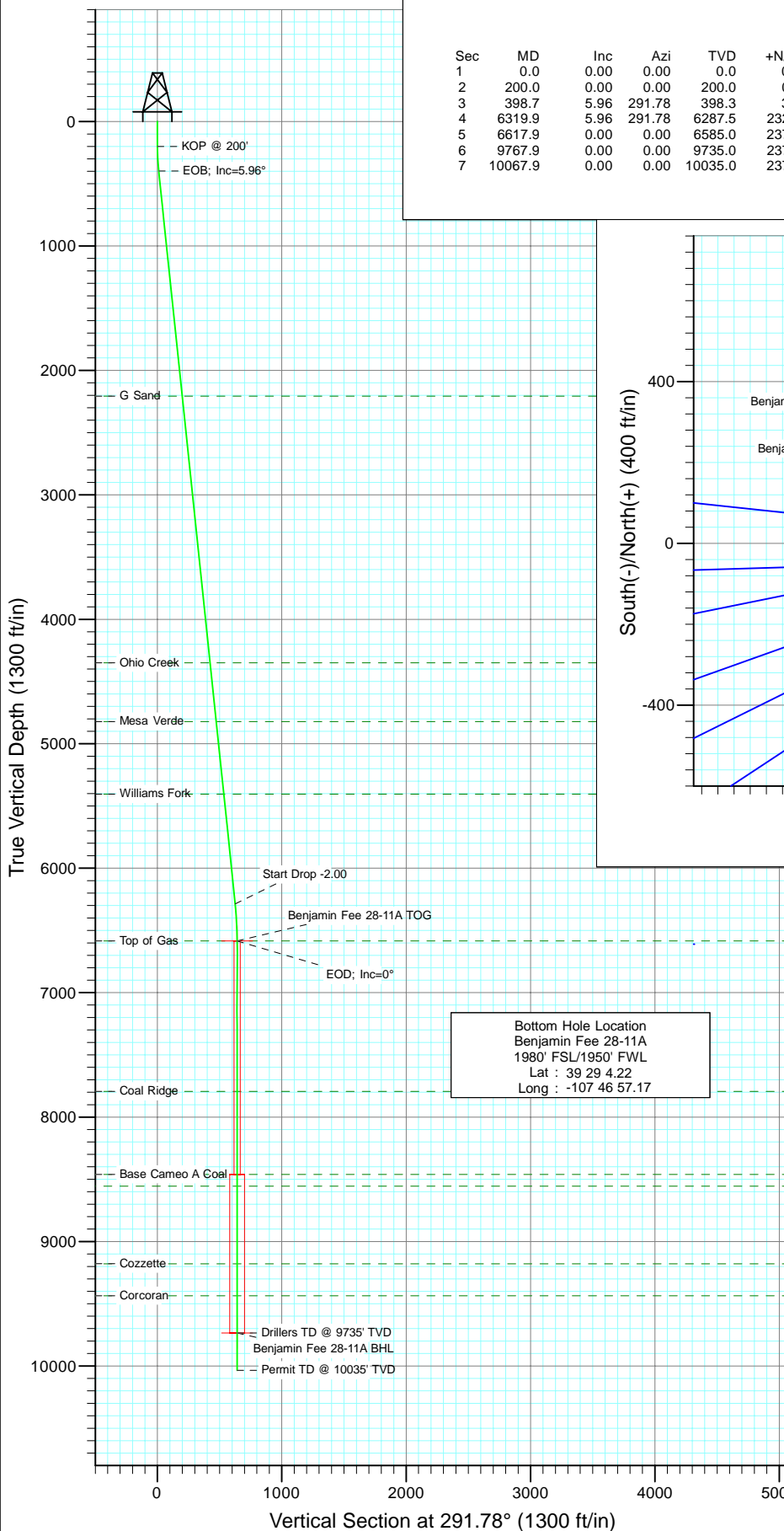
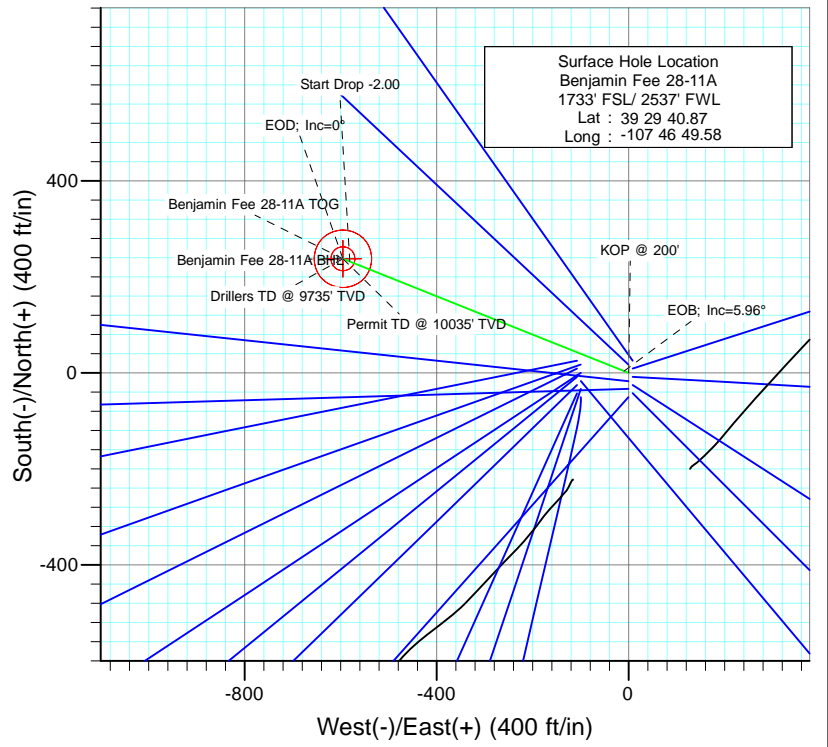




