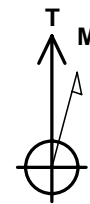
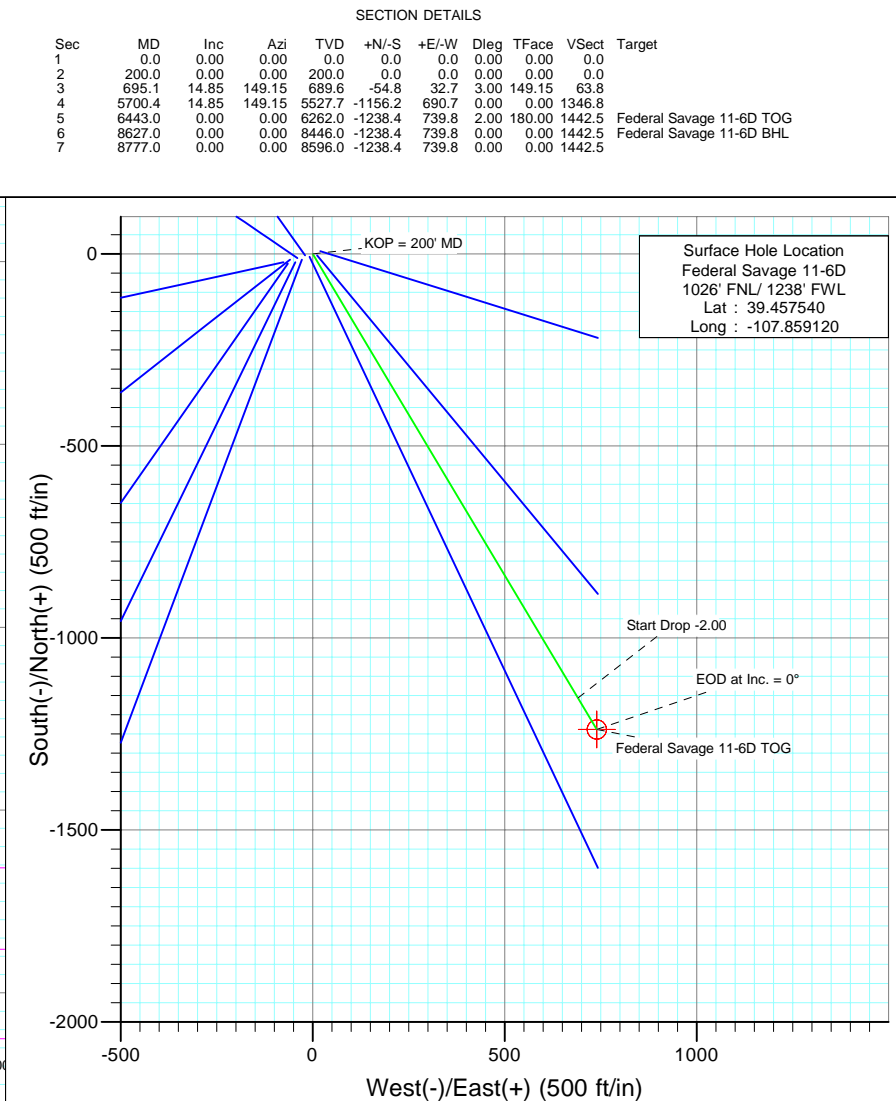
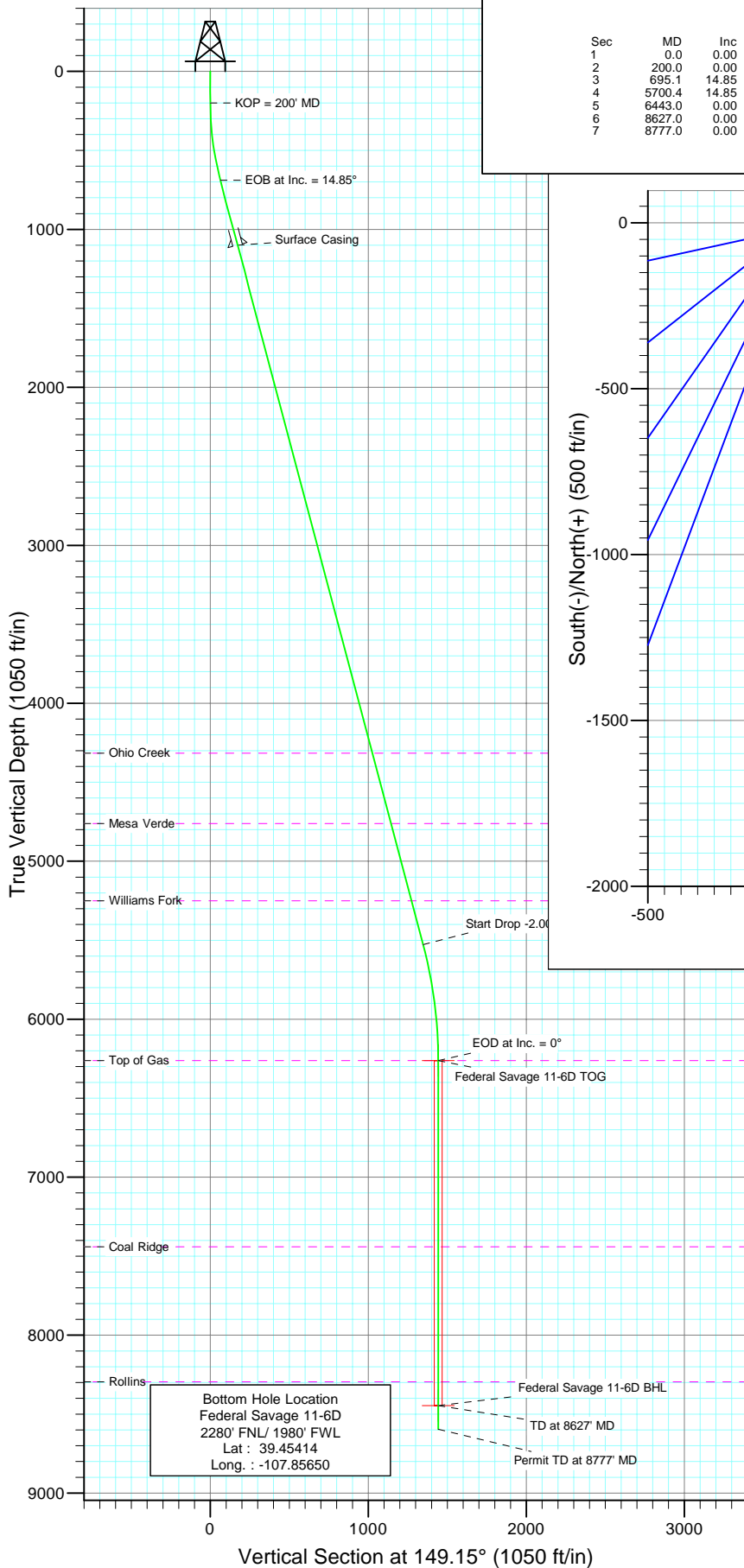




