

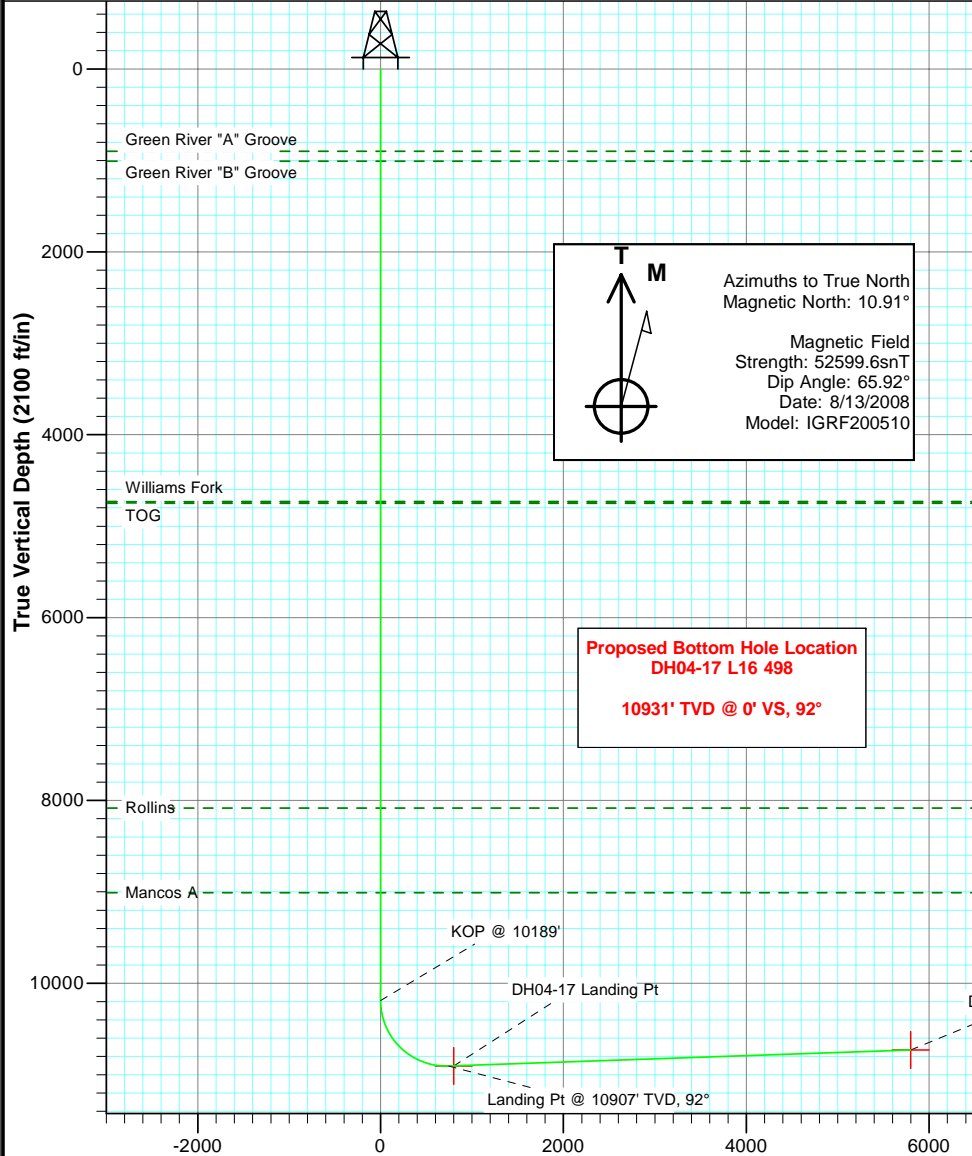


Project: Figure Four Unit  
 Site: L16 498  
 Well: DH04-17 L16 498 (was 8004B)  
 Wellbore: DD  
 Plan: Plan #2



