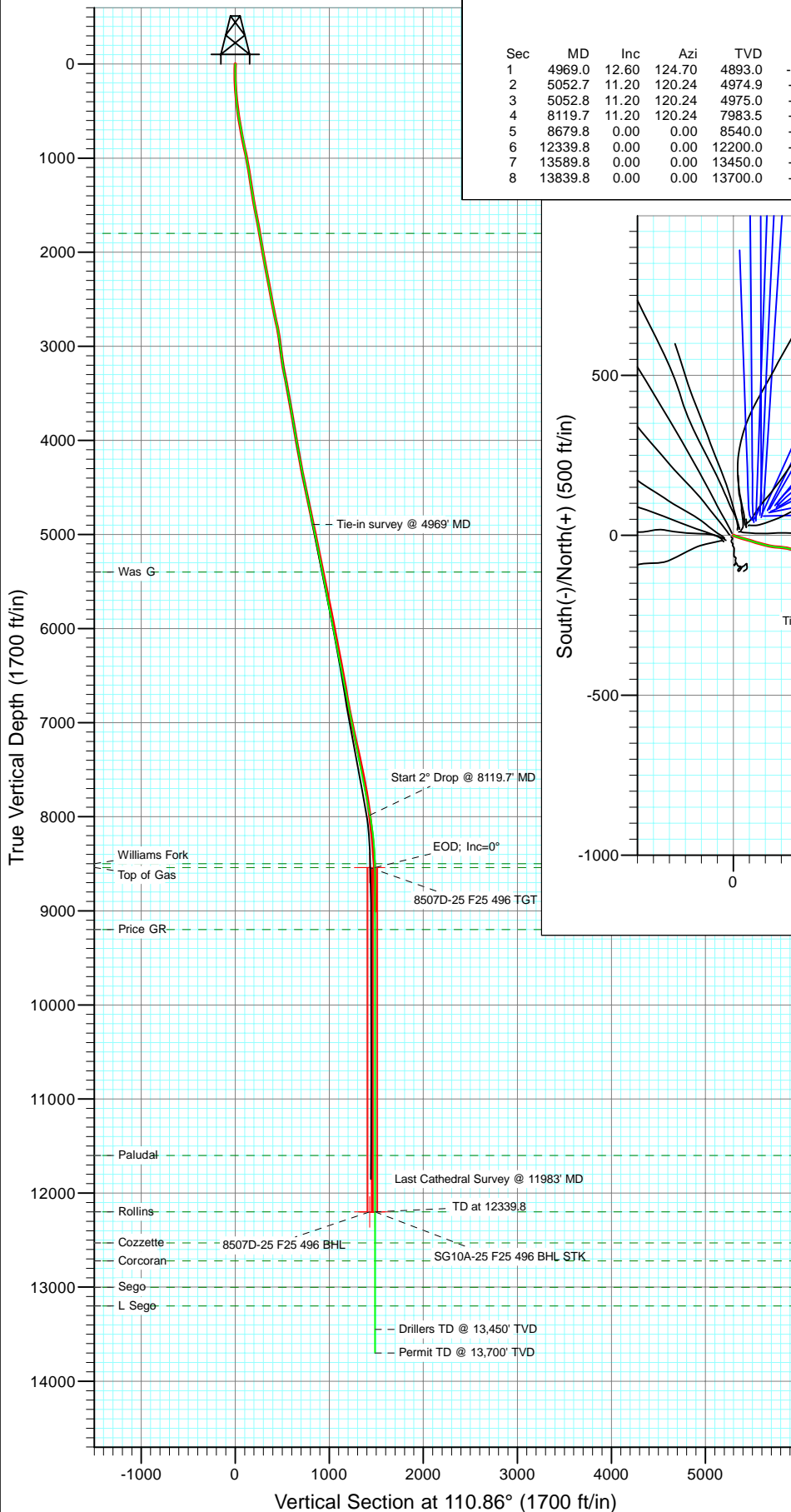