Project: S. Piceance  
Site: NWNW S11-T7S-R94W (RD 11 Pad)  
Well: Federal Savage 11-6D  
Wellbore: DD  
Design: Plan #1



Azimuths to True North  
Magnetic North: 10.41°

Magnetic Field  
Strength: 52390.3nT  
Dip Angle: 65.78°  
Date: 4/16/2010  
Model: IGRF200510

#### FORMATION TOP DETAILS

TVDPath	MDPath	Formation
4316.0	4446.9	Ohio Creek
4761.0	4907.3	Mesa Verde
5251.0	5414.2	Williams Fork
6262.0	6443.0	Top of Gas
7441.0	7622.0	Coal Ridge
8296.0	8477.0	Rollins

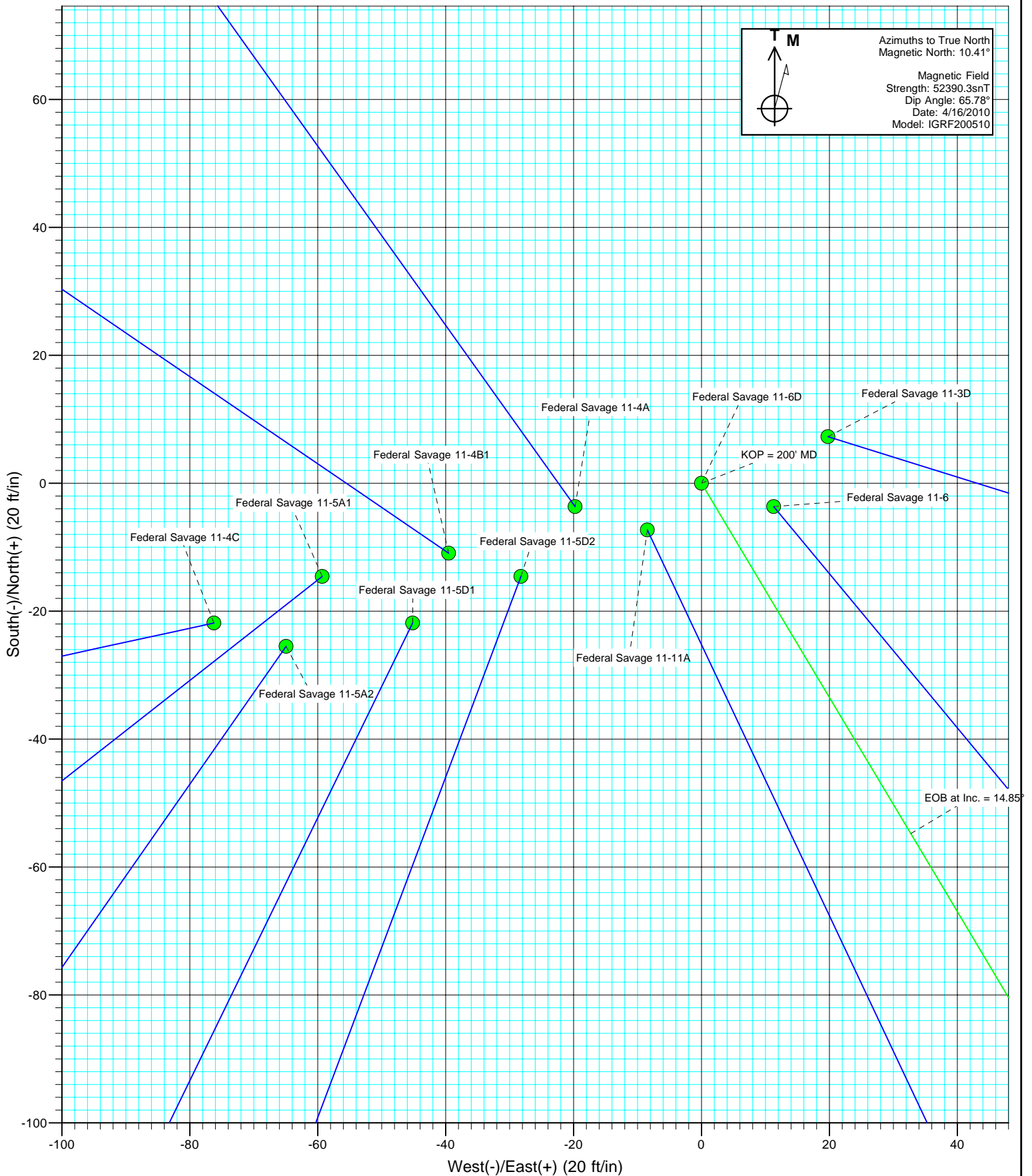
#### DESIGN DETAILS: Plan #1

105xxx: KR  
WELL @ 6406.0ft (Original Well Elev)

Target	Azimuth	Origin	N/S	E/W	From TVD
Federal Savage 11-6D BHL	149.15	Slot	0.0	0.0	0.0