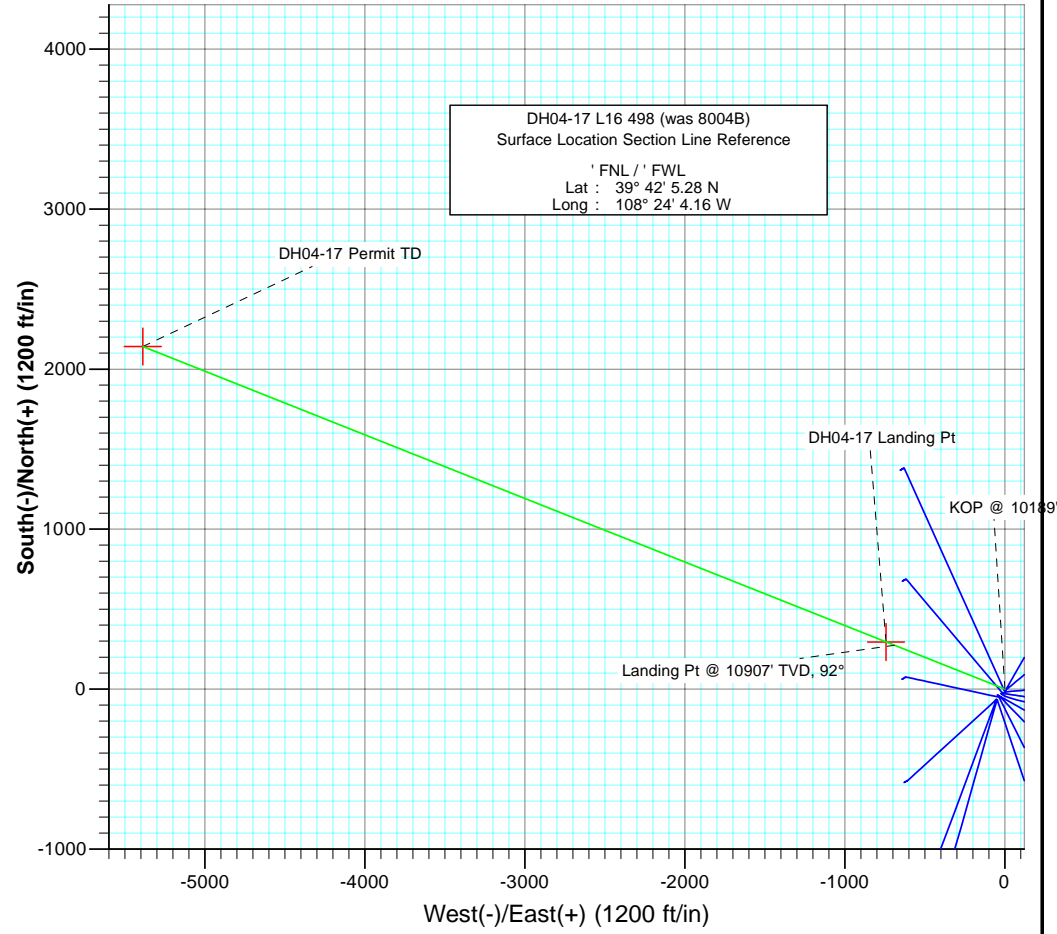
SECTION DETAILS

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	10189.0	0.00	0.00	10189.0	0.0	0.0	0.00	0.00	0.0	
3	11338.8	91.99	291.67	10904.7	273.6	-688.7	8.00	291.67	741.1	
4	16399.1	91.99	291.67	10729.0	2140.7	-5388.7	0.00	0.00	5798.3	DH04-17 Permit TD



Azimuths to True North  
 Magnetic North: 10.91°  
 Magnetic Field  
 Strength: 52599.6snT  
 Dip Angle: 65.92°  
 Date: 8/13/2008  
 Model: IGRF200510