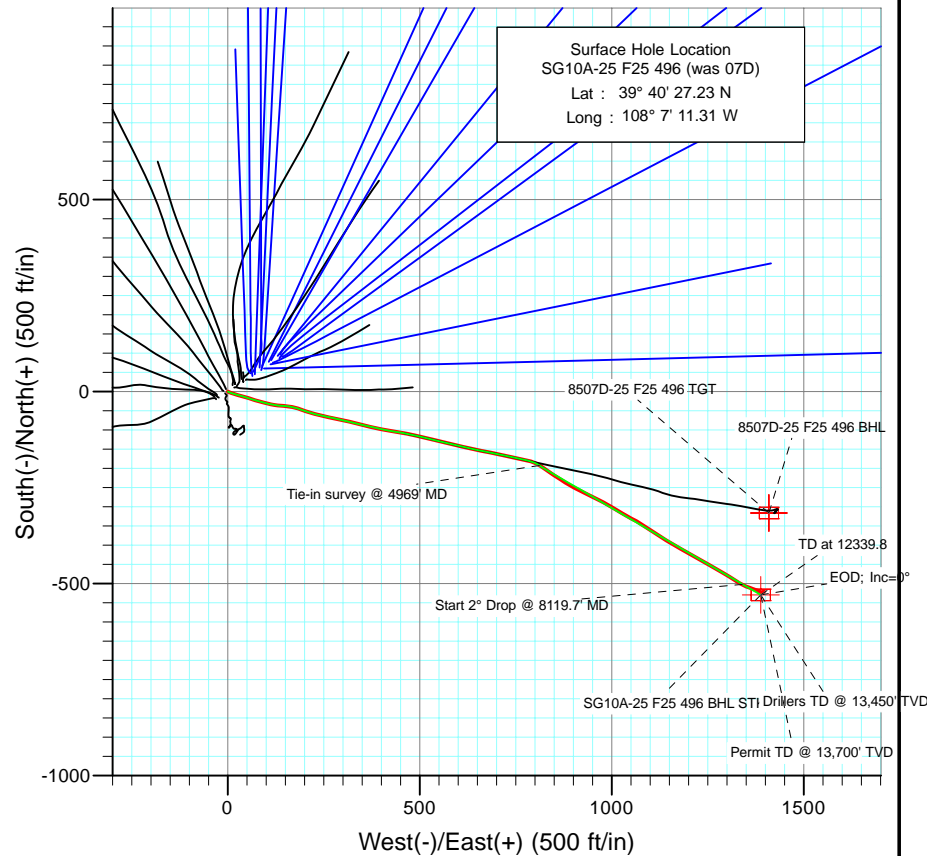