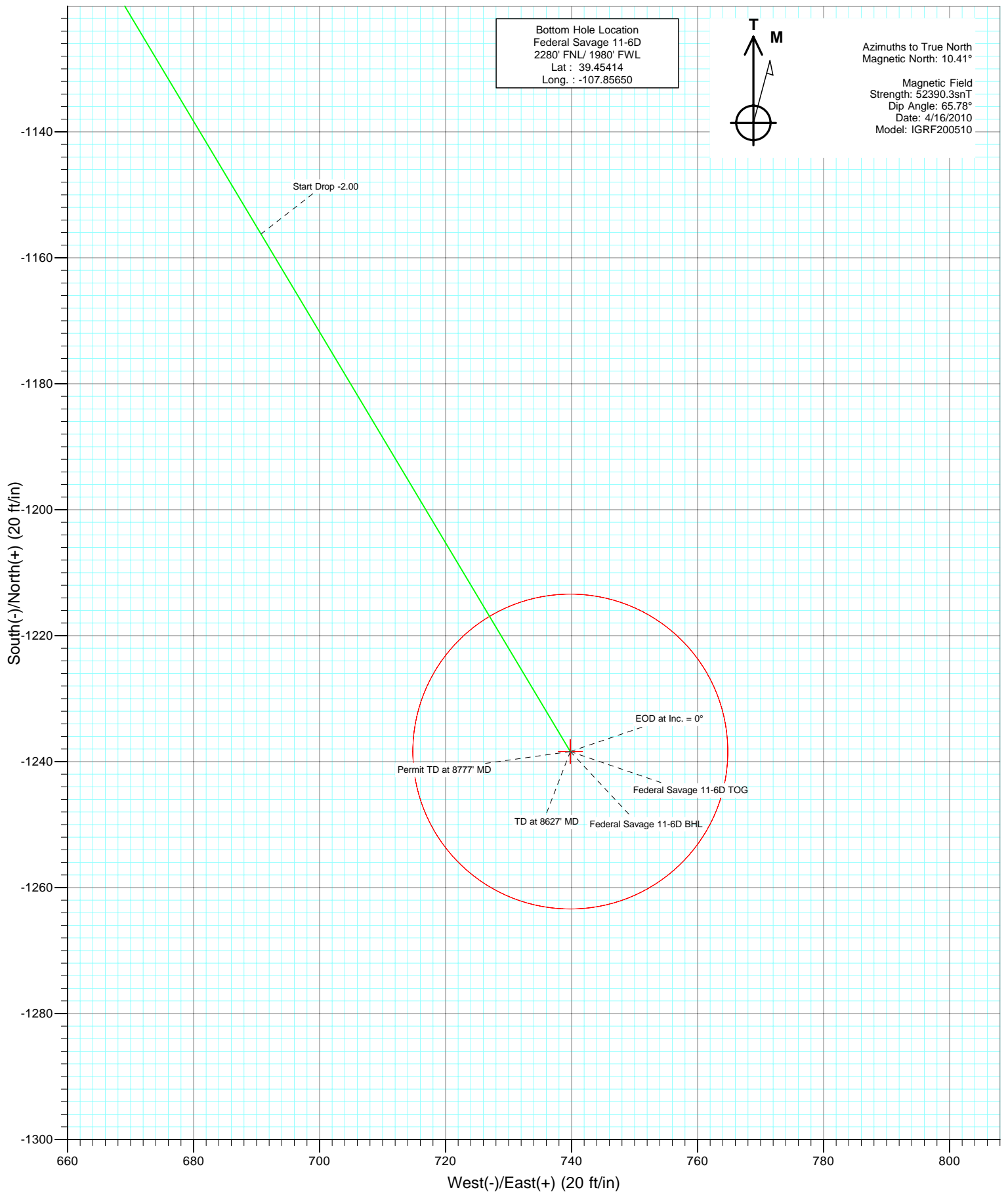


Project: S. Piceance  
Site: NWNW S11-T7S-R94W (RD 11 Pad)  
Well: Federal Savage 11-6D  
Wellbore: DD  
Design: Plan #1





