	
500.0	499.6	499.9	499.6	0.9	0.9	96.11	17.0	13.1	19.9	18.1	1.76	11.332	
600.0	598.8	599.9	598.7	1.1	1.1	95.89	29.1	8.3	21.7	19.4	2.29	9.458	
700.0	697.1	699.8	696.9	1.5	1.5	95.63	46.0	1.6	24.2	21.2	2.98	8.114	
800.0	794.3	799.7	794.0	1.9	1.9	95.36	67.7	-7.0	27.4	23.6	3.85	7.134	
900.0	890.2	899.6	889.8	2.5	2.4	95.08	94.0	-17.5	31.4	26.5	4.89	6.417	
1,000.0	984.4	999.4	983.9	3.1	3.1	94.83	125.0	-29.8	36.0	29.8	6.11	5.887	
1,100.0	1,076.8	1,099.1	1,076.0	3.8	3.8	94.58	160.4	-43.8	41.2	33.7	7.51	5.492	
1,200.0	1,168.2	1,199.0	1,167.2	4.5	4.5	94.47	198.2	-58.8	46.9	37.9	8.93	5.244	
1,300.0	1,259.5	1,298.8	1,258.5	5.2	5.2	94.38	235.9	-73.8	52.5	42.1	10.38	5.057	
1,400.0	1,350.9	1,398.7	1,349.7	5.9	5.9	94.30	273.7	-88.8	58.1	46.3	11.83	4.911	
1,500.0	1,441.1	1,498.3	1,439.6	6.8	6.7	94.13	313.5	-104.6	64.0	50.6	13.44	4.764	
1,600.0	1,529.0	1,597.9	1,527.2	7.7	7.6	93.96	357.6	-122.1	70.6	55.4	15.21	4.641	
1,629.8	1,554.7	1,627.7	1,552.8	7.9	7.9	93.91	371.5	-127.6	72.7	56.9	15.77	4.609	
1,700.0	1,614.9	1,697.5	1,612.1	8.6	8.6	92.99	405.8	-141.2	77.7	60.6	17.09	4.547	
1,800.0	1,700.7	1,796.6	1,693.9	9.5	9.6	88.94	457.8	-161.9	85.4	66.4	19.00	4.497 SF	
1,900.0	1,786.5	1,894.7	1,771.9	10.4	10.7	82.58	513.2	-183.9	94.6	73.9	20.73	4.564	