Project: Story Gulch  
Site: F25 496  
Well: SG10A-25 F25 496 (was 07D)  
Wellbore: DD  
Design: Plan #3



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	4969.0	12.60	124.70	4893.0	-192.1	811.7	0.00	0.00	826.9	
2	5052.7	11.20	120.24	4974.9	-201.4	826.2	2.00	-148.87	843.8	
3	5052.8	11.20	120.24	4975.0	-201.4	826.3	2.00	17.83	843.8	
4	8119.7	11.20	120.24	7983.5	-501.5	1341.0	0.00	0.00	1431.7	
5	8679.8	0.00	0.00	8540.0	-529.0	1388.1	2.00	180.00	1485.5	
6	12339.8	0.00	0.00	12200.0	-529.0	1388.1	0.00	0.00	1485.5	SG10A-25 F25 496 BHL STK
7	13589.8	0.00	0.00	13450.0	-529.0	1388.1	0.00	0.00	1485.5	
8	13839.8	0.00	0.00	13700.0	-529.0	1388.1	0.00	0.00	1485.5	



Azimuths to True North  
Magnetic North: 10.53°

Magnetic Field  
Strength: 52436.9nT  
Dip Angle: 65.90°  
Date: 7/7/2010  
Model: IGRF200510

#### FORMATION TOP DETAILS

TVDPath	MDPath	Formation	DipAngle
1800.0	1822.5	Mahog Bench	0.00
5400.0	5486.0	Was G	0.00
8500.0	8639.8	Williams Fork	0.00
8540.0	8679.8	Top of Gas	0.00
9200.0	9339.8	Price GR	0.00
11600.0	11739.8	Paludal	0.00
12200.0	12339.8	Rollins	0.00
12530.0	12669.8	Cozzette	0.00
12720.0	12859.8	Corcoran	0.00
13000.0	13139.8	Sego	0.00
13200.0	13339.8	L Sego	0.00

Plan #3  
SG10A-25 F25 496 (was 07D)  
Job #105173, 105291: KR

KBE @ 8320.0ft (Patterson 306)  
North American Datum 1983  
Well SG10A-25 F25 496 (was 07D), True North

Target	Azimuth	Origin Type	N/S	E/W From	TVD
SG10A-25 F25 496 BHL STK	110.86	Slot	0.0	0.0	0.0
Name	TVD	+N/-S	+E/-W	Latitude	Longitude

SG10A-25 F25 496 BHL STK2200.0 -529.0 1388.1 39° 40' 22.00 N 108° 6' 53.56 W

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well SG10A-25 F25 496 (was 07D)
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KBE @ 8320.0ft (Patterson 306)
<b>Project:</b>	Story Gulch	<b>MD Reference:</b>	KBE @ 8320.0ft (Patterson 306)
<b>Site:</b>	F25 496	<b>North Reference:</b>	True
<b>Well:</b>	SG10A-25 F25 496 (was 07D)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #3		

<b>Project</b>	Story Gulch		
<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		

<b>Site</b>	F25 496			
<b>Site Position:</b>		<b>Northing:</b>	1,681,091.06 ft	<b>Latitude:</b> 39° 40' 27.10 N
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,262,632.54 ft	<b>Longitude:</b> 108° 7' 11.76 W
<b>Position Uncertainty:</b>	0.0 ft	<b>Slot Radius:</b>	13.200 in	<b>Grid Convergence:</b> -1.65 °

<b>Well</b>	SG10A-25 F25 496 (was 07D)			
<b>Well Position</b>	<b>+N/-S</b>	0.0 ft	<b>Northing:</b>	1,681,102.83 ft
	<b>+E/-W</b>	0.0 ft	<b>Easting:</b>	2,262,667.54 ft
<b>Position Uncertainty</b>		0.0 ft	<b>Wellhead Elevation:</b>	ft
			<b>Ground Level:</b>	8,298.0 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>
	IGRF200510	7/7/2010	10.53	65.90	52,437

<b>Design</b>	Plan #3			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	4,969.0
<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	110.86

<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
4,969.0	12.60	124.70	4,893.0	-192.1	811.7	0.00	0.00	0.00	0.00	
5,052.7	11.20	120.24	4,974.9	-201.4	826.2	2.00	-1.67	-5.33	-148.87	
5,052.8	11.20	120.24	4,975.0	-201.4	826.3	2.00	1.90	3.15	17.83	
8,119.7	11.20	120.24	7,983.5	-501.5	1,341.0	0.00	0.00	0.00	0.00	
8,679.8	0.00	0.00	8,540.0	-529.0	1,388.1	2.00	-2.00	0.00	180.00	
12,339.8	0.00	0.00	12,200.0	-529.0	1,388.1	0.00	0.00	0.00	0.00	SG10A-25 F25 496 B
13,589.8	0.00	0.00	13,450.0	-529.0	1,388.1	0.00	0.00	0.00	0.00	
13,839.8	0.00	0.00	13,700.0	-529.0	1,388.1	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 SG10A-25 F25 496 (was 07D)
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KBE @ 8320.0ft (Patterson 306)
<b>Project:</b>	Story Gulch	<b>MD Reference:</b>	KBE @ 8320.0ft (Patterson 306)
<b>Site:</b>	F25 496	<b>North Reference:</b>	True
<b>Well:</b>	SG10A-25 F25 496 (was 07D)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #3		