**Proposed Bottom Hole Location**  
**DH04-17 L16 498**  
**10931' TVD @ 0° VS, 92°**



Type		Target	Target	Azimuth	Origin	Type	N/S	E/W	From
Target		DH04-17 Permit TD		Slot			0.0	0.0	0.0
Name		TVD	+N/-S	+E/-W	Latitude	Longitude			
DH04-17 Permit TD		10729.0	2140.7	-5388.739° 42'	26.43 N 108° 25' 13.11 W				
DH04-17 Landing Pt		10904.0	294.5	-743.3 39° 42'	8.19 N 108° 24' 13.67 W				

Vertical Section at 291.67° (2100 ft/in)

# Cathedral Energy Services

## Planning Report

<b>Database:</b> EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b> Well DH04-17 L16 498 (was 8004B)
<b>Company:</b> EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b> Well @ 8209.0ft
<b>Project:</b> Figure Four Unit	<b>MD Reference:</b> Well @ 8209.0ft
<b>Site:</b> L16 498	<b>North Reference:</b> True
<b>Well:</b> DH04-17 L16 498 (was 8004B)	<b>Survey Calculation Method:</b> Minimum Curvature
<b>Wellbore:</b> DD	
<b>Design:</b> Plan #2	

<b>Project</b> Figure Four Unit	
<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> L16 498		
<b>Site Position:</b>	<b>Northing:</b> 1,693,419.82 ft	<b>Latitude:</b> 39° 42' 5.23 N
<b>From:</b> Lat/Long	<b>Easting:</b> 2,183,832.56 ft	<b>Longitude:</b> 108° 24' 4.07 W
<b>Position Uncertainty:</b> 0.0 ft	<b>Slot Radius:</b> 13.200 in	<b>Grid Convergence:</b> -1.83 °

<b>Well</b> DH04-17 L16 498 (was 8004B)			
<b>Well Position</b>	<b>+N/-S</b> 0.0 ft	<b>Northing:</b> 1,693,425.08 ft	<b>Latitude:</b> 39° 42' 5.28 N
	<b>+E/-W</b> 0.0 ft	<b>Easting:</b> 2,183,825.69 ft	<b>Longitude:</b> 108° 24' 4.16 W
<b>Position Uncertainty</b>	0.0 ft	<b>Wellhead Elevation:</b> ft	<b>Ground Level:</b> 8,176.0 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>
	IGRF200510	8/13/2008	(°) 10.91	(°) 65.92	(nT) 52,600

<b>Design</b> Plan #2				
<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	291.67

<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	
10,189.0	0.00	0.00	10,189.0	0.0	0.0	0.00	0.00	0.00	0.00	
11,338.8	91.99	291.67	10,904.7	273.6	-688.7	8.00	8.00	0.00	291.67	
16,399.1	91.99	291.67	10,729.0	2,140.7	-5,388.7	0.00	0.00	0.00	0.00	DH04-17 Permit TD