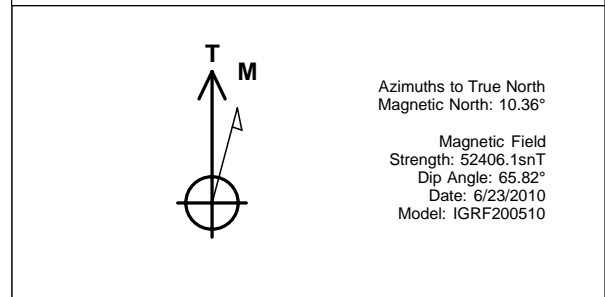
Project: Mamm Creek  
Site: K28NW Pad  
Well: Benjamin Fee 28-11A  
Wellbore: DD  
Design: Plan #1



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.0	
3	398.7	5.96	291.78	398.3	3.8	-9.6	3.00	291.78	10.3	
4	6319.9	5.96	291.78	6287.5	232.0	-580.6	0.00	0.00	625.2	
5	6617.9	0.00	0.00	6585.0	237.8	-595.0	2.00	180.00	640.7	Benjamin Fee 28-11A TOG
6	9767.9	0.00	0.00	9735.0	237.8	-595.0	0.00	0.00	640.7	Benjamin Fee 28-11A BHL
7	10067.9	0.00	0.00	10035.0	237.8	-595.0	0.00	0.00	640.7	



FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
2206.0	2216.2	G Sand
4350.0	4371.8	Ohio Creek
4822.0	4846.4	Mesa Verde
5404.0	5431.6	Williams Fork
6585.0	6617.9	Top of Gas
7794.0	7826.9	Coal Ridge
8460.0	8492.9	Base Cameo A Coal
8555.0	8587.9	Rollins
9180.0	9212.9	Cozzette
9435.0	9467.9	Corcoran



Plan #1 Benjamin Fee 28-11A (2000 FSL - 240 FWL) Job #10xxx: KR						
WELL @ 5965.0ft (Original Well Elev) North American Datum 1983 Well Benjamin Fee 28-11A, True North						
Type	Target	Azimuth	Origin	Type	N/S	E/W From TVD
Target	Benjamin Fee 28-11A BHL	291.78	Slot	0.0	0.0	0.0
Name	Benjamin Fee 28-11A TOG	TVD	+N/-S	+E/-W	Latitude	Longitude
	Benjamin Fee 28-11A TOG	6585.0	237.8	-595.0	39.495339	-107.782547
	Benjamin Fee 28-11A BHL	9735.0	237.8	-595.0	39.495339	-107.782547

