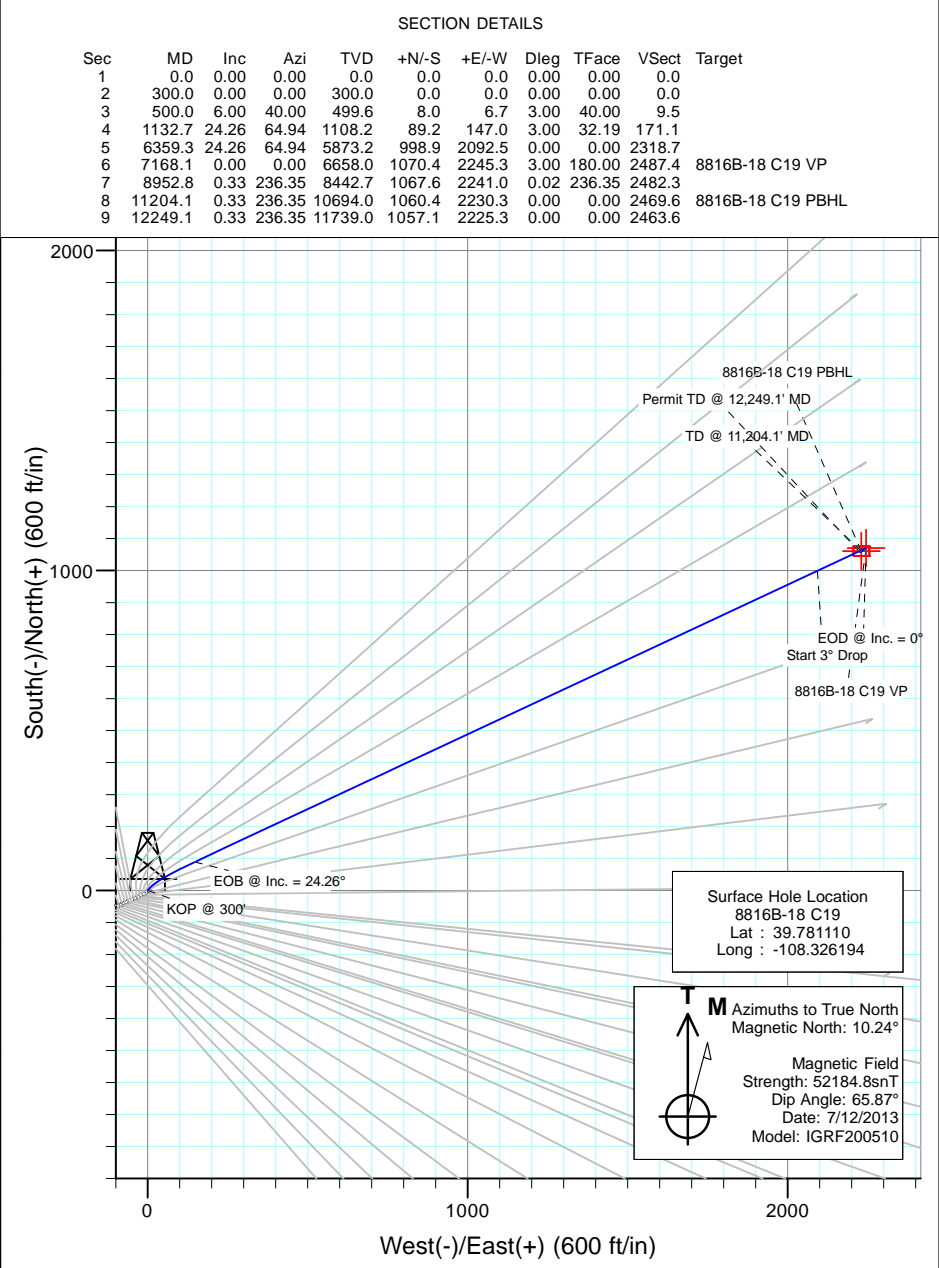
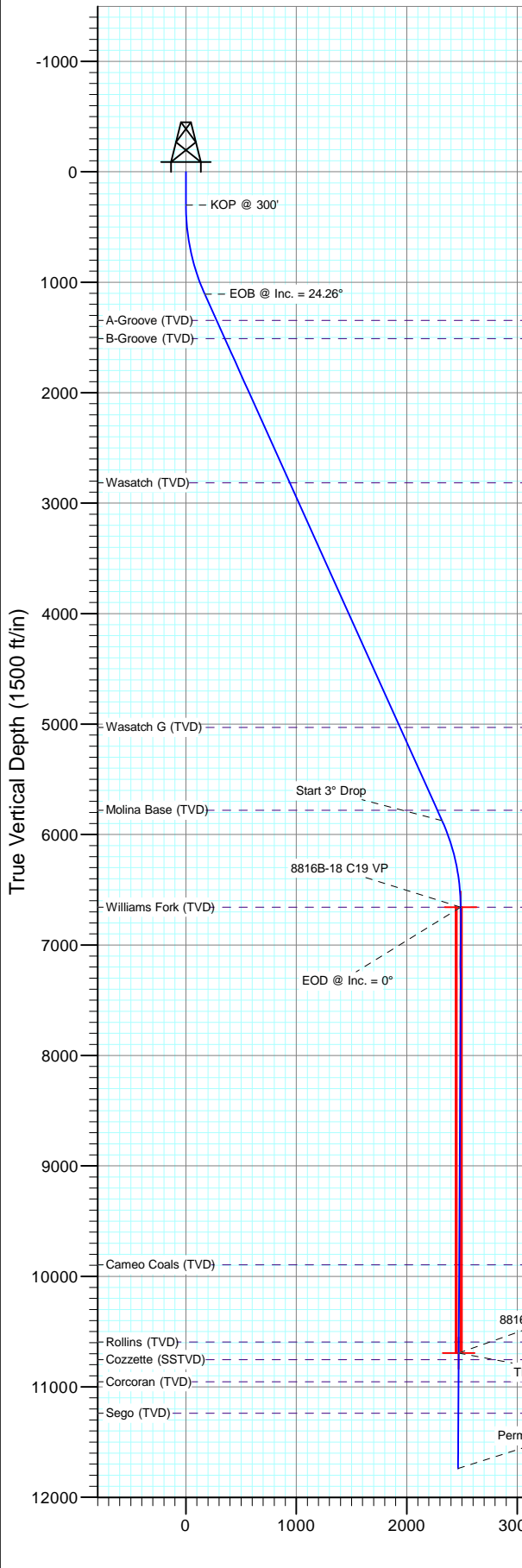




Project: Eureka Unit
Site: C19 Pad (S19-T3S-R97W)
Well: 8816B-18 C19
Wellbore: DD
Design: Plan #1



SECTION DETAILS										
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSection	Target
1	0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.0	
2	300.0	0.00	0.00	300.0	0.0	0.0	0.00	0.00	0.0	
3	500.0	6.00	40.00	499.6	8.0	6.7	3.00	40.00	9.5	
4	1132.7	24.26	64.94	1108.2	89.2	147.0	3.00	32.19	171.1	
