

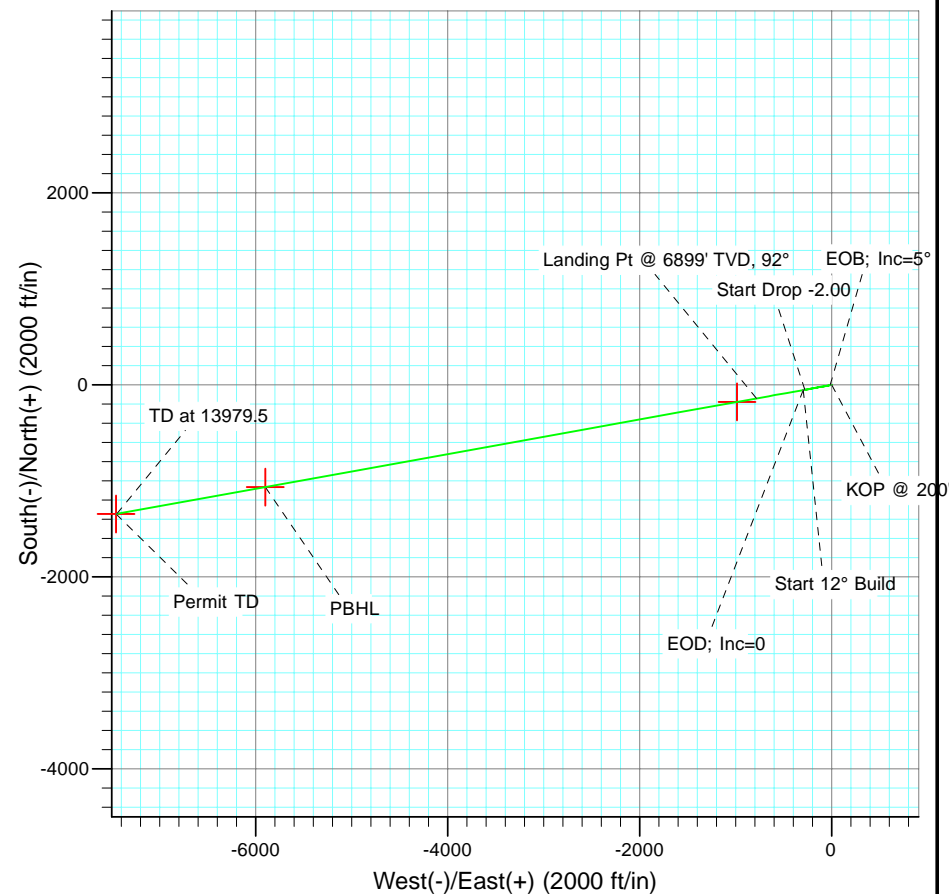