### 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
4,969.0	12.60	124.70	4,893.0	-192.1	811.7	826.9	0.00	0.00	Tie-in survey @ 4969' MD
5,000.0	12.07	123.17	4,923.3	-195.8	817.2	833.4	2.00	-1.70	
5,052.7	11.20	120.24	4,974.9	-201.4	826.2	843.8	2.00	-1.66	
5,052.8	11.20	120.24	4,975.0	-201.4	826.3	843.8	2.00	1.90	
5,100.0	11.20	120.24	5,021.3	-206.0	834.2	852.9	0.00	0.00	
5,200.0	11.20	120.24	5,119.4	-215.8	851.0	872.0	0.00	0.00	
5,300.0	11.20	120.24	5,217.5	-225.6	867.7	891.2	0.00	0.00	
5,400.0	11.20	120.24	5,315.6	-235.4	884.5	910.4	0.00	0.00	
5,486.0	11.20	120.24	5,400.0	-243.8	899.0	926.9	0.00	0.00	Was G
5,500.0	11.20	120.24	5,413.7	-245.2	901.3	929.5	0.00	0.00	
5,600.0	11.20	120.24	5,511.8	-255.0	918.1	948.7	0.00	0.00	
5,700.0	11.20	120.24	5,609.9	-264.7	934.9	967.9	0.00	0.00	
5,800.0	11.20	120.24	5,708.0	-274.5	951.7	987.0	0.00	0.00	
5,900.0	11.20	120.24	5,806.1	-284.3	968.4	1,006.2	0.00	0.00	
6,000.0	11.20	120.24	5,904.2	-294.1	985.2	1,025.4	0.00	0.00	
6,100.0	11.20	120.24	6,002.3	-303.9	1,002.0	1,044.5	0.00	0.00	
6,200.0	11.20	120.24	6,100.4	-313.7	1,018.8	1,063.7	0.00	0.00	
6,300.0	11.20	120.24	6,198.5	-323.5	1,035.6	1,082.9	0.00	0.00	
6,400.0	11.20	120.24	6,296.5	-333.2	1,052.4	1,102.0	0.00	0.00	
6,500.0	11.20	120.24	6,394.6	-343.0	1,069.1	1,121.2	0.00	0.00	
6,600.0	11.20	120.24	6,492.7	-352.8	1,085.9	1,140.4	0.00	0.00	
6,700.0	11.20	120.24	6,590.8	-362.6	1,102.7	1,159.5	0.00	0.00	
6,800.0	11.20	120.24	6,688.9	-372.4	1,119.5	1,178.7	0.00	0.00	
6,900.0	11.20	120.24	6,787.0	-382.2	1,136.3	1,197.9	0.00	0.00	
7,000.0	11.20	120.24	6,885.1	-392.0	1,153.1	1,217.0	0.00	0.00	
7,100.0	11.20	120.24	6,983.2	-401.7	1,169.8	1,236.2	0.00	0.00	
7,200.0	11.20	120.24	7,081.3	-411.5	1,186.6	1,255.4	0.00	0.00	
7,300.0	11.20	120.24	7,179.4	-421.3	1,203.4	1,274.5	0.00	0.00	
7,400.0	11.20	120.24	7,277.5	-431.1	1,220.2	1,293.7	0.00	0.00	
7,500.0	11.20	120.24	7,375.6	-440.9	1,237.0	1,312.9	0.00	0.00	
7,600.0	11.20	120.24	7,473.7	-450.7	1,253.8	1,332.0	0.00	0.00	
7,700.0	11.20	120.24	7,571.8	-460.4	1,270.5	1,351.2	0.00	0.00	
7,800.0	11.20	120.24	7,669.9	-470.2	1,287.3	1,370.4	0.00	0.00	
7,900.0	11.20	120.24	7,768.0	-480.0	1,304.1	1,389.5	0.00	0.00	
8,000.0	11.20	120.24	7,866.1	-489.8	1,320.9	1,408.7	0.00	0.00	
8,100.0	11.20	120.24	7,964.2	-499.6	1,337.7	1,427.9	0.00	0.00	
8,119.7	11.20	120.24	7,983.5	-501.5	1,341.0	1,431.7	0.00	0.00	Start 2° Drop @ 8119.7' MD
8,200.0	9.60	120.24	8,062.5	-508.8	1,353.5	1,446.0	2.00	-2.00	
8,300.0	7.60	120.24	8,161.3	-516.3	1,366.4	1,460.7	2.00	-2.00	
8,400.0	5.60	120.24	8,260.7	-522.1	1,376.3	1,472.0	2.00	-2.00	
8,500.0	3.60	120.24	8,360.3	-526.2	1,383.2	1,479.9	2.00	-2.00	
8,600.0	1.60	120.24	8,460.2	-528.4	1,387.2	1,484.4	2.00	-2.00	
8,639.8	0.80	120.24	8,500.0	-528.9	1,387.9	1,485.2	2.00	-2.00	Williams Fork
8,679.2	0.01	120.24	8,539.4	-529.0	1,388.1	1,485.5	2.00	-2.00	8507D-25 F25 496 TGT
8,679.8	0.00	0.00	8,540.0	-529.0	1,388.1	1,485.5	2.00	-2.00	EOD; Inc=0° - Top of Gas
8,700.0	0.00	0.00	8,560.2	-529.0	1,388.1	1,485.5	0.00	0.00	
8,800.0	0.00	0.00	8,660.2	-529.0	1,388.1	1,485.5	0.00	0.00	
8,900.0	0.00	0.00	8,760.2	-529.0	1,388.1	1,485.5	0.00	0.00	
9,000.0	0.00	0.00	8,860.2	-529.0	1,388.1	1,485.5	0.00	0.00	
9,100.0	0.00	0.00	8,960.2	-529.0	1,388.1	1,485.5	0.00	0.00	
9,200.0	0.00	0.00	9,060.2	-529.0	1,388.1	1,485.5	0.00	0.00	
9,300.0	0.00	0.00	9,160.2	-529.0	1,388.1	1,485.5	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 SG10A-25 F25 496 (was 07D)
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KBE @ 8320.0ft (Patterson 306)
<b>Project:</b>	Story Gulch	<b>MD Reference:</b>	KBE @ 8320.0ft (Patterson 306)
<b>Site:</b>	F25 496	<b>North Reference:</b>	True
<b>Well:</b>	SG10A-25 F25 496 (was 07D)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #3		