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Daybreak Federal 19-6 (PJ-19)
<b>Project:</b>	S. Piceance	<b>TVD Reference:</b>	KBE @ 5449.0ft (Original Well Elev)
<b>Reference Site:</b>	NWSE S19-T7S-R95W (PJ-19 Pad)	<b>MD Reference:</b>	KBE @ 5449.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Daybreak Federal 19-6 (PJ-19)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design NWSE S19-T7S-R95W (PJ-19 Pad) - Daybreak Federal 19-6BB (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	-104.48	-3.6	-14.1	14.6					
100.0	100.0	100.0	100.0	0.1	0.1	-104.48	-3.6	-14.1	14.6	14.3	0.27	53.580		
200.0	200.0	200.0	200.0	0.3	0.3	-104.48	-3.6	-14.1	14.6	14.0	0.62	23.479 CC, ES		
300.0	300.0	299.5	299.5	0.5	0.5	-96.60	-1.9	-16.0	16.1	15.1	0.97	16.598		
400.0	400.0	398.7	398.3	0.7	0.7	-56.80	3.5	-21.6	20.4	19.0	1.34	15.160		
500.0	499.6	497.6	496.4	0.9	1.0	-52.71	12.4	-30.8	26.1	24.3	1.75	14.884		
600.0	598.8	596.1	593.3	1.1	1.3	-52.02	24.7	-43.7	32.8	30.6	2.23	14.726		
700.0	697.1	694.3	688.8	1.5	1.8	-53.08	40.4	-60.0	40.5	37.7	2.81	14.401		
800.0	794.3	792.1	782.7	1.9	2.3	-54.98	59.4	-79.8	49.2	45.6	3.55	13.873		
900.0	890.2	890.3	875.5	2.5	2.9	-57.46	81.6	-102.9	58.7	54.2	4.45	13.187		
1,000.0	984.4	989.8	969.2	3.1	3.5	-62.51	104.7	-127.1	66.5	60.8	5.63	11.813		
1,100.0	1,076.8	1,089.2	1,062.8	3.8	4.1	-70.21	127.9	-151.1	72.8	65.7	7.12	10.221		
1,200.0	1,168.2	1,188.3	1,156.1	4.5	4.7	-78.54	150.9	-175.2	79.7	71.0	8.72	9.142		
1,300.0	1,259.5	1,287.4	1,249.5	5.2	5.3	-85.44	174.0	-199.2	88.0	77.8	10.26	8.583		
1,400.0	1,350.9	1,386.6	1,342.9	5.9	6.0	-91.08	197.1	-223.3	97.4	85.7	11.72	8.312 SF		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Daybreak Federal 19-6 (PJ-19)
<b>Project:</b>	S. Piceance	<b>TVD Reference:</b>	KBE @ 5449.0ft (Original Well Elev)
<b>Reference Site:</b>	NWSE S19-T7S-R95W (PJ-19 Pad)	<b>MD Reference:</b>	KBE @ 5449.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Daybreak Federal 19-6 (PJ-19)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design 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					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)	Total Uncertainty Axis			
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, ES		
300.0	300.0	299.5	299.5	0.5	0.5	18.98	13.3	4.6	14.1	13.1	0.98	14.381		
400.0	400.0	398.7	398.4	0.7	0.7	37.73	20.3	1.3	18.3	17.0	1.34	13.698		
500.0	499.6	497.7	496.4	0.9	1.0	32.13	32.0	-4.0	23.1	21.4	1.71	13.501		
600.0	598.8	596.3	593.5	1.1	1.3	29.32	48.2	-11.5	28.2	26.1	2.11	13.375		
700.0	697.1	694.7	689.2	1.5	1.8	28.07	68.8	-21.0	33.5	30.9	2.54	13.180		
800.0	794.3	792.9	783.4	1.9	2.3	27.77	93.9	-32.5	38.8	35.8	3.02	12.866		
900.0	890.2	890.8	875.8	2.5	2.9	28.07	123.2	-46.0	44.3	40.7	3.57	12.418		
1,000.0	984.4	988.4	966.2	3.1	3.6	28.77	156.7	-61.4	49.8	45.6	4.21	11.847		
1,100.0	1,076.8	1,085.8	1,054.4	3.8	4.4	29.74	194.2	-78.6	55.4	50.5	4.96	11.181		
1,200.0	1,168.2	1,182.8	1,140.0	4.5	5.2	29.79	235.6	-97.7	63.4	57.7	5.72	11.087 SF		
1,300.0	1,259.5	1,278.8	1,222.3	5.2	6.1	28.24	280.5	-118.3	75.9	69.6	6.32	12.007		
1,400.0	1,350.9	1,373.7	1,301.2	5.9	7.1	25.99	328.4	-140.3	93.0	86.3	6.78	13.722		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Daybreak Federal 19-6 (PJ-19)
<b>Project:</b>	S. Piceance	<b>TVD Reference:</b>	KBE @ 5449.0ft (Original Well Elev)
<b>Reference Site:</b>	NWSE S19-T7S-R95W (PJ-19 Pad)	<b>MD Reference:</b>	KBE @ 5449.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Daybreak Federal 19-6 (PJ-19)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design 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				Total		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	Separation Factor		
0.0	0.0	0.0	0.0	0.0	0.0	-66.74	3.6	-8.5	9.2					
100.0	100.0	100.0	100.0	0.1	0.1	-66.74	3.6	-8.5	9.2	9.0	0.27	33.880		
200.0	200.0	200.0	200.0	0.3	0.3	-66.74	3.6	-8.5	9.2	8.6	0.62	14.846 CC, ES		
300.0	300.0	299.5	299.5	0.5	0.5	-59.85	5.8	-9.9	11.5	10.5	0.97	11.875		
400.0	400.0	398.7	398.3	0.7	0.7	-23.23	12.1	-14.3	16.4	15.1	1.32	12.420		
500.0	499.6	497.6	496.4	0.9	1.0	-20.63	22.7	-21.6	21.6	19.9	1.68	12.840		
600.0	598.8	596.3	593.4	1.1	1.3	-19.96	37.4	-31.7	26.8	24.8	2.05	13.085		
700.0	697.1	694.7	689.2	1.5	1.8	-20.30	56.1	-44.6	32.1	29.7	2.44	13.154		
800.0	794.3	792.8	783.3	1.9	2.3	-21.19	78.8	-60.3	37.5	34.6	2.87	13.040		
900.0	890.2	890.7	875.7	2.5	2.9	-22.43	105.4	-78.6	42.9	39.5	3.37	12.734		
1,000.0	984.4	988.8	966.6	3.1	3.6	-23.94	135.8	-99.5	48.3	44.3	3.95	12.222		
1,100.0	1,076.8	1,088.7	1,058.6	3.8	4.3	-27.08	168.0	-121.7	50.5	45.7	4.74	10.644		
1,121.7	1,096.6	1,110.4	1,078.5	3.9	4.4	-28.03	175.0	-126.5	50.5	45.5	4.96	10.181		
1,200.0	1,168.2	1,188.6	1,150.5	4.5	5.0	-31.46	200.2	-143.9	50.6	44.7	5.80	8.710		
1,300.0	1,259.5	1,288.6	1,242.5	5.2	5.7	-35.80	232.4	-166.1	50.9	43.9	7.05	7.228		
1,400.0	1,350.9	1,388.5	1,334.4	5.9	6.4	-40.06	264.6	-188.3	51.6	43.2	8.44	6.111		
1,500.0	1,441.1	1,488.3	1,426.3	6.8	7.1	-46.25	296.8	-210.5	50.7	40.4	10.31	4.915		
1,600.0	1,529.0	1,587.8	1,517.8	7.7	7.9	-57.63	328.8	-232.5	47.4	34.3	13.12	3.611		
1,629.8	1,554.7	1,617.4	1,545.0	7.9	8.1	-62.36	338.3	-239.1	46.3	32.2	14.14	3.277		
1,700.0	1,614.9	1,686.8	1,609.0	8.6	8.6	-74.67	360.7	-254.5	45.0	28.6	16.43	2.738		
1,708.0	1,621.8	1,694.7	1,616.2	8.7	8.6	-76.10	363.3	-256.3	45.0	28.3	16.66	2.699		
1,800.0	1,700.7	1,785.8	1,700.0	9.5	9.3	-92.16	392.6	-276.5	46.8	28.1	18.76	2.496 SF		
1,900.0	1,786.5	1,884.8	1,791.1	10.4	10.0	-107.09	424.5	-298.5	52.6	32.8	19.78	2.660		
2,000.0	1,872.4	1,983.8	1,882.2	11.4	10.7	-118.52	456.4	-320.5	61.2	41.2	19.97	3.065		
2,100.0	1,958.2	2,082.7	1,973.3	12.3	11.4	-126.91	488.3	-342.5	71.6	51.8	19.86	3.605		
2,200.0	2,044.0	2,181.7	2,064.4	13.2	12.1	-133.09	520.2	-364.4	83.2	63.4	19.73	4.215		
2,300.0	2,129.8	2,280.7	2,155.5	14.2	12.8	-137.74	552.1	-386.4	95.4	75.8	19.66	4.853		



# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Daybreak Federal 19-6 (PJ-19)
<b>Project:</b>	S. Piceance	<b>TVD Reference:</b>	KBE @ 5449.0ft (Original Well Elev)
<b>Reference Site:</b>	NWSE S19-T7S-R95W (PJ-19 Pad)	<b>MD Reference:</b>	KBE @ 5449.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Daybreak Federal 19-6 (PJ-19)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design 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								
Measured Depth	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty Axis	Separation Factor	Warning		
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)					
0.0	0.0	0.0	0.0	0.0	0.0	64.59	25.5	53.7	59.4						
100.0	100.0	100.0	100.0	0.1	0.1	64.59	25.5	53.7	59.4	59.2	0.27	218.248			
200.0	200.0	200.0	200.0	0.3	0.3	64.59	25.5	53.7	59.4	58.8	0.62	95.637 CC, ES			
300.0	300.0	297.8	297.8	0.5	0.5	62.90	27.9	54.5	61.2	60.3	0.97	62.842			
400.0	400.0	395.2	394.9	0.7	0.7	90.00	35.0	56.8	66.9	65.5	1.34	49.847			
500.0	499.6	492.1	490.9	0.9	1.0	89.22	46.6	60.7	76.3	74.6	1.77	43.146			
600.0	598.8	588.1	585.4	1.1	1.3	89.64	62.8	66.1	89.5	87.2	2.29	39.038 SF			