Project: S. Piceance  
Site: NWNW S11-T7S-R94W (RD 11 Pad)  
Well: Federal Savage 11-6D  
Wellbore: DD  
Design: Plan #1



# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Federal Savage 11-6D
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WELL @ 6406.0ft (Original Well Elev)
<b>Project:</b>	S. Piceance	<b>MD Reference:</b>	WELL @ 6406.0ft (Original Well Elev)
<b>Site:</b>	NWNW S11-T7S-R94W (RD 11 Pad)	<b>North Reference:</b>	True
<b>Well:</b>	Federal Savage 11-6D	<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		NWNW S11-T7S-R94W (RD 11 Pad)			
Site Position:		Northing:	1,600,192.72 ft	Latitude:	39.457550
From:	Lat/Long	Easting:	2,333,999.30 ft	Longitude:	-107.859020
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	-1.49 °

Well	Federal Savage 11-6D					
Well Position	+N/-S	0.0 ft	Northing:	1,600,189.81 ft	Latitude:	39.457540
	+E/-W	0.0 ft	Easting:	2,333,970.98 ft	Longitude:	-107.859120
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	6,384.0 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</b>
			(°)	(°)	(nT)
	IGRF200510	4/16/2010	10.41	65.78	52,390

<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)</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Direction</b>
	(ft)	(ft)	(ft)	(°)
	0.0	0.0	0.0	149.15

<b>Plan Sections</b>										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.00	0.00	0.00	0.00	
695.1	14.85	149.15	689.6	-54.8	32.7	3.00	3.00	0.00	149.15	
5,700.4	14.85	149.15	5,527.7	-1,156.2	690.7	0.00	0.00	0.00	0.00	
6,443.0	0.00	0.00	6,262.0	-1,238.4	739.8	2.00	-2.00	0.00	180.00	Federal Savage 11-6D
8,627.0	0.00	0.00	8,446.0	-1,238.4	739.8	0.00	0.00	0.00	0.00	Federal Savage 11-6D
8,777.0	0.00	0.00	8,596.0	-1,238.4	739.8	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 Federal Savage 11-6D
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WELL @ 6406.0ft (Original Well Elev)
<b>Project:</b>	S. Piceance	<b>MD Reference:</b>	WELL @ 6406.0ft (Original Well Elev)
<b>Site:</b>	NWNW S11-T7S-R94W (RD 11 Pad)	<b>North Reference:</b>	True
<b>Well:</b>	Federal Savage 11-6D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #1		

### Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	KOP = 200' MD
300.0	3.00	149.15	300.0	-2.2	1.3	2.6	3.00	3.00	
400.0	6.00	149.15	399.6	-9.0	5.4	10.5	3.00	3.00	
500.0	9.00	149.15	498.8	-20.2	12.1	23.5	3.00	3.00	
600.0	12.00	149.15	597.1	-35.8	21.4	41.7	3.00	3.00	
695.1	14.85	149.15	689.6	-54.8	32.7	63.8	3.00	3.00	EOB at Inc. = 14.85°
700.0	14.85	149.15	694.3	-55.9	33.4	65.1	0.00	0.00	
800.0	14.85	149.15	791.0	-77.9	46.5	90.7	0.00	0.00	
900.0	14.85	149.15	887.6	-99.9	59.7	116.3	0.00	0.00	
1,000.0	14.85	149.15	984.3	-121.9	72.8	142.0	0.00	0.00	
1,100.0	14.85	149.15	1,080.9	-143.9	86.0	167.6	0.00	0.00	
1,119.7	14.85	149.15	1,100.0	-148.2	88.5	172.7	0.00	0.00	Surface Casing
1,200.0	14.85	149.15	1,177.6	-165.9	99.1	193.2	0.00	0.00	
1,300.0	14.85	149.15	1,274.3	-187.9	112.2	218.9	0.00	0.00	
1,400.0	14.85	149.15	1,370.9	-209.9	125.4	244.5	0.00	0.00	
1,500.0	14.85	149.15	1,467.6	-231.9	138.5	270.1	0.00	0.00	
1,600.0	14.85	149.15	1,564.2	-253.9	151.7	295.8	0.00	0.00	
1,700.0	14.85	149.15	1,660.9	-275.9	164.8	321.4	0.00	0.00	
1,800.0	14.85	149.15	1,757.6	-297.9	178.0	347.0	0.00	0.00	
1,900.0	14.85	149.15	1,854.2	-319.9	191.1	372.7	0.00	0.00	
2,000.0	14.85	149.15	1,950.9	-341.9	204.3	398.3	0.00	0.00	
2,100.0	14.85	149.15	2,047.5	-363.9	217.4	423.9	0.00	0.00	
2,200.0	14.85	149.15	2,144.2	-385.9	230.6	449.6	0.00	0.00	
2,300.0	14.85	149.15	2,240.9	-407.9	243.7	475.2	0.00	0.00	
2,400.0	14.85	149.15	2,337.5	-430.0	256.9	500.8	0.00	0.00	
2,500.0	14.85	149.15	2,434.2	-452.0	270.0	526.5	0.00	0.00	
2,600.0	14.85	149.15	2,530.8	-474.0	283.1	552.1	0.00	0.00	
2,700.0	14.85	149.15	2,627.5	-496.0	296.3	577.7	0.00	0.00	
2,800.0	14.85	149.15	2,724.1	-518.0	309.4	603.4	0.00	0.00	
2,900.0	14.85	149.15	2,820.8	-540.0	322.6	629.0	0.00	0.00	
3,000.0	14.85	149.15	2,917.5	-562.0	335.7	654.6	0.00	0.00	
3,100.0	14.85	149.15	3,014.1	-584.0	348.9	680.3	0.00	0.00	
3,200.0	14.85	149.15	3,110.8	-606.0	362.0	705.9	0.00	0.00	
3,300.0	14.85	149.15	3,207.4	-628.0	375.2	731.5	0.00	0.00	
3,400.0	14.85	149.15	3,304.1	-650.0	388.3	757.2	0.00	0.00	
3,500.0	14.85	149.15	3,400.8	-672.0	401.5	782.8	0.00	0.00	