### 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
9,339.8	0.00	0.00	9,200.0	-529.0	1,388.1	1,485.5	0.00	0.00	Price GR
9,400.0	0.00	0.00	9,260.2	-529.0	1,388.1	1,485.5	0.00	0.00	
9,500.0	0.00	0.00	9,360.2	-529.0	1,388.1	1,485.5	0.00	0.00	
9,600.0	0.00	0.00	9,460.2	-529.0	1,388.1	1,485.5	0.00	0.00	
9,700.0	0.00	0.00	9,560.2	-529.0	1,388.1	1,485.5	0.00	0.00	
9,800.0	0.00	0.00	9,660.2	-529.0	1,388.1	1,485.5	0.00	0.00	
9,900.0	0.00	0.00	9,760.2	-529.0	1,388.1	1,485.5	0.00	0.00	
10,000.0	0.00	0.00	9,860.2	-529.0	1,388.1	1,485.5	0.00	0.00	
10,100.0	0.00	0.00	9,960.2	-529.0	1,388.1	1,485.5	0.00	0.00	
10,200.0	0.00	0.00	10,060.2	-529.0	1,388.1	1,485.5	0.00	0.00	
10,300.0	0.00	0.00	10,160.2	-529.0	1,388.1	1,485.5	0.00	0.00	
10,400.0	0.00	0.00	10,260.2	-529.0	1,388.1	1,485.5	0.00	0.00	
10,500.0	0.00	0.00	10,360.2	-529.0	1,388.1	1,485.5	0.00	0.00	
10,600.0	0.00	0.00	10,460.2	-529.0	1,388.1	1,485.5	0.00	0.00	
10,700.0	0.00	0.00	10,560.2	-529.0	1,388.1	1,485.5	0.00	0.00	
10,800.0	0.00	0.00	10,660.2	-529.0	1,388.1	1,485.5	0.00	0.00	
10,900.0	0.00	0.00	10,760.2	-529.0	1,388.1	1,485.5	0.00	0.00	
11,000.0	0.00	0.00	10,860.2	-529.0	1,388.1	1,485.5	0.00	0.00	
11,100.0	0.00	0.00	10,960.2	-529.0	1,388.1	1,485.5	0.00	0.00	
11,200.0	0.00	0.00	11,060.2	-529.0	1,388.1	1,485.5	0.00	0.00	
11,300.0	0.00	0.00	11,160.2	-529.0	1,388.1	1,485.5	0.00	0.00	
11,400.0	0.00	0.00	11,260.2	-529.0	1,388.1	1,485.5	0.00	0.00	
11,500.0	0.00	0.00	11,360.2	-529.0	1,388.1	1,485.5	0.00	0.00	
11,600.0	0.00	0.00	11,460.2	-529.0	1,388.1	1,485.5	0.00	0.00	
11,700.0	0.00	0.00	11,560.2	-529.0	1,388.1	1,485.5	0.00	0.00	
11,739.8	0.00	0.00	11,600.0	-529.0	1,388.1	1,485.5	0.00	0.00	Paludal
11,800.0	0.00	0.00	11,660.2	-529.0	1,388.1	1,485.5	0.00	0.00	
11,900.0	0.00	0.00	11,760.2	-529.0	1,388.1	1,485.5	0.00	0.00	
12,000.0	0.00	0.00	11,860.2	-529.0	1,388.1	1,485.5	0.00	0.00	