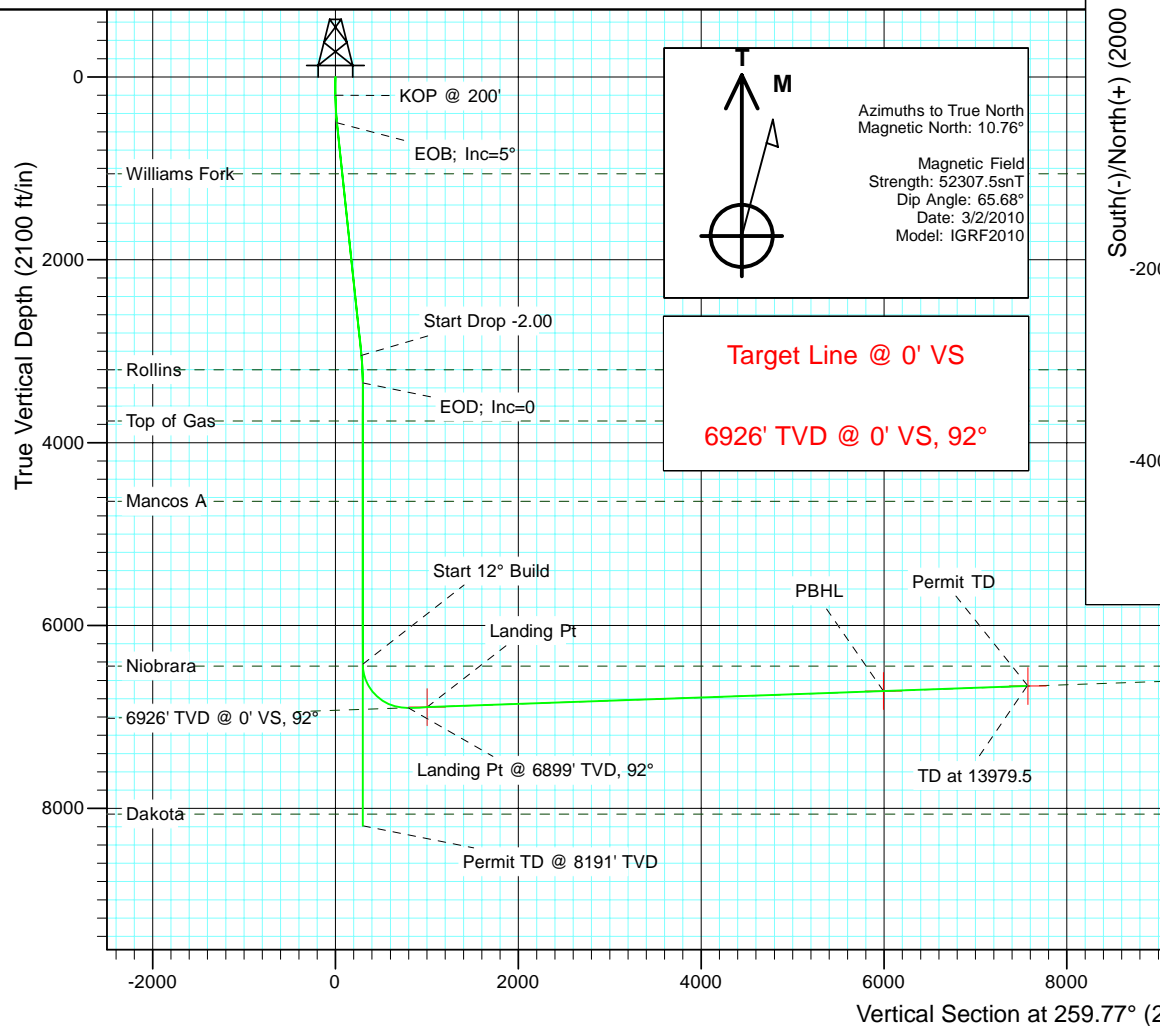