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Benjamin Fee 28-11A
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WELL @ 5965.0ft (Original Well Elev)
<b>Project:</b>	Mamm Creek	<b>MD Reference:</b>	WELL @ 5965.0ft (Original Well Elev)
<b>Site:</b>	K28NW Pad	<b>North Reference:</b>	True
<b>Well:</b>	Benjamin Fee 28-11A	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #1		

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 28-11A					
Well Position	+N/-S	0.0 ft	Northing:	1,613,148.35 ft	Latitude:	39.494686
	+E/-W	0.0 ft	Easting:	2,356,519.35 ft	Longitude:	-107.780439
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
			(°)	(°)	(nT)
	IGRF200510	6/23/2010	10.36	65.82	52,406

Design	Plan #1			
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	291.78

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	
398.7	5.96	291.78	398.3	3.8	-9.6	3.00	3.00	0.00	291.78	
6,319.9	5.96	291.78	6,287.5	232.0	-580.6	0.00	0.00	0.00	0.00	
6,617.9	0.00	0.00	6,585.0	237.8	-595.0	2.00	-2.00	0.00	180.00	Benjamin Fee 28-11A
9,767.9	0.00	0.00	9,735.0	237.8	-595.0	0.00	0.00	0.00	0.00	Benjamin Fee 28-11A
10,067.9	0.00	0.00	10,035.0	237.8	-595.0	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 Benjamin Fee 28-11A
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WELL @ 5965.0ft (Original Well Elev)
<b>Project:</b>	Mamm Creek	<b>MD Reference:</b>	WELL @ 5965.0ft (Original Well Elev)
<b>Site:</b>	K28NW Pad	<b>North Reference:</b>	True
<b>Well:</b>	Benjamin Fee 28-11A	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #1		

### Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	KOP @ 200'
300.0	3.00	291.78	300.0	1.0	-2.4	2.6	3.00	3.00	
398.7	5.96	291.78	398.3	3.8	-9.6	10.3	3.00	3.00	EOB; Inc=5.96°
400.0	5.96	291.78	399.6	3.9	-9.7	10.5	0.00	0.00	
500.0	5.96	291.78	499.1	7.7	-19.4	20.8	0.00	0.00	
600.0	5.96	291.78	598.6	11.6	-29.0	31.2	0.00	0.00	
700.0	5.96	291.78	698.0	15.4	-38.6	41.6	0.00	0.00	
800.0	5.96	291.78	797.5	19.3	-48.3	52.0	0.00	0.00	
900.0	5.96	291.78	896.9	23.2	-57.9	62.4	0.00	0.00	
1,000.0	5.96	291.78	996.4	27.0	-67.6	72.8	0.00	0.00	
1,100.0	5.96	291.78	1,095.8	30.9	-77.2	83.2	0.00	0.00	
1,200.0	5.96	291.78	1,195.3	34.7	-86.9	93.5	0.00	0.00	
1,300.0	5.96	291.78	1,294.8	38.6	-96.5	103.9	0.00	0.00	
1,400.0	5.96	291.78	1,394.2	42.4	-106.1	114.3	0.00	0.00	
1,500.0	5.96	291.78	1,493.7	46.3	-115.8	124.7	0.00	0.00	
1,510.0	5.96	291.78	1,503.6	46.7	-116.8	125.7	0.00	0.00	Surface Casing
1,600.0	5.96	291.78	1,593.1	50.1	-125.4	135.1	0.00	0.00	
1,700.0	5.96	291.78	1,692.6	54.0	-135.1	145.5	0.00	0.00	
1,800.0	5.96	291.78	1,792.1	57.8	-144.7	155.9	0.00	0.00	
1,900.0	5.96	291.78	1,891.5	61.7	-154.4	166.2	0.00	0.00	
2,000.0	5.96	291.78	1,991.0	65.5	-164.0	176.6	0.00	0.00	
2,100.0	5.96	291.78	2,090.4	69.4	-173.7	187.0	0.00	0.00	
2,200.0	5.96	291.78	2,189.9	73.3	-183.3	197.4	0.00	0.00	
2,216.2	5.96	291.78	2,206.0	73.9	-184.9	199.1	0.00	0.00	G Sand
2,300.0	5.96	291.78	2,289.4	77.1	-192.9	207.8	0.00	0.00	
2,400.0	5.96	291.78	2,388.8	81.0	-202.6	218.2	0.00	0.00	
2,500.0	5.96	291.78	2,488.3	84.8	-212.2	228.5	0.00	0.00	
2,600.0	5.96	291.78	2,587.7	88.7	-221.9	238.9	0.00	0.00	
2,700.0	5.96	291.78	2,687.2	92.5	-231.5	249.3	0.00	0.00	
2,800.0	5.96	291.78	2,786.7	96.4	-241.2	259.7	0.00	0.00	
2,900.0	5.96	291.78	2,886.1	100.2	-250.8	270.1	0.00	0.00	
3,000.0	5.96	291.78	2,985.6	104.1	-260.4	280.5	0.00	0.00	
3,100.0	5.96	291.78	3,085.0	107.9	-270.1	290.9	0.00	0.00	
3,200.0	5.96	291.78	3,184.5	111.8	-279.7	301.2	0.00	0.00	
3,300.0	5.96	291.78	3,284.0	115.6	-289.4	311.6	0.00	0.00	
3,400.0	5.96	291.78	3,383.4	119.5	-299.0	322.0	0.00	0.00	
3,500.0	5.96	291.78	3,482.9	123.4	-308.7	332.4	0.00	0.00	
3,600.0	5.96	291.78	3,582.3	127.2	-318.3	342.8	0.00	0.00	
3,700.0	5.96	291.78	3,681.8	131.1	-327.9	353.2	0.00	0.00	
3,800.0	5.96	291.78	3,781.3	134.9	-337.6	363.6	0.00	0.00	
3,900.0	5.96	291.78	3,880.7	138.8	-347.2	373.9	0.00	0.00	
4,000.0	5.96	291.78	3,980.2	142.6	-356.9	384.3	0.00	0.00	
4,100.0	5.96	291.78	4,079.6	146.5	-366.5	394.7	0.00	0.00	
4,200.0	5.96	291.78	4,179.1	150.3	-376.2	405.1	0.00	0.00	
4,300.0	5.96	291.78	4,278.5	154.2	-385.8	415.5	0.00	0.00	
4,371.8	5.96	291.78	4,350.0	157.0	-392.7	422.9	0.00	0.00	Ohio Creek
4,400.0	5.96	291.78	4,378.0	158.0	-395.5	425.9	0.00	0.00	
4,500.0	5.96	291.78	4,477.5	161.9	-405.1	436.3	0.00	0.00	
4,600.0	5.96	291.78	4,576.9	165.8	-414.7	446.6	0.00	0.00	
4,700.0	5.96	291.78	4,676.4	169.6	-424.4	457.0	0.00	0.00	