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well DH04-17 L16 498 (was 8004B)
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	Well @ 8209.0ft
<b>Project:</b>	Figure Four Unit	<b>MD Reference:</b>	Well @ 8209.0ft
<b>Site:</b>	L16 498	<b>North Reference:</b>	True
<b>Well:</b>	DH04-17 L16 498 (was 8004B)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	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	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	
899.0	0.00	0.00	899.0	0.0	0.0	0.0	0.00	0.00	Green River "A" Groove
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	
1,009.0	0.00	0.00	1,009.0	0.0	0.0	0.0	0.00	0.00	Green River "B" Groove
1,100.0	0.00	0.00	1,100.0	0.0	0.0	0.0	0.00	0.00	
1,200.0	0.00	0.00	1,200.0	0.0	0.0	0.0	0.00	0.00	
1,300.0	0.00	0.00	1,300.0	0.0	0.0	0.0	0.00	0.00	
1,400.0	0.00	0.00	1,400.0	0.0	0.0	0.0	0.00	0.00	
1,500.0	0.00	0.00	1,500.0	0.0	0.0	0.0	0.00	0.00	
1,600.0	0.00	0.00	1,600.0	0.0	0.0	0.0	0.00	0.00	
1,700.0	0.00	0.00	1,700.0	0.0	0.0	0.0	0.00	0.00	
1,800.0	0.00	0.00	1,800.0	0.0	0.0	0.0	0.00	0.00	
1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	
2,000.0	0.00	0.00	2,000.0	0.0	0.0	0.0	0.00	0.00	
2,100.0	0.00	0.00	2,100.0	0.0	0.0	0.0	0.00	0.00	
2,200.0	0.00	0.00	2,200.0	0.0	0.0	0.0	0.00	0.00	
2,300.0	0.00	0.00	2,300.0	0.0	0.0	0.0	0.00	0.00	
2,400.0	0.00	0.00	2,400.0	0.0	0.0	0.0	0.00	0.00	
2,500.0	0.00	0.00	2,500.0	0.0	0.0	0.0	0.00	0.00	
2,600.0	0.00	0.00	2,600.0	0.0	0.0	0.0	0.00	0.00	
2,700.0	0.00	0.00	2,700.0	0.0	0.0	0.0	0.00	0.00	
2,800.0	0.00	0.00	2,800.0	0.0	0.0	0.0	0.00	0.00	
2,900.0	0.00	0.00	2,900.0	0.0	0.0	0.0	0.00	0.00	
3,000.0	0.00	0.00	3,000.0	0.0	0.0	0.0	0.00	0.00	
3,100.0	0.00	0.00	3,100.0	0.0	0.0	0.0	0.00	0.00	
3,200.0	0.00	0.00	3,200.0	0.0	0.0	0.0	0.00	0.00	
3,300.0	0.00	0.00	3,300.0	0.0	0.0	0.0	0.00	0.00	
3,400.0	0.00	0.00	3,400.0	0.0	0.0	0.0	0.00	0.00	
3,500.0	0.00	0.00	3,500.0	0.0	0.0	0.0	0.00	0.00	
3,600.0	0.00	0.00	3,600.0	0.0	0.0	0.0	0.00	0.00	
3,700.0	0.00	0.00	3,700.0	0.0	0.0	0.0	0.00	0.00	
3,800.0	0.00	0.00	3,800.0	0.0	0.0	0.0	0.00	0.00	
3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	
4,000.0	0.00	0.00	4,000.0	0.0	0.0	0.0	0.00	0.00	
4,100.0	0.00	0.00	4,100.0	0.0	0.0	0.0	0.00	0.00	
4,200.0	0.00	0.00	4,200.0	0.0	0.0	0.0	0.00	0.00	
4,300.0	0.00	0.00	4,300.0	0.0	0.0	0.0	0.00	0.00	
4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	
4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	
4,700.0	0.00	0.00	4,700.0	0.0	0.0	0.0	0.00	0.00	
4,729.0	0.00	0.00	4,729.0	0.0	0.0	0.0	0.00	0.00	Williams Fork
4,749.0	0.00	0.00	4,749.0	0.0	0.0	0.0	0.00	0.00	TOG