Project: Cedar Bench
Site: A28 6100
Well: DH08-29 A28 6100
Wellbore: Hz
Design: Plan #3



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	500.0	6.00	259.61	499.5	-2.8	-15.4	2.00	259.61	15.7	
4	3060.0	6.00	259.61	3045.4	-51.1	-278.6	0.00	0.00	283.3	
5	3360.0	0.00	0.00	3344.9	-53.9	-294.1	2.00	180.00	299.0	
6	6437.2	0.00	0.00	6422.1	-53.9	-294.1	0.00	0.00	299.0	
7	7203.9	92.00	259.90	6899.3	-140.6	-780.6	12.00	259.90	793.1	
8	7410.8	92.00	259.90	6892.0	-176.8	-984.1	0.00	0.00	999.8	
9	7411.9	92.01	259.76	6892.0	-177.0	-985.2	12.00	-86.92	1001.0	Landing Pt
10	12408.4	92.01	259.76	6716.7	-1064.8	-5899.1	0.00	0.00	5994.4	PBHL
11	13979.5	92.01	259.76	6661.5	-1343.9	-7444.2	0.00	0.00	7564.5	Permit TD



Plan #3 DH08-29 A28 6100 KBE @ 6678.0ft (Original Well Elev) North American Datum 1983 Well DH08-29 A28 6100, True North						
Type	Target	Azimuth	Origin	N/S	E/W	From TVD
TD	No Target (Freehand)	259.77	Slot	0.0	0.0	0.0
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	
Permit TD	6661.5	-1344.6	-7452.7	39° 30' 22.58 N	108° 34' 39.40 W	
PBHL	6716.7	-1064.8	-5899.1	39° 30' 25.35 N	108° 34' 19.58 W	
Landing Pt	6892.0	-177.0	-985.2	39° 30' 34.13 N	108° 33' 16.89 W	

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well DH08-29 A28 6100
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KBE @ 6678.0ft (Original Well Elev)
Project:	Cedar Bench	MD Reference:	KBE @ 6678.0ft (Original Well Elev)
Site:	A28 6100	North Reference:	True
Well:	DH08-29 A28 6100	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #3		

Project	Cedar Bench		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site		A28 6100			
Site Position:		Northing:	1,079,182.87 ft	Latitude:	39° 30' 36.16 N
From:	Lat/Long	Easting:	2,139,237.70 ft	Longitude:	108° 33' 4.20 W
Position Uncertainty:	0.0 ft	Slot Radius:	0.000 in	Grid Convergence:	-1.97 °

Well	DH08-29 A28 6100					
Well Position	+N/-S	0.0 ft	Northing:	1,079,155.35 ft	Latitude:	39° 30' 35.88 N
	+E/-W	0.0 ft	Easting:	2,139,227.39 ft	Longitude:	108° 33' 4.32 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	6,656.0 ft

Wellbore	Hz				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	3/2/2010	10.76	65.68	52,307

Design	Plan #3			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	259.77

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	
500.0	6.00	259.61	499.5	-2.8	-15.4	2.00	2.00	0.00	259.61	
3,060.0	6.00	259.61	3,045.4	-51.1	-278.6	0.00	0.00	0.00	0.00	
3,360.0	0.00	0.00	3,344.9	-53.9	-294.1	2.00	-2.00	0.00	180.00	
6,437.2	0.00	0.00	6,422.1	-53.9	-294.1	0.00	0.00	0.00	0.00	
7,203.9	92.00	259.90	6,899.3	-140.6	-780.6	12.00	12.00	0.00	259.90	
7,410.8	92.00	259.90	6,892.0	-176.8	-984.1	0.00	0.00	0.00	0.00	
7,411.9	92.01	259.76	6,892.0	-177.0	-985.2	12.00	0.65	-11.99	-86.92	Landing Pt
12,408.4	92.01	259.76	6,716.7	-1,064.8	-5,899.1	0.00	0.00	0.00	0.00	PBHL
13,979.5	92.01	259.76	6,661.5	-1,343.9	-7,444.2	0.00	0.00	0.00	0.00	Permit TD