3,600.0	14.85	149.15	3,497.4	-694.0	414.6	808.4	0.00	0.00	
3,700.0	14.85	149.15	3,594.1	-716.0	427.7	834.1	0.00	0.00	
3,800.0	14.85	149.15	3,690.7	-738.0	440.9	859.7	0.00	0.00	
3,900.0	14.85	149.15	3,787.4	-760.0	454.0	885.3	0.00	0.00	
4,000.0	14.85	149.15	3,884.1	-782.0	467.2	911.0	0.00	0.00	
4,100.0	14.85	149.15	3,980.7	-804.0	480.3	936.6	0.00	0.00	
4,200.0	14.85	149.15	4,077.4	-826.0	493.5	962.2	0.00	0.00	
4,300.0	14.85	149.15	4,174.0	-848.0	506.6	987.9	0.00	0.00	
4,400.0	14.85	149.15	4,270.7	-870.1	519.8	1,013.5	0.00	0.00	
4,446.9	14.85	149.15	4,316.0	-880.4	525.9	1,025.5	0.00	0.00	Ohio Creek
4,500.0	14.85	149.15	4,367.4	-892.1	532.9	1,039.1	0.00	0.00	
4,600.0	14.85	149.15	4,464.0	-914.1	546.1	1,064.8	0.00	0.00	
4,700.0	14.85	149.15	4,560.7	-936.1	559.2	1,090.4	0.00	0.00	
4,800.0	14.85	149.15	4,657.3	-958.1	572.4	1,116.0	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 Federal Savage 11-6D
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WELL @ 6406.0ft (Original Well Elev)
<b>Project:</b>	S. Piceance	<b>MD Reference:</b>	WELL @ 6406.0ft (Original Well Elev)
<b>Site:</b>	NWNW S11-T7S-R94W (RD 11 Pad)	<b>North Reference:</b>	True
<b>Well:</b>	Federal Savage 11-6D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
4,900.0	14.85	149.15	4,754.0	-980.1	585.5	1,141.6	0.00	0.00	
4,907.3	14.85	149.15	4,761.0	-981.7	586.5	1,143.5	0.00	0.00	Mesa Verde
5,000.0	14.85	149.15	4,850.6	-1,002.1	598.6	1,167.3	0.00	0.00	
5,100.0	14.85	149.15	4,947.3	-1,024.1	611.8	1,192.9	0.00	0.00	
5,200.0	14.85	149.15	5,044.0	-1,046.1	624.9	1,218.5	0.00	0.00	
5,300.0	14.85	149.15	5,140.6	-1,068.1	638.1	1,244.2	0.00	0.00	
5,400.0	14.85	149.15	5,237.3	-1,090.1	651.2	1,269.8	0.00	0.00	
5,414.2	14.85	149.15	5,251.0	-1,093.2	653.1	1,273.5	0.00	0.00	Williams Fork
5,500.0	14.85	149.15	5,333.9	-1,112.1	664.4	1,295.4	0.00	0.00	
5,600.0	14.85	149.15	5,430.6	-1,134.1	677.5	1,321.1	0.00	0.00	
5,700.0	14.85	149.15	5,527.3	-1,156.1	690.7	1,346.7	0.00	0.00	
5,700.4	14.85	149.15	5,527.7	-1,156.2	690.7	1,346.8	0.00	0.00	Start Drop -2.00
5,800.0	12.86	149.15	5,624.3	-1,176.7	702.9	1,370.7	2.00	-2.00	
5,900.0	10.86	149.15	5,722.2	-1,194.3	713.5	1,391.2	2.00	-2.00	