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well DH04-17 L16 498 (was 8004B)
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	Well @ 8209.0ft
<b>Project:</b>	Figure Four Unit	<b>MD Reference:</b>	Well @ 8209.0ft
<b>Site:</b>	L16 498	<b>North Reference:</b>	True
<b>Well:</b>	DH04-17 L16 498 (was 8004B)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	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
4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	
4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	
5,000.0	0.00	0.00	5,000.0	0.0	0.0	0.0	0.00	0.00	
5,100.0	0.00	0.00	5,100.0	0.0	0.0	0.0	0.00	0.00	
5,200.0	0.00	0.00	5,200.0	0.0	0.0	0.0	0.00	0.00	
5,300.0	0.00	0.00	5,300.0	0.0	0.0	0.0	0.00	0.00	
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	
5,600.0	0.00	0.00	5,600.0	0.0	0.0	0.0	0.00	0.00	
5,700.0	0.00	0.00	5,700.0	0.0	0.0	0.0	0.00	0.00	
5,800.0	0.00	0.00	5,800.0	0.0	0.0	0.0	0.00	0.00	
5,900.0	0.00	0.00	5,900.0	0.0	0.0	0.0	0.00	0.00	
6,000.0	0.00	0.00	6,000.0	0.0	0.0	0.0	0.00	0.00	
6,100.0	0.00	0.00	6,100.0	0.0	0.0	0.0	0.00	0.00	
6,200.0	0.00	0.00	6,200.0	0.0	0.0	0.0	0.00	0.00	
6,300.0	0.00	0.00	6,300.0	0.0	0.0	0.0	0.00	0.00	
6,400.0	0.00	0.00	6,400.0	0.0	0.0	0.0	0.00	0.00	
6,500.0	0.00	0.00	6,500.0	0.0	0.0	0.0	0.00	0.00	
6,600.0	0.00	0.00	6,600.0	0.0	0.0	0.0	0.00	0.00	
6,700.0	0.00	0.00	6,700.0	0.0	0.0	0.0	0.00	0.00	
6,800.0	0.00	0.00	6,800.0	0.0	0.0	0.0	0.00	0.00	
6,900.0	0.00	0.00	6,900.0	0.0	0.0	0.0	0.00	0.00	
7,000.0	0.00	0.00	7,000.0	0.0	0.0	0.0	0.00	0.00	
7,100.0	0.00	0.00	7,100.0	0.0	0.0	0.0	0.00	0.00	
7,200.0	0.00	0.00	7,200.0	0.0	0.0	0.0	0.00	0.00	
7,300.0	0.00	0.00	7,300.0	0.0	0.0	0.0	0.00	0.00	
7,400.0	0.00	0.00	7,400.0	0.0	0.0	0.0	0.00	0.00	
7,500.0	0.00	0.00	7,500.0	0.0	0.0	0.0	0.00	0.00	
7,600.0	0.00	0.00	7,600.0	0.0	0.0	0.0	0.00	0.00	
7,700.0	0.00	0.00	7,700.0	0.0	0.0	0.0	0.00	0.00	
7,800.0	0.00	0.00	7,800.0	0.0	0.0	0.0	0.00	0.00	
7,900.0	0.00	0.00	7,900.0	0.0	0.0	0.0	0.00	0.00	
8,000.0	0.00	0.00	8,000.0	0.0	0.0	0.0	0.00	0.00	
8,084.0	0.00	0.00	8,084.0	0.0	0.0	0.0	0.00	0.00	Rollins
8,100.0	0.00	0.00	8,100.0	0.0	0.0	0.0	0.00	0.00	
8,200.0	0.00	0.00	8,200.0	0.0	0.0	0.0	0.00	0.00	
8,300.0	0.00	0.00	8,300.0	0.0	0.0	0.0	0.00	0.00	
8,400.0	0.00	0.00	8,400.0	0.0	0.0	0.0	0.00	0.00	
8,500.0	0.00	0.00	8,500.0	0.0	0.0	0.0	0.00	0.00	
8,600.0	0.00	0.00	8,600.0	0.0	0.0	0.0	0.00	0.00	
8,700.0	0.00	0.00	8,700.0	0.0	0.0	0.0	0.00	0.00	
8,800.0	0.00	0.00	8,800.0	0.0	0.0	0.0	0.00	0.00	
8,900.0	0.00	0.00	8,900.0	0.0	0.0	0.0	0.00	0.00	
9,000.0	0.00	0.00	9,000.0	0.0	0.0	0.0	0.00	0.00	
9,009.0	0.00	0.00	9,009.0	0.0	0.0	0.0	0.00	0.00	Mancos A
9,100.0	0.00	0.00	9,100.0	0.0	0.0	0.0	0.00	0.00	
9,200.0	0.00	0.00	9,200.0	0.0	0.0	0.0	0.00	0.00	
9,300.0	0.00	0.00	9,300.0	0.0	0.0	0.0	0.00	0.00	
9,400.0	0.00	0.00	9,400.0	0.0	0.0	0.0	0.00	0.00	
9,500.0	0.00	0.00	9,500.0	0.0	0.0	0.0	0.00	0.00	
9,600.0	0.00	0.00	9,600.0	0.0	0.0	0.0	0.00	0.00	
9,700.0	0.00	0.00	9,700.0	0.0	0.0	0.0	0.00	0.00	