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well DH08-29 A28 6100
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KBE @ 6678.0ft (Original Well Elev)
Project:	Cedar Bench	MD Reference:	KBE @ 6678.0ft (Original Well Elev)
Site:	A28 6100	North Reference:	True
Well:	DH08-29 A28 6100	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	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
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	2.00	259.61	300.0	-0.3	-1.7	1.7	2.00	2.00	
400.0	4.00	259.61	399.8	-1.3	-6.9	7.0	2.00	2.00	
500.0	6.00	259.61	499.5	-2.8	-15.4	15.7	2.00	2.00	EOB; Inc=5°
600.0	6.00	259.61	598.9	-4.7	-25.7	26.1	0.00	0.00	
700.0	6.00	259.61	698.4	-6.6	-36.0	36.6	0.00	0.00	
800.0	6.00	259.61	797.8	-8.5	-46.3	47.1	0.00	0.00	
900.0	6.00	259.61	897.3	-10.4	-56.6	57.5	0.00	0.00	
1,000.0	6.00	259.61	996.7	-12.3	-66.8	68.0	0.00	0.00	
1,061.6	6.00	259.61	1,058.0	-13.4	-73.2	74.4	0.00	0.00	Williams Fork
1,100.0	6.00	259.61	1,096.2	-14.1	-77.1	78.4	0.00	0.00	
1,200.0	6.00	259.61	1,195.6	-16.0	-87.4	88.9	0.00	0.00	
1,300.0	6.00	259.61	1,295.1	-17.9	-97.7	99.3	0.00	0.00	
1,400.0	6.00	259.61	1,394.5	-19.8	-108.0	109.8	0.00	0.00	
1,500.0	6.00	259.61	1,494.0	-21.7	-118.3	120.2	0.00	0.00	
1,600.0	6.00	259.61	1,593.4	-23.6	-128.5	130.7	0.00	0.00	
1,700.0	6.00	259.61	1,692.9	-25.5	-138.8	141.1	0.00	0.00	
1,800.0	6.00	259.61	1,792.3	-27.3	-149.1	151.6	0.00	0.00	
1,900.0	6.00	259.61	1,891.8	-29.2	-159.4	162.0	0.00	0.00	
2,000.0	6.00	259.61	1,991.2	-31.1	-169.7	172.5	0.00	0.00	
2,100.0	6.00	259.61	2,090.7	-33.0	-179.9	182.9	0.00	0.00	
2,200.0	6.00	259.61	2,190.1	-34.9	-190.2	193.4	0.00	0.00	
2,300.0	6.00	259.61	2,289.6	-36.8	-200.5	203.8	0.00	0.00	
2,400.0	6.00	259.61	2,389.0	-38.6	-210.8	214.3	0.00	0.00	
2,500.0	6.00	259.61	2,488.5	-40.5	-221.1	224.7	0.00	0.00	
2,600.0	6.00	259.61	2,587.9	-42.4	-231.3	235.2	0.00	0.00	
2,700.0	6.00	259.61	2,687.4	-44.3	-241.6	245.7	0.00	0.00	
2,800.0	6.00	259.61	2,786.9	-46.2	-251.9	256.1	0.00	0.00	
2,900.0	6.00	259.61	2,886.3	-48.1	-262.2	266.6	0.00	0.00	
3,000.0	6.00	259.61	2,985.8	-50.0	-272.5	277.0	0.00	0.00	
3,060.0	6.00	259.61	3,045.4	-51.1	-278.6	283.3	0.00	0.00	Start Drop -2.00
3,100.0	5.20	259.61	3,085.2	-51.8	-282.5	287.2	2.00	-2.00	
3,200.0	3.20	259.61	3,185.0	-53.1	-289.7	294.5	2.00	-2.00	
3,218.1	2.84	259.61	3,203.0	-53.3	-290.6	295.5	2.00	-2.00	Rollins
3,300.0	1.20	259.61	3,284.9	-53.8	-293.5	298.4	2.00	-2.00	
3,360.0	0.00	0.00	3,344.9	-53.9	-294.1	299.0	2.00	-2.00	EOD; Inc=0
3,400.0	0.00	0.00	3,384.9	-53.9	-294.1	299.0	0.00	0.00	
3,500.0	0.00	0.00	3,484.9	-53.9	-294.1	299.0	0.00	0.00	
3,600.0	0.00	0.00	3,584.9	-53.9	-294.1	299.0	0.00	0.00	