6,000.0	8.86	149.15	5,820.7	-1,209.0	722.3	1,408.3	2.00	-2.00	
6,100.0	6.86	149.15	5,919.8	-1,220.8	729.3	1,422.0	2.00	-2.00	
6,200.0	4.86	149.15	6,019.2	-1,229.5	734.5	1,432.2	2.00	-2.00	
6,300.0	2.86	149.15	6,119.0	-1,235.3	738.0	1,439.0	2.00	-2.00	
6,400.0	0.86	149.15	6,219.0	-1,238.1	739.6	1,442.2	2.00	-2.00	
6,443.0	0.00	0.00	6,262.0	-1,238.4	739.8	1,442.5	2.00	-2.00	EOD at Inc. = 0° - Top of Gas - Federal Savage
6,500.0	0.00	0.00	6,319.0	-1,238.4	739.8	1,442.5	0.00	0.00	
6,600.0	0.00	0.00	6,419.0	-1,238.4	739.8	1,442.5	0.00	0.00	
6,700.0	0.00	0.00	6,519.0	-1,238.4	739.8	1,442.5	0.00	0.00	
6,800.0	0.00	0.00	6,619.0	-1,238.4	739.8	1,442.5	0.00	0.00	
6,900.0	0.00	0.00	6,719.0	-1,238.4	739.8	1,442.5	0.00	0.00	
7,000.0	0.00	0.00	6,819.0	-1,238.4	739.8	1,442.5	0.00	0.00	
7,100.0	0.00	0.00	6,919.0	-1,238.4	739.8	1,442.5	0.00	0.00	
7,200.0	0.00	0.00	7,019.0	-1,238.4	739.8	1,442.5	0.00	0.00	
7,300.0	0.00	0.00	7,119.0	-1,238.4	739.8	1,442.5	0.00	0.00	
7,400.0	0.00	0.00	7,219.0	-1,238.4	739.8	1,442.5	0.00	0.00	
7,500.0	0.00	0.00	7,319.0	-1,238.4	739.8	1,442.5	0.00	0.00	
7,600.0	0.00	0.00	7,419.0	-1,238.4	739.8	1,442.5	0.00	0.00	
7,622.0	0.00	0.00	7,441.0	-1,238.4	739.8	1,442.5	0.00	0.00	Coal Ridge
7,700.0	0.00	0.00	7,519.0	-1,238.4	739.8	1,442.5	0.00	0.00	
7,800.0	0.00	0.00	7,619.0	-1,238.4	739.8	1,442.5	0.00	0.00	
7,900.0	0.00	0.00	7,719.0	-1,238.4	739.8	1,442.5	0.00	0.00	
8,000.0	0.00	0.00	7,819.0	-1,238.4	739.8	1,442.5	0.00	0.00	
8,100.0	0.00	0.00	7,919.0	-1,238.4	739.8	1,442.5	0.00	0.00	
8,200.0	0.00	0.00	8,019.0	-1,238.4	739.8	1,442.5	0.00	0.00	
8,300.0	0.00	0.00	8,119.0	-1,238.4	739.8	1,442.5	0.00	0.00	
8,400.0	0.00	0.00	8,219.0	-1,238.4	739.8	1,442.5	0.00	0.00	
8,477.0	0.00	0.00	8,296.0	-1,238.4	739.8	1,442.5	0.00	0.00	Rollins
8,500.0	0.00	0.00	8,319.0	-1,238.4	739.8	1,442.5	0.00	0.00	
8,600.0	0.00	0.00	8,419.0	-1,238.4	739.8	1,442.5	0.00	0.00	
8,627.0	0.00	0.00	8,446.0	-1,238.4	739.8	1,442.5	0.00	0.00	TD at 8627' MD - Federal Savage 11-6D BHL
8,700.0	0.00	0.00	8,519.0	-1,238.4	739.8	1,442.5	0.00	0.00	
8,777.0	0.00	0.00	8,596.0	-1,238.4	739.8	1,442.5	0.00	0.00	Permit TD at 8777' MD