12,100.0	0.00	0.00	11,960.2	-529.0	1,388.1	1,485.5	0.00	0.00	
12,200.0	0.00	0.00	12,060.2	-529.0	1,388.1	1,485.5	0.00	0.00	
12,300.0	0.00	0.00	12,160.2	-529.0	1,388.1	1,485.5	0.00	0.00	
12,339.8	0.00	0.00	12,200.0	-529.0	1,388.1	1,485.5	0.00	0.00	TD at 12339.8 - Rollins - SG10A-25 F25 496 Bt
12,400.0	0.00	0.00	12,260.2	-529.0	1,388.1	1,485.5	0.00	0.00	
12,500.0	0.00	0.00	12,360.2	-529.0	1,388.1	1,485.5	0.00	0.00	
12,600.0	0.00	0.00	12,460.2	-529.0	1,388.1	1,485.5	0.00	0.00	
12,669.8	0.00	0.00	12,530.0	-529.0	1,388.1	1,485.5	0.00	0.00	Cozzette
12,700.0	0.00	0.00	12,560.2	-529.0	1,388.1	1,485.5	0.00	0.00	
12,800.0	0.00	0.00	12,660.2	-529.0	1,388.1	1,485.5	0.00	0.00	
12,859.8	0.00	0.00	12,720.0	-529.0	1,388.1	1,485.5	0.00	0.00	Corcoran
12,900.0	0.00	0.00	12,760.2	-529.0	1,388.1	1,485.5	0.00	0.00	
13,000.0	0.00	0.00	12,860.2	-529.0	1,388.1	1,485.5	0.00	0.00	
13,100.0	0.00	0.00	12,960.2	-529.0	1,388.1	1,485.5	0.00	0.00	
13,139.8	0.00	0.00	13,000.0	-529.0	1,388.1	1,485.5	0.00	0.00	Sego
13,200.0	0.00	0.00	13,060.2	-529.0	1,388.1	1,485.5	0.00	0.00	
13,300.0	0.00	0.00	13,160.2	-529.0	1,388.1	1,485.5	0.00	0.00	
13,339.8	0.00	0.00	13,200.0	-529.0	1,388.1	1,485.5	0.00	0.00	L Sego
13,400.0	0.00	0.00	13,260.2	-529.0	1,388.1	1,485.5	0.00	0.00	
13,500.0	0.00	0.00	13,360.2	-529.0	1,388.1	1,485.5	0.00	0.00	
13,589.8	0.00	0.00	13,450.0	-529.0	1,388.1	1,485.5	0.00	0.00	Drillers TD @ 13,450' TVD
13,600.0	0.00	0.00	13,460.2	-529.0	1,388.1	1,485.5	0.00	0.00	
13,700.0	0.00	0.00	13,560.2	-529.0	1,388.1	1,485.5	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 SG10A-25 F25 496 (was 07D)
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	KBE @ 8320.0ft (Patterson 306)
<b>Project:</b>	Story Gulch	<b>MD Reference:</b>	KBE @ 8320.0ft (Patterson 306)
<b>Site:</b>	F25 496	<b>North Reference:</b>	True
<b>Well:</b>	SG10A-25 F25 496 (was 07D)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #3		