3,700.0	0.00	0.00	3,684.9	-53.9	-294.1	299.0	0.00	0.00	
3,778.1	0.00	0.00	3,763.0	-53.9	-294.1	299.0	0.00	0.00	Top of Gas
3,800.0	0.00	0.00	3,784.9	-53.9	-294.1	299.0	0.00	0.00	
3,900.0	0.00	0.00	3,884.9	-53.9	-294.1	299.0	0.00	0.00	
4,000.0	0.00	0.00	3,984.9	-53.9	-294.1	299.0	0.00	0.00	
4,100.0	0.00	0.00	4,084.9	-53.9	-294.1	299.0	0.00	0.00	
4,200.0	0.00	0.00	4,184.9	-53.9	-294.1	299.0	0.00	0.00	
4,300.0	0.00	0.00	4,284.9	-53.9	-294.1	299.0	0.00	0.00	
4,400.0	0.00	0.00	4,384.9	-53.9	-294.1	299.0	0.00	0.00	
4,500.0	0.00	0.00	4,484.9	-53.9	-294.1	299.0	0.00	0.00	
4,600.0	0.00	0.00	4,584.9	-53.9	-294.1	299.0	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well DH08-29 A28 6100
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KBE @ 6678.0ft (Original Well Elev)
Project:	Cedar Bench	MD Reference:	KBE @ 6678.0ft (Original Well Elev)
Site:	A28 6100	North Reference:	True
Well:	DH08-29 A28 6100	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	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
4,656.1	0.00	0.00	4,641.0	-53.9	-294.1	299.0	0.00	0.00	Mancos A
4,700.0	0.00	0.00	4,684.9	-53.9	-294.1	299.0	0.00	0.00	
4,800.0	0.00	0.00	4,784.9	-53.9	-294.1	299.0	0.00	0.00	
4,900.0	0.00	0.00	4,884.9	-53.9	-294.1	299.0	0.00	0.00	
5,000.0	0.00	0.00	4,984.9	-53.9	-294.1	299.0	0.00	0.00	
5,100.0	0.00	0.00	5,084.9	-53.9	-294.1	299.0	0.00	0.00	
5,200.0	0.00	0.00	5,184.9	-53.9	-294.1	299.0	0.00	0.00	
5,300.0	0.00	0.00	5,284.9	-53.9	-294.1	299.0	0.00	0.00	
5,400.0	0.00	0.00	5,384.9	-53.9	-294.1	299.0	0.00	0.00	
5,500.0	0.00	0.00	5,484.9	-53.9	-294.1	299.0	0.00	0.00	
5,600.0	0.00	0.00	5,584.9	-53.9	-294.1	299.0	0.00	0.00	Start 12° Build Niobrara
5,700.0	0.00	0.00	5,684.9	-53.9	-294.1	299.0	0.00	0.00	
5,800.0	0.00	0.00	5,784.9	-53.9	-294.1	299.0	0.00	0.00	
5,900.0	0.00	0.00	5,884.9	-53.9	-294.1	299.0	0.00	0.00	
6,000.0	0.00	0.00	5,984.9	-53.9	-294.1	299.0	0.00	0.00	
6,100.0	0.00	0.00	6,084.9	-53.9	-294.1	299.0	0.00	0.00	
6,200.0	0.00	0.00	6,184.9	-53.9	-294.1	299.0	0.00	0.00	
6,300.0	0.00	0.00	6,284.9	-53.9	-294.1	299.0	0.00	0.00	
6,400.0	0.00	0.00	6,384.9	-53.9	-294.1	299.0	0.00	0.00	
6,437.2	0.00	0.00	6,422.1	-53.9	-294.1	299.0	0.00	0.00	
6,458.1	2.51	259.90	6,443.0	-54.0	-294.5	299.4	12.00	12.00	6926' TVD @ 0' VS, 92°
6,500.0	7.53	259.90	6,484.7	-54.6	-298.1	303.1	12.00	12.00	
6,600.0	19.53	259.90	6,581.7	-58.7	-321.1	326.5	12.00	12.00	
6,700.0	31.53	259.90	6,671.8	-66.3	-363.5	369.5	12.00	12.00	
6,800.0	43.53	259.90	6,751.0	-76.9	-423.4	430.3	12.00	12.00	
6,900.0	55.53	259.90	6,815.7	-90.3	-498.1	506.2	12.00	12.00	
7,000.0	67.53	259.90	6,863.3	-105.7	-584.5	594.0	12.00	12.00	