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Daybreak Federal 19-6 (PJ-19)
<b>Project:</b>	S. Piceance	<b>TVD Reference:</b>	KBE @ 5449.0ft (Original Well Elev)
<b>Reference Site:</b>	NWSE S19-T7S-R95W (PJ-19 Pad)	<b>MD Reference:</b>	KBE @ 5449.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Daybreak Federal 19-6 (PJ-19)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design 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	Vertical Depth	Measured Depth	Vertical Depth	Reference	Offset	Highside Toolface	Offset Wellbore Centre		Between Centres	Between Ellipses	Total Uncertainty	Separation			
(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(°)	+N/-S (ft)	+E/-W (ft)	(ft)	(ft)	Axis	Factor			
0.0	0.0	0.0	0.0	0.0	0.0	61.08	21.9	39.6	45.2						
100.0	100.0	100.0	100.0	0.1	0.1	61.08	21.9	39.6	45.2	44.9	0.27	165.960			
200.0	200.0	200.0	200.0	0.3	0.3	61.08	21.9	39.6	45.2	44.6	0.62	72.724			
300.0	300.0	300.0	300.0	0.5	0.5	61.08	21.9	39.6	45.2	44.2	0.97	46.564 CC			
314.6	314.6	314.6	314.6	0.5	0.5	90.72	21.9	39.6	45.2	44.2	1.02	44.207			
400.0	400.0	400.0	400.0	0.7	0.7	93.95	21.9	39.6	45.3	44.0	1.33	34.165 ES			
500.0	499.6	499.6	499.6	0.9	0.8	103.58	21.9	39.6	46.5	44.8	1.71	27.205			
600.0	598.8	598.1	598.0	1.1	1.0	114.90	24.3	40.1	51.8	49.7	2.13	24.309			
700.0	697.1	696.6	696.2	1.5	1.2	123.03	31.8	41.6	62.4	59.8	2.61	23.908 SF			
800.0	794.3	795.0	793.8	1.9	1.5	127.82	44.1	44.1	77.3	74.1	3.17	24.390			
900.0	890.2	893.1	890.3	2.5	1.8	130.18	61.3	47.7	95.9	92.1	3.84	24.956			

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Daybreak Federal 19-6 (PJ-19)
<b>Project:</b>	S. Piceance	<b>TVD Reference:</b>	KBE @ 5449.0ft (Original Well Elev)
<b>Reference Site:</b>	NWSE S19-T7S-R95W (PJ-19 Pad)	<b>MD Reference:</b>	KBE @ 5449.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Daybreak Federal 19-6 (PJ-19)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> NWSE S19-T7S-R95W (PJ-19 Pad) - Daybreak Federal 19-7C (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	69.23	18.2	48.0	51.4					
100.0	100.0	100.0	100.0	0.1	0.1	69.23	18.2	48.0	51.4	51.1	0.27	188.643		
200.0	200.0	200.0	200.0	0.3	0.3	69.23	18.2	48.0	51.4	50.7	0.62	82.664		
300.0	300.0	300.0	300.0	0.5	0.5	69.23	18.2	48.0	51.4	50.4	0.97	52.929	CC, ES	
400.0	400.0	400.0	400.0	0.7	0.7	101.65	18.2	48.0	51.8	50.5	1.33	39.104		
500.0	499.6	499.6	499.6	0.9	0.8	109.75	18.2	48.0	54.0	52.3	1.71	31.626		
600.0	598.8	598.8	598.8	1.1	1.0	121.40	18.2	48.0	59.7	57.6	2.12	28.211		
700.0	697.1	697.1	697.1	1.5	1.2	133.70	18.2	48.0	71.0	68.4	2.52	28.147	SF	
800.0	794.3	794.7	794.7	1.9	1.3	143.93	18.7	48.2	88.8	85.9	2.90	30.609		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Daybreak Federal 19-6 (PJ-19)
<b>Project:</b>	S. Piceance	<b>TVD Reference:</b>	KBE @ 5449.0ft (Original Well Elev)
<b>Reference Site:</b>	NWSE S19-T7S-R95W (PJ-19 Pad)	<b>MD Reference:</b>	KBE @ 5449.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Daybreak Federal 19-6 (PJ-19)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