### 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
13,800.0	0.00	0.00	13,660.2	-529.0	1,388.1	1,485.5	0.00	0.00	
13,839.8	0.00	0.00	13,700.0	-529.0	1,388.1	1,485.5	0.00	0.00	Permit TD @ 13,700' TVD

### 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									
8507D-25 F25 496 TGT	0.00	0.00	8,540.0	-315.5	1,409.2	1,680,746.82	2,264,067.08	39° 40' 24.11 N	108° 6' 53.29 W
- plan misses target center by 214.5ft at 8679.8ft MD (8540.0 TVD, -529.0 N, 1388.1 E)									
- Point									
SG10A-25 F25 496 BHL	0.00	0.00	12,200.0	-529.0	1,388.1	1,680,534.02	2,264,039.83	39° 40' 22.00 N	108° 6' 53.56 W
- plan hits target center									
- Rectangle (sides W30.0 H50.0 D0.0)									
8507D-25 F25 496 BHL	0.00	0.00	12,200.0	-315.5	1,409.2	1,680,746.82	2,264,067.08	39° 40' 24.11 N	108° 6' 53.29 W
- plan misses target center by 214.5ft at 12339.8ft MD (12200.0 TVD, -529.0 N, 1388.1 E)									
- Rectangle (sides W30.0 H50.0 D0.0)									

### Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,822.5	1,800.0	Mahog Bench		0.00	
5,486.0	5,400.0	Was G		0.00	
8,639.8	8,500.0	Williams Fork		0.00	
8,679.8	8,540.0	Top of Gas		0.00	
9,339.8	9,200.0	Price GR		0.00	
11,739.8	11,600.0	Paludal		0.00	
12,339.8	12,200.0	Rollins		0.00	
12,669.8	12,530.0	Cozzette		0.00	
12,859.8	12,720.0	Corcoran		0.00	
13,139.8	13,000.0	Sego		0.00	
13,339.8	13,200.0	L Sego		0.00	

### Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
4,969.0	4,893.0	-192.1	811.7	Tie-in survey @ 4969' MD
8,119.7	7,983.5	-501.5	1,341.0	Start 2° Drop @ 8119.7' MD
8,679.8	8,540.0	-529.0	1,388.1	EOD; Inc=0°
12,339.8	12,200.0	-529.0	1,388.1	TD at 12339.8
13,589.8	13,450.0	-529.0	1,388.1	Drillers TD @ 13,450' TVD
13,839.8	13,700.0	-529.0	1,388.1	Permit TD @ 13,700' TVD