7,100.0	79.53	259.90	6,891.6	-122.4	-678.8	689.7	12.00	12.00	
7,173.5	88.35	259.90	6,899.4	-135.2	-750.6	762.7	12.00	12.00	
7,200.0	91.53	259.90	6,899.4	-139.9	-776.7	789.2	12.00	12.00	Landing Pt @ 6899' TVD, 92°
7,203.9	92.00	259.90	6,899.3	-140.6	-780.6	793.1	12.00	12.00	
7,300.0	92.00	259.90	6,895.9	-157.4	-875.1	889.2	0.00	0.00	
7,400.0	92.00	259.90	6,892.4	-174.9	-973.5	989.1	0.00	0.00	
7,410.8	92.00	259.90	6,892.0	-176.8	-984.1	999.8	0.00	0.00	
7,411.9	92.01	259.76	6,892.0	-177.0	-985.2	1,001.0	12.00	0.65	
7,500.0	92.01	259.76	6,888.9	-192.7	-1,071.9	1,089.0	0.00	0.00	
7,600.0	92.01	259.76	6,885.4	-210.5	-1,170.2	1,189.0	0.00	0.00	
7,700.0	92.01	259.76	6,881.9	-228.2	-1,268.5	1,288.9	0.00	0.00	
7,800.0	92.01	259.76	6,878.4	-246.0	-1,366.9	1,388.9	0.00	0.00	Landing Pt
7,900.0	92.01	259.76	6,874.9	-263.8	-1,465.2	1,488.8	0.00	0.00	
8,000.0	92.01	259.76	6,871.4	-281.5	-1,563.6	1,588.7	0.00	0.00	
8,100.0	92.01	259.76	6,867.9	-299.3	-1,661.9	1,688.7	0.00	0.00	
8,200.0	92.01	259.76	6,864.3	-317.1	-1,760.3	1,788.6	0.00	0.00	
8,300.0	92.01	259.76	6,860.8	-334.8	-1,858.6	1,888.5	0.00	0.00	
8,400.0	92.01	259.76	6,857.3	-352.6	-1,957.0	1,988.5	0.00	0.00	
8,500.0	92.01	259.76	6,853.8	-370.4	-2,055.3	2,088.4	0.00	0.00	
8,600.0	92.01	259.76	6,850.3	-388.1	-2,153.7	2,188.4	0.00	0.00	
8,700.0	92.01	259.76	6,846.8	-405.9	-2,252.0	2,288.3	0.00	0.00	
8,800.0	92.01	259.76	6,843.3	-423.7	-2,350.4	2,388.2	0.00	0.00	
8,900.0	92.01	259.76	6,839.8	-441.4	-2,448.7	2,488.2	0.00	0.00	
9,000.0	92.01	259.76	6,836.3	-459.2	-2,547.1	2,588.1	0.00	0.00	
9,100.0	92.01	259.76	6,832.8	-477.0	-2,645.4	2,688.1	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well DH08-29 A28 6100
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KBE @ 6678.0ft (Original Well Elev)
Project:	Cedar Bench	MD Reference:	KBE @ 6678.0ft (Original Well Elev)
Site:	A28 6100	North Reference:	True
Well:	DH08-29 A28 6100	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	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
9,200.0	92.01	259.76	6,829.3	-494.7	-2,743.7	2,788.0	0.00	0.00	
9,300.0	92.01	259.76	6,825.7	-512.5	-2,842.1	2,887.9	0.00	0.00	
9,400.0	92.01	259.76	6,822.2	-530.3	-2,940.4	2,987.9	0.00	0.00	
9,500.0	92.01	259.76	6,818.7	-548.0	-3,038.8	3,087.8	0.00	0.00	
9,600.0	92.01	259.76	6,815.2	-565.8	-3,137.1	3,187.7	0.00	0.00	
9,700.0	92.01	259.76	6,811.7	-583.6	-3,235.5	3,287.7	0.00	0.00	
9,800.0	92.01	259.76	6,808.2	-601.3	-3,333.8	3,387.6	0.00	0.00	
9,900.0	92.01	259.76	6,804.7	-619.1	-3,432.2	3,487.6	0.00	0.00	
10,000.0	92.01	259.76	6,801.2	-636.9	-3,530.5	3,587.5	0.00	0.00	
10,100.0	92.01	259.76	6,797.7	-654.6	-3,628.9	3,687.4	0.00	0.00	