# Cathedral Energy Services

## Planning Report

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<b>Site:</b>	L16 498	<b>North Reference:</b>	True
<b>Well:</b>	DH04-17 L16 498 (was 8004B)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	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
9,800.0	0.00	0.00	9,800.0	0.0	0.0	0.0	0.00	0.00	
9,900.0	0.00	0.00	9,900.0	0.0	0.0	0.0	0.00	0.00	
10,000.0	0.00	0.00	10,000.0	0.0	0.0	0.0	0.00	0.00	
10,100.0	0.00	0.00	10,100.0	0.0	0.0	0.0	0.00	0.00	
10,189.0	0.00	0.00	10,189.0	0.0	0.0	0.0	0.00	0.00	KOP @ 10189'
10,200.0	0.88	291.67	10,200.0	0.0	-0.1	0.1	8.00	8.00	
10,300.0	8.88	291.67	10,299.6	3.2	-8.0	8.6	8.00	8.00	
10,400.0	16.88	291.67	10,397.0	11.4	-28.7	30.9	8.00	8.00	
10,500.0	24.88	291.67	10,490.3	24.5	-61.8	66.5	8.00	8.00	
10,600.0	32.88	291.67	10,577.8	42.4	-106.6	114.8	8.00	8.00	
10,700.0	40.88	291.67	10,657.7	64.5	-162.4	174.7	8.00	8.00	
10,800.0	48.88	291.67	10,728.5	90.5	-227.9	245.2	8.00	8.00	
10,900.0	56.88	291.67	10,788.8	120.0	-302.0	324.9	8.00	8.00	
11,000.0	64.88	291.67	10,837.4	152.2	-383.1	412.2	8.00	8.00	
11,100.0	72.88	291.67	10,873.4	186.6	-469.7	505.4	8.00	8.00	
11,200.0	80.88	291.67	10,896.1	222.5	-560.1	602.7	8.00	8.00	
11,300.0	88.88	291.67	10,905.0	259.3	-652.6	702.2	8.00	8.00	
11,338.8	91.99	291.67	10,904.7	273.6	-688.7	741.1	8.00	8.00	Landing Pt @ 10907' TVD, 92°
11,397.3	91.99	291.67	10,902.7	295.1	-743.0	799.5	0.00	0.00	DH04-17 Landing Pt
11,400.0	91.99	291.67	10,902.6	296.2	-745.5	802.2	0.00	0.00	
11,500.0	91.99	291.67	10,899.1	333.1	-838.4	902.1	0.00	0.00	
11,600.0	91.99	291.67	10,895.7	370.0	-931.3	1,002.1	0.00	0.00	
11,700.0	91.99	291.67	10,892.2	406.8	-1,024.2	1,102.0	0.00	0.00	
11,800.0	91.99	291.67	10,888.7	443.7	-1,117.0	1,202.0	0.00	0.00	
11,900.0	91.99	291.67	10,885.2	480.6	-1,209.9	1,301.9	0.00	0.00	
12,000.0	91.99	291.67	10,881.8	517.5	-1,302.8	1,401.8	0.00	0.00	
12,100.0	91.99	291.67	10,878.3	554.4	-1,395.7	1,501.8	0.00	0.00	
12,200.0	91.99	291.67	10,874.8	591.3	-1,488.6	1,601.7	0.00	0.00	