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Benjamin Fee 28-11A
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WELL @ 5965.0ft (Original Well Elev)
<b>Project:</b>	Mamm Creek	<b>MD Reference:</b>	WELL @ 5965.0ft (Original Well Elev)
<b>Site:</b>	K28NW Pad	<b>North Reference:</b>	True
<b>Well:</b>	Benjamin Fee 28-11A	<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
4,800.0	5.96	291.78	4,775.8	173.5	-434.0	467.4	0.00	0.00	
4,846.4	5.96	291.78	4,822.0	175.2	-438.5	472.2	0.00	0.00	Mesa Verde
4,900.0	5.96	291.78	4,875.3	177.3	-443.7	477.8	0.00	0.00	
5,000.0	5.96	291.78	4,974.8	181.2	-453.3	488.2	0.00	0.00	
5,100.0	5.96	291.78	5,074.2	185.0	-463.0	498.6	0.00	0.00	
5,200.0	5.96	291.78	5,173.7	188.9	-472.6	508.9	0.00	0.00	
5,300.0	5.96	291.78	5,273.1	192.7	-482.2	519.3	0.00	0.00	
5,400.0	5.96	291.78	5,372.6	196.6	-491.9	529.7	0.00	0.00	
5,431.6	5.96	291.78	5,404.0	197.8	-494.9	533.0	0.00	0.00	Williams Fork
5,500.0	5.96	291.78	5,472.1	200.4	-501.5	540.1	0.00	0.00	
5,600.0	5.96	291.78	5,571.5	204.3	-511.2	550.5	0.00	0.00	
5,700.0	5.96	291.78	5,671.0	208.1	-520.8	560.9	0.00	0.00	
5,800.0	5.96	291.78	5,770.4	212.0	-530.5	571.3	0.00	0.00	
5,900.0	5.96	291.78	5,869.9	215.9	-540.1	581.6	0.00	0.00	
6,000.0	5.96	291.78	5,969.4	219.7	-549.7	592.0	0.00	0.00	
6,100.0	5.96	291.78	6,068.8	223.6	-559.4	602.4	0.00	0.00	
6,200.0	5.96	291.78	6,168.3	227.4	-569.0	612.8	0.00	0.00	
6,300.0	5.96	291.78	6,267.7	231.3	-578.7	623.2	0.00	0.00	
6,319.9	5.96	291.78	6,287.5	232.0	-580.6	625.2	0.00	0.00	Start Drop -2.00
6,400.0	4.36	291.78	6,367.3	234.7	-587.3	632.5	2.00	-2.00	
6,500.0	2.36	291.78	6,467.1	236.9	-592.7	638.3	2.00	-2.00	
6,600.0	0.36	291.78	6,567.1	237.8	-594.9	640.7	2.00	-2.00	
6,617.9	0.00	0.00	6,585.0	237.8	-595.0	640.7	2.00	-2.00	EOD; Inc=0° - Top of Gas - Benjamin Fee 28-11
6,700.0	0.00	0.00	6,667.1	237.8	-595.0	640.7	0.00	0.00	
6,800.0	0.00	0.00	6,767.1	237.8	-595.0	640.7	0.00	0.00	
6,900.0	0.00	0.00	6,867.1	237.8	-595.0	640.7	0.00	0.00	
7,000.0	0.00	0.00	6,967.1	237.8	-595.0	640.7	0.00	0.00	
7,100.0	0.00	0.00	7,067.1	237.8	-595.0	640.7	0.00	0.00	
7,200.0	0.00	0.00	7,167.1	237.8	-595.0	640.7	0.00	0.00	
7,300.0	0.00	0.00	7,267.1	237.8	-595.0	640.7	0.00	0.00	
7,400.0	0.00	0.00	7,367.1	237.8	-595.0	640.7	0.00	0.00	
7,500.0	0.00	0.00	7,467.1	237.8	-595.0	640.7	0.00	0.00	
7,600.0	0.00	0.00	7,567.1	237.8	-595.0	640.7	0.00	0.00	
7,700.0	0.00	0.00	7,667.1	237.8	-595.0	640.7	0.00	0.00	
7,800.0	0.00	0.00	7,767.1	237.8	-595.0	640.7	0.00	0.00	
7,826.9	0.00	0.00	7,794.0	237.8	-595.0	640.7	0.00	0.00	Coal Ridge
7,900.0	0.00	0.00	7,867.1	237.8	-595.0	640.7	0.00	0.00	
8,000.0	0.00	0.00	7,967.1	237.8	-595.0	640.7	0.00	0.00	
8,100.0	0.00	0.00	8,067.1	237.8	-595.0	640.7	0.00	0.00	
8,200.0	0.00	0.00	8,167.1	237.8	-595.0	640.7	0.00	0.00	
8,300.0	0.00	0.00	8,267.1	237.8	-595.0	640.7	0.00	0.00	
8,400.0	0.00	0.00	8,367.1	237.8	-595.0	640.7	0.00	0.00	
8,492.9	0.00	0.00	8,460.0	237.8	-595.0	640.7	0.00	0.00	Base Cameo A Coal
8,500.0	0.00	0.00	8,467.1	237.8	-595.0	640.7	0.00	0.00	
8,587.9	0.00	0.00	8,555.0	237.8	-595.0	640.7	0.00	0.00	Rollins
8,600.0	0.00	0.00	8,567.1	237.8	-595.0	640.7	0.00	0.00	
8,700.0	0.00	0.00	8,667.1	237.8	-595.0	640.7	0.00	0.00	
8,800.0	0.00	0.00	8,767.1	237.8	-595.0	640.7	0.00	0.00	
8,900.0	0.00	0.00	8,867.1	237.8	-595.0	640.7	0.00	0.00	
9,000.0	0.00	0.00	8,967.1	237.8	-595.0	640.7	0.00	0.00	
9,100.0	0.00	0.00	9,067.1	237.8	-595.0	640.7	0.00	0.00	
9,200.0	0.00	0.00	9,167.1	237.8	-595.0	640.7	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 Benjamin Fee 28-11A
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WELL @ 5965.0ft (Original Well Elev)
<b>Project:</b>	Mamm Creek	<b>MD Reference:</b>	WELL @ 5965.0ft (Original Well Elev)
<b>Site:</b>	K28NW Pad	<b>North Reference:</b>	True
<b>Well:</b>	Benjamin Fee 28-11A	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #1		

### Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
9,212.9	0.00	0.00	9,180.0	237.8	-595.0	640.7	0.00	0.00	Cozzette
9,300.0	0.00	0.00	9,267.1	237.8	-595.0	640.7	0.00	0.00	
9,400.0	0.00	0.00	9,367.1	237.8	-595.0	640.7	0.00	0.00	
9,467.9	0.00	0.00	9,435.0	237.8	-595.0	640.7	0.00	0.00	Corcoran
9,500.0	0.00	0.00	9,467.1	237.8	-595.0	640.7	0.00	0.00	
9,600.0	0.00	0.00	9,567.1	237.8	-595.0	640.7	0.00	0.00	
9,700.0	0.00	0.00	9,667.1	237.8	-595.0	640.7	0.00	0.00	
9,767.9	0.00	0.00	9,735.0	237.8	-595.0	640.7	0.00	0.00	Drillers TD @ 9735' TVD - Benjamin Fee 28-11.
9,800.0	0.00	0.00	9,767.1	237.8	-595.0	640.7	0.00	0.00	
9,900.0	0.00	0.00	9,867.1	237.8	-595.0	640.7	0.00	0.00	
10,000.0	0.00	0.00	9,967.1	237.8	-595.0	640.7	0.00	0.00	
10,067.9	0.00	0.00	10,035.0	237.8	-595.0	640.7	0.00	0.00	Permit TD @ 10035' TVD

### Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Benjamin Fee 28-11A Tr - plan hits target center - Circle (radius 25.0)	0.00	0.00	6,585.0	237.8	-595.0	1,613,400.99	2,355,930.53	39.495339	-107.782547
Benjamin Fee 28-11A Bl - plan hits target center - Circle (radius 60.0)	0.00	0.00	9,735.0	237.8	-595.0	1,613,400.99	2,355,930.53	39.495339	-107.782547

### Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
1,510.0	1,503.6	Surface Casing		

### Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
2,216.2	2,206.0	G Sand			
4,371.8	4,350.0	Ohio Creek			
4,846.4	4,822.0	Mesa Verde			
5,431.6	5,404.0	Williams Fork			
6,617.9	6,585.0	Top of Gas			
7,826.9	7,794.0	Coal Ridge			
8,492.9	8,460.0	Base Cameo A Coal			
8,587.9	8,555.0	Rollins			
9,212.9	9,180.0	Cozzette			
9,467.9	9,435.0	Corcoran			

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Benjamin Fee 28-11A
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WELL @ 5965.0ft (Original Well Elev)
<b>Project:</b>	Mamm Creek	<b>MD Reference:</b>	WELL @ 5965.0ft (Original Well Elev)
<b>Site:</b>	K28NW Pad	<b>North Reference:</b>	True
<b>Well:</b>	Benjamin Fee 28-11A	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #1		

### Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
200.0	200.0	0.0	0.0	KOP @ 200'
398.7	398.3	3.8	-9.6	EOB; Inc=5.96°
6,319.9	6,287.5	232.0	-580.6	Start Drop -2.00
6,617.9	6,585.0	237.8	-595.0	EOD; Inc=0°
9,767.9	9,735.0	237.8	-595.0	Drillers TD @ 9735' TVD
10,067.9	10,035.0	237.8	-595.0	Permit TD @ 10035' TVD