10,200.0	92.01	259.76	6,794.2	-672.4	-3,727.2	3,787.4	0.00	0.00	
10,300.0	92.01	259.76	6,790.7	-690.2	-3,825.6	3,887.3	0.00	0.00	
10,400.0	92.01	259.76	6,787.1	-707.9	-3,923.9	3,987.3	0.00	0.00	
10,500.0	92.01	259.76	6,783.6	-725.7	-4,022.2	4,087.2	0.00	0.00	
10,600.0	92.01	259.76	6,780.1	-743.5	-4,120.6	4,187.1	0.00	0.00	
10,700.0	92.01	259.76	6,776.6	-761.2	-4,218.9	4,287.1	0.00	0.00	
10,800.0	92.01	259.76	6,773.1	-779.0	-4,317.3	4,387.0	0.00	0.00	
10,900.0	92.01	259.76	6,769.6	-796.8	-4,415.6	4,486.9	0.00	0.00	
11,000.0	92.01	259.76	6,766.1	-814.5	-4,514.0	4,586.9	0.00	0.00	
11,100.0	92.01	259.76	6,762.6	-832.3	-4,612.3	4,686.8	0.00	0.00	
11,200.0	92.01	259.76	6,759.1	-850.1	-4,710.7	4,786.8	0.00	0.00	
11,300.0	92.01	259.76	6,755.6	-867.8	-4,809.0	4,886.7	0.00	0.00	
11,400.0	92.01	259.76	6,752.1	-885.6	-4,907.4	4,986.6	0.00	0.00	
11,500.0	92.01	259.76	6,748.5	-903.4	-5,005.7	5,086.6	0.00	0.00	
11,600.0	92.01	259.76	6,745.0	-921.1	-5,104.1	5,186.5	0.00	0.00	
11,700.0	92.01	259.76	6,741.5	-938.9	-5,202.4	5,286.5	0.00	0.00	
11,800.0	92.01	259.76	6,738.0	-956.7	-5,300.8	5,386.4	0.00	0.00	
11,900.0	92.01	259.76	6,734.5	-974.4	-5,399.1	5,486.3	0.00	0.00	
12,000.0	92.01	259.76	6,731.0	-992.2	-5,497.4	5,586.3	0.00	0.00	
12,100.0	92.01	259.76	6,727.5	-1,010.0	-5,595.8	5,686.2	0.00	0.00	
12,200.0	92.01	259.76	6,724.0	-1,027.7	-5,694.1	5,786.1	0.00	0.00	
12,300.0	92.01	259.76	6,720.5	-1,045.5	-5,792.5	5,886.1	0.00	0.00	
12,400.0	92.01	259.76	6,717.0	-1,063.3	-5,890.8	5,986.0	0.00	0.00	
12,408.4	92.01	259.76	6,716.7	-1,064.8	-5,899.1	5,994.4	0.00	0.00	PBHL
12,500.0	92.01	259.76	6,713.5	-1,081.0	-5,989.2	6,086.0	0.00	0.00	
12,600.0	92.01	259.76	6,709.9	-1,098.8	-6,087.5	6,185.9	0.00	0.00	
12,700.0	92.01	259.76	6,706.4	-1,116.6	-6,185.9	6,285.8	0.00	0.00	
12,800.0	92.01	259.76	6,702.9	-1,134.4	-6,284.2	6,385.8	0.00	0.00	
12,900.0	92.01	259.76	6,699.4	-1,152.1	-6,382.6	6,485.7	0.00	0.00	
13,000.0	92.01	259.76	6,695.9	-1,169.9	-6,480.9	6,585.6	0.00	0.00	
13,100.0	92.01	259.76	6,692.4	-1,187.7	-6,579.3	6,685.6	0.00	0.00	
13,200.0	92.01	259.76	6,688.9	-1,205.4	-6,677.6	6,785.5	0.00	0.00	
13,300.0	92.01	259.76	6,685.4	-1,223.2	-6,775.9	6,885.5	0.00	0.00	
13,400.0	92.01	259.76	6,681.9	-1,241.0	-6,874.3	6,985.4	0.00	0.00	
13,500.0	92.01	259.76	6,678.4	-1,258.7	-6,972.6	7,085.3	0.00	0.00	
13,600.0	92.01	259.76	6,674.9	-1,276.5	-7,071.0	7,185.3	0.00	0.00	
13,700.0	92.01	259.76	6,671.3	-1,294.3	-7,169.3	7,285.2	0.00	0.00	
13,800.0	92.01	259.76	6,667.8	-1,312.0	-7,267.7	7,385.2	0.00	0.00	
13,900.0	92.01	259.76	6,664.3	-1,329.8	-7,366.0	7,485.1	0.00	0.00	
13,979.5	92.01	259.76	6,661.5	-1,343.9	-7,444.2	7,564.5	0.00	0.00	Permit TD