12,300.0	91.99	291.67	10,871.3	628.2	-1,581.4	1,701.7	0.00	0.00	
12,400.0	91.99	291.67	10,867.9	665.1	-1,674.3	1,801.6	0.00	0.00	
12,500.0	91.99	291.67	10,864.4	702.0	-1,767.2	1,901.5	0.00	0.00	
12,600.0	91.99	291.67	10,860.9	738.9	-1,860.1	2,001.5	0.00	0.00	
12,700.0	91.99	291.67	10,857.5	775.8	-1,953.0	2,101.4	0.00	0.00	
12,800.0	91.99	291.67	10,854.0	812.7	-2,045.8	2,201.4	0.00	0.00	
12,900.0	91.99	291.67	10,850.5	849.6	-2,138.7	2,301.3	0.00	0.00	
13,000.0	91.99	291.67	10,847.0	886.5	-2,231.6	2,401.2	0.00	0.00	
13,100.0	91.99	291.67	10,843.6	923.4	-2,324.5	2,501.2	0.00	0.00	
13,200.0	91.99	291.67	10,840.1	960.3	-2,417.4	2,601.1	0.00	0.00	
13,300.0	91.99	291.67	10,836.6	997.2	-2,510.2	2,701.1	0.00	0.00	
13,400.0	91.99	291.67	10,833.1	1,034.1	-2,603.1	2,801.0	0.00	0.00	
13,500.0	91.99	291.67	10,829.7	1,071.0	-2,696.0	2,900.9	0.00	0.00	
13,600.0	91.99	291.67	10,826.2	1,107.9	-2,788.9	3,000.9	0.00	0.00	
13,700.0	91.99	291.67	10,822.7	1,144.8	-2,881.8	3,100.8	0.00	0.00	
13,800.0	91.99	291.67	10,819.3	1,181.7	-2,974.6	3,200.8	0.00	0.00	
13,900.0	91.99	291.67	10,815.8	1,218.6	-3,067.5	3,300.7	0.00	0.00	
14,000.0	91.99	291.67	10,812.3	1,255.5	-3,160.4	3,400.6	0.00	0.00	
14,100.0	91.99	291.67	10,808.8	1,292.4	-3,253.3	3,500.6	0.00	0.00	
14,200.0	91.99	291.67	10,805.4	1,329.3	-3,346.2	3,600.5	0.00	0.00	
14,300.0	91.99	291.67	10,801.9	1,366.2	-3,439.0	3,700.5	0.00	0.00	
14,400.0	91.99	291.67	10,798.4	1,403.0	-3,531.9	3,800.4	0.00	0.00	
14,500.0	91.99	291.67	10,794.9	1,439.9	-3,624.8	3,900.3	0.00	0.00	
14,600.0	91.99	291.67	10,791.5	1,476.8	-3,717.7	4,000.3	0.00	0.00	

# Cathedral Energy Services

## Planning Report

**Database:** EDM 5000.1 US Multi Users DB  
**Company:** EnCana Oil & Gas (USA) Inc  
**Project:** Figure Four Unit  
**Site:** L16 498  
**Well:** DH04-17 L16 498 (was 8004B)  
**Wellbore:** DD  
**Design:** Plan #2

**Local Co-ordinate Reference:** Well DH04-17 L16 498 (was 8004B)  
**TVD Reference:** Well @ 8209.0ft  
**MD Reference:** Well @ 8209.0ft  
**North Reference:** True  
**Survey Calculation Method:** Minimum Curvature