Offset Design 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			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	65.42	40.1	87.6	96.3					
100.0	100.0	100.0	100.0	0.1	0.1	65.42	40.1	87.6	96.3	96.0	0.27	353.709		
200.0	200.0	200.0	200.0	0.3	0.3	65.42	40.1	87.6	96.3	95.7	0.62	154.996 CC, ES		
300.0	300.0	295.4	295.3	0.5	0.5	64.96	41.7	89.3	98.7	97.7	0.97	102.040 SF		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Daybreak Federal 19-6 (PJ-19)
<b>Project:</b>	S. Piceance	<b>TVD Reference:</b>	KBE @ 5449.0ft (Original Well Elev)
<b>Reference Site:</b>	NWSE S19-T7S-R95W (PJ-19 Pad)	<b>MD Reference:</b>	KBE @ 5449.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Daybreak Federal 19-6 (PJ-19)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> NWSE S19-T7S-R95W (PJ-19 Pad) - Daybreak Federal 19-8C (PJ-19 Pad) - DD - Plan #1													<b>Offset Site Error:</b>	0.0 ft
Survey Program: 0-MWD													<b>Offset Well Error:</b>	0.0 ft
Reference		Offset		Semi Major Axis			Distance					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)	Total Uncertainty Axis			
0.0	0.0	0.0	0.0	0.0	0.0	71.41	21.9	65.0	68.6					
100.0	100.0	100.0	100.0	0.1	0.1	71.41	21.9	65.0	68.6	68.3	0.27	251.778		
200.0	200.0	200.0	200.0	0.3	0.3	71.41	21.9	65.0	68.6	67.9	0.62	110.330 CC, ES		
300.0	300.0	296.9	296.9	0.5	0.5	70.37	23.7	66.6	70.7	69.8	0.97	72.824		
400.0	400.0	393.4	393.1	0.7	0.7	98.83	29.4	71.3	77.7	76.4	1.33	58.585		
500.0	499.6	489.0	487.9	0.9	1.0	99.44	38.6	79.0	89.9	88.2	1.73	51.921 SF		

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Daybreak Federal 19-6 (PJ-19)
<b>Project:</b>	S. Piceance	<b>TVD Reference:</b>	KBE @ 5449.0ft (Original Well Elev)
<b>Reference Site:</b>	NWSE S19-T7S-R95W (PJ-19 Pad)	<b>MD Reference:</b>	KBE @ 5449.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Daybreak Federal 19-6 (PJ-19)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

<b>Offset Design</b> NWSE S19-T7S-R95W (PJ-19 Pad) - Daybreak Federal 19-8D (PJ-19) - DD - Plan #1													<b>Offset Site Error:</b> 0.0 ft
Survey Program: 0-MWD													<b>Offset Well Error:</b> 0.0 ft
Reference		Offset		Semi Major Axis		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	70.42	29.1	81.9	87.0				
100.0	100.0	100.0	100.0	0.1	0.1	70.42	29.1	81.9	87.0	86.7	0.27	319.360	
200.0	200.0	200.0	200.0	0.3	0.3	70.42	29.1	81.9	87.0	86.3	0.62	139.945 CC, ES	
300.0	300.0	295.8	295.7	0.5	0.5	69.96	30.6	83.8	89.4	88.4	0.97	92.375	
400.0	400.0	391.0	390.7	0.7	0.7	99.55	34.9	89.6	97.0	95.7	1.31	73.765 SF	

# Cathedral Energy Services

## Anticollision Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well Daybreak Federal 19-6 (PJ-19)
<b>Project:</b>	S. Piceance	<b>TVD Reference:</b>	KBE @ 5449.0ft (Original Well Elev)
<b>Reference Site:</b>	NWSE S19-T7S-R95W (PJ-19 Pad)	<b>MD Reference:</b>	KBE @ 5449.0ft (Original Well Elev)
<b>Site Error:</b>	0.0ft	<b>North Reference:</b>	True
<b>Reference Well:</b>	Daybreak Federal 19-6 (PJ-19)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Well Error:</b>	0.0ft	<b>Output errors are at</b>	2.00 sigma
<b>Reference Wellbore</b>	DD	<b>Database:</b>	EDM 5000.1 US Multi Users DB
<b>Reference Design:</b>	Plan #1	<b>Offset TVD Reference:</b>	Offset Datum

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 19-6 (PJ-19)  
Coordinate System is US State Plane 1983, Colorado Central Zone  
Grid Convergence at Surface is: -1.60°