Cathedral Energy Services

Planning Report

Database:	EDM 5000.1 US Multi Users DB	Local Co-ordinate Reference:	Well DH08-29 A28 6100
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KBE @ 6678.0ft (Original Well Elev)
Project:	Cedar Bench	MD Reference:	KBE @ 6678.0ft (Original Well Elev)
Site:	A28 6100	North Reference:	True
Well:	DH08-29 A28 6100	Survey Calculation Method:	Minimum Curvature
Wellbore:	H2		
Design:	Plan #3		

Targets									
Target Name									
- hit/miss target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
PBHL	0.00	0.00	6,716.7	-1,064.8	-5,899.1	1,078,294.15	2,133,295.14	39° 30' 25.35 N	108° 34' 19.58 W
- plan hits target center									
- Point									
Landing Pt	0.00	0.00	6,892.0	-177.0	-985.2	1,079,012.31	2,138,236.65	39° 30' 34.13 N	108° 33' 16.89 W
- plan hits target center									
- Point									
Permit TD	0.00	0.00	6,661.5	-1,344.6	-7,452.7	1,078,067.89	2,131,732.80	39° 30' 22.58 N	108° 34' 39.40 W
- plan misses target center by 8.6ft at 13979.5ft MD (6661.5 TVD, -1343.9 N, -7444.2 E)									
- Point									

1,061.6	1,058.0	Williams Fork	0.00
3,218.1	3,203.0	Rollins	0.00
3,778.1	3,763.0	Top of Gas	0.00
4,656.1	4,641.0	Mancos A	0.00
6,458.1	6,443.0	Niobrara	0.00
7,173.5	6,926.0	6926' TVD @ 0° VS, 92°	-2.00 259.79

Plan Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	
200.0	200.0	0.0	0.0	KOP @ 200'
500.0	499.5	-2.8	-15.4	EOB; Inc=5°
3,060.0	3,045.4	-51.1	-278.6	Start Drop -2.00
3,360.0	3,344.9	-53.9	-294.1	EOD; Inc=0
6,437.2	6,422.1	-53.9	-294.1	Start 12° Build
7,203.9	6,899.3	-140.6	-780.6	Landing Pt @ 6899' TVD, 92°
13,979.5	6,661.5	-1,343.9	-7,444.2	TD at 13979.5