### 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
14,700.0	91.99	291.67	10,788.0	1,513.7	-3,810.6	4,100.2	0.00	0.00	
14,800.0	91.99	291.67	10,784.5	1,550.6	-3,903.4	4,200.2	0.00	0.00	
14,900.0	91.99	291.67	10,781.1	1,587.5	-3,996.3	4,300.1	0.00	0.00	
15,000.0	91.99	291.67	10,777.6	1,624.4	-4,089.2	4,400.0	0.00	0.00	
15,100.0	91.99	291.67	10,774.1	1,661.3	-4,182.1	4,500.0	0.00	0.00	
15,200.0	91.99	291.67	10,770.6	1,698.2	-4,275.0	4,599.9	0.00	0.00	
15,300.0	91.99	291.67	10,767.2	1,735.1	-4,367.8	4,699.8	0.00	0.00	
15,400.0	91.99	291.67	10,763.7	1,772.0	-4,460.7	4,799.8	0.00	0.00	
15,500.0	91.99	291.67	10,760.2	1,808.9	-4,553.6	4,899.7	0.00	0.00	
15,600.0	91.99	291.67	10,756.7	1,845.8	-4,646.5	4,999.7	0.00	0.00	
15,700.0	91.99	291.67	10,753.3	1,882.7	-4,739.4	5,099.6	0.00	0.00	
15,800.0	91.99	291.67	10,749.8	1,919.6	-4,832.2	5,199.5	0.00	0.00	
15,900.0	91.99	291.67	10,746.3	1,956.5	-4,925.1	5,299.5	0.00	0.00	
16,000.0	91.99	291.67	10,742.9	1,993.4	-5,018.0	5,399.4	0.00	0.00	
16,100.0	91.99	291.67	10,739.4	2,030.3	-5,110.9	5,499.4	0.00	0.00	
16,200.0	91.99	291.67	10,735.9	2,067.2	-5,203.7	5,599.3	0.00	0.00	
16,300.0	91.99	291.67	10,732.4	2,104.1	-5,296.6	5,699.2	0.00	0.00	
16,399.1	91.99	291.67	10,729.0	2,140.7	-5,388.7	5,798.3	0.00	0.00	TD at 16399.1 - DH04-17 Permit TD

### 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
DH04-17 Permit TD - plan hits target center - Point	0.00	0.00	10,729.0	2,140.7	-5,388.7	1,695,736.70	2,178,508.09	39° 42' 26.43 N	108° 25' 13.11 W
DH04-17 Landing Pt - plan misses target center by 1.5ft at 11397.3ft MD (10902.7 TVD, 295.1 N, -743.0 E) - Point	0.00	0.00	10,904.0	294.5	-743.3	1,693,743.15	2,183,092.18	39° 42' 8.19 N	108° 24' 13.67 W

### Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
899.0	899.0	Green River "A" Groove			
1,009.0	1,009.0	Green River "B" Groove			
4,729.0	4,729.0	Williams Fork			
4,749.0	4,749.0	TOG			
8,084.0	8,084.0	Rollins			
9,009.0	9,009.0	Mancos A			

# Cathedral Energy Services

## Planning Report

<b>Database:</b>	EDM 5000.1 US Multi Users DB	<b>Local Co-ordinate Reference:</b>	Well DH04-17 L16 498 (was 8004B)
<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>TVD Reference:</b>	Well @ 8209.0ft
<b>Project:</b>	Figure Four Unit	<b>MD Reference:</b>	Well @ 8209.0ft
<b>Site:</b>	L16 498	<b>North Reference:</b>	True
<b>Well:</b>	DH04-17 L16 498 (was 8004B)	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	DD		
<b>Design:</b>	Plan #2		

Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
10,189.0	10,189.0	0.0	0.0	KOP @ 10189'
11,338.8	10,904.7	273.6	-688.7	Landing Pt @ 10907' TVD, 92°
16,399.1	10,729.0	2,140.7	-5,388.7	TD at 16399.1