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well Federal Savage 11-6D
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	WELL @ 6406.0ft (Original Well Elev)
<b>Project:</b>	S. Piceance	<b>MD Reference:</b>	WELL @ 6406.0ft (Original Well Elev)
<b>Site:</b>	NWNW S11-T7S-R94W (RD 11 Pad)	<b>North Reference:</b>	True
<b>Well:</b>	Federal Savage 11-6D	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #1		

Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
- Shape									
Federal Savage 11-6D E	0.00	0.00	8,446.0	-1,238.4	739.8	1,598,932.63	2,334,678.38	39.454140	-107.856500
- plan hits target center									
- Circle (radius 25.0)									
Federal Savage 11-6D T	0.00	0.00	6,262.0	-1,238.4	739.8	1,598,932.63	2,334,678.38	39.454140	-107.856500
- plan hits target center									
- Point									

Casing Points					
Measured Depth	Vertical Depth	Name		Casing Diameter	Hole Diameter
(ft)	(ft)			(in)	(in)
1,119.7	1,100.0	Surface Casing		5.500	6.000

Formations						
Measured Depth	Vertical Depth	Name		Lithology	Dip	Dip Direction
(ft)	(ft)				(°)	(°)
4,446.9	4,316.0	Ohio Creek				
4,907.3	4,761.0	Mesa Verde				
5,414.2	5,251.0	Williams Fork				
6,443.0	6,262.0	Top of Gas				
7,622.0	7,441.0	Coal Ridge				
8,477.0	8,296.0	Rollins				

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates		Comment	
(ft)	(ft)	+N/-S	+E/-W		
(ft)	(ft)	(ft)	(ft)		
200.0	200.0	0.0	0.0	KOP = 200' MD	
695.1	689.6	-54.8	32.7	EOB at Inc. = 14.85°	
5,700.4	5,527.7	-1,156.2	690.7	Start Drop -2.00	
6,443.0	6,262.0	-1,238.4	739.8	EOD at Inc. = 0°	
8,627.0	8,446.0	-1,238.4	739.8	TD at 8627' MD	
8,777.0	8,596.0	-1,238.4	739.8	Permit TD at 8777' MD	