5	6359.3	24.26	64.94	5873.2	998.9	2092.5	0.00	0.00	2318.7	
6	7168.1	0.00	0.00	6658.0	1070.4	2245.3	3.00	180.00	2487.4	8816B-18 C19 VP
7	8952.8	0.33	236.35	8442.7	1067.6	2241.0	0.02	236.35	2482.3	
8	11204.1	0.33	236.35	10694.0	1060.4	2230.3	0.00	0.00	2469.6	8816B-18 C19 PBHL
9	12249.1	0.33	236.35	11739.0	1057.1	2225.3	0.00	0.00	2463.6	

DESIGN TARGET DETAILS						
Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
8816B-18 C19 VP	1070.4	2245.3	1722757.92	2208087.65	39.784048	-108.318205
8816B-18 C19 PBHL	1060.4	2230.3	1722748.41	2208072.34	39.784020	-108.318258

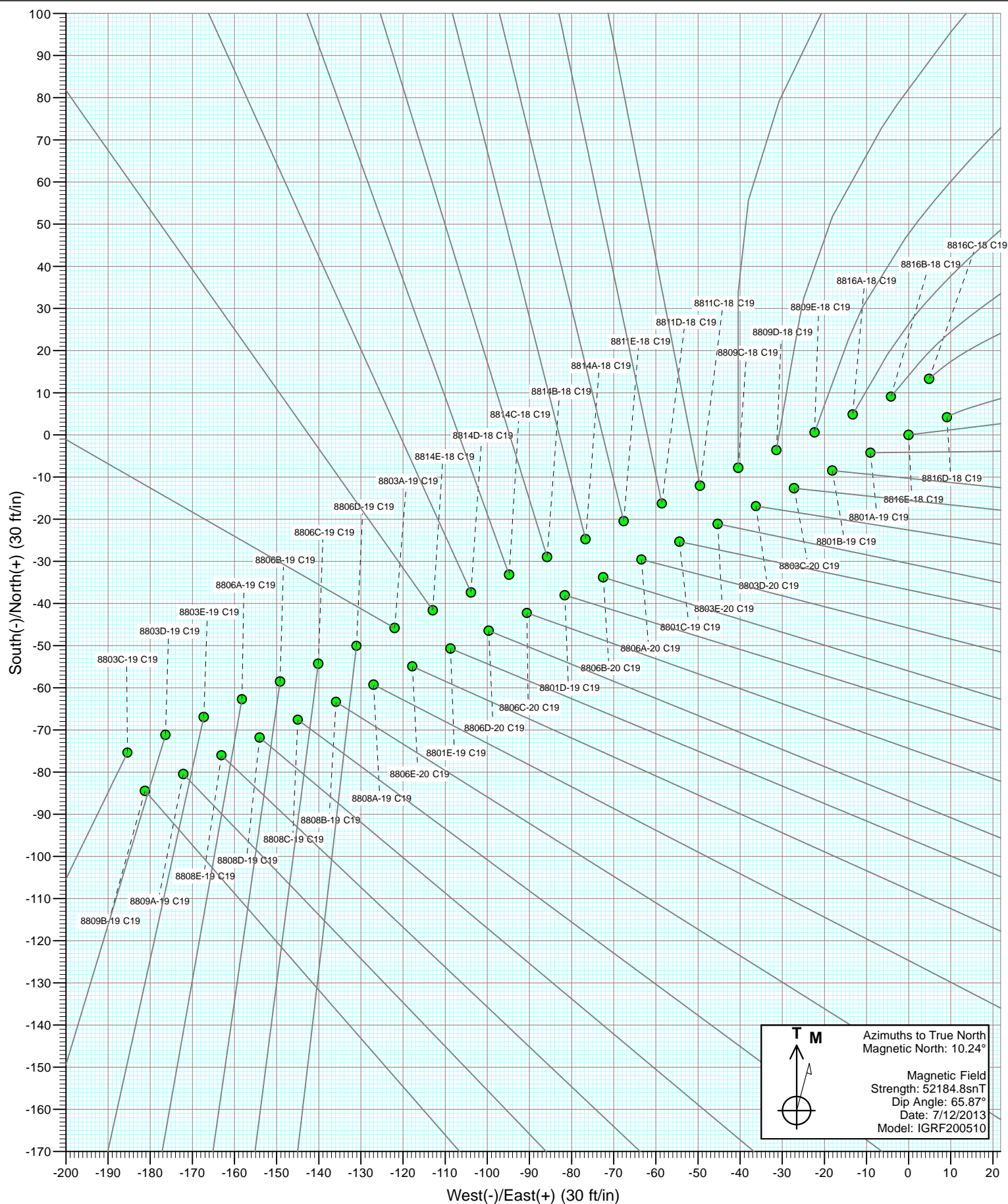
FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
1345.0	1392.4	A-Groove (TVD)
1509.0	1572.3	B-Groove (TVD)
2815.0	3004.8	Wasatch (TVD)
5030.0	5434.4	Wasatch G (TVD)
5780.0	6257.1	Molina Base (TVD)
6658.0	7168.1	Williams Fork (TVD)
9894.0	10404.1	Cameo Coals (TVD)
10594.0	11104.1	Rollins (TVD)
10754.0	11264.1	Cozzette (SSTVD)
10954.0	11464.1	Corcoran (TVD)
11239.0	11749.1	Sego (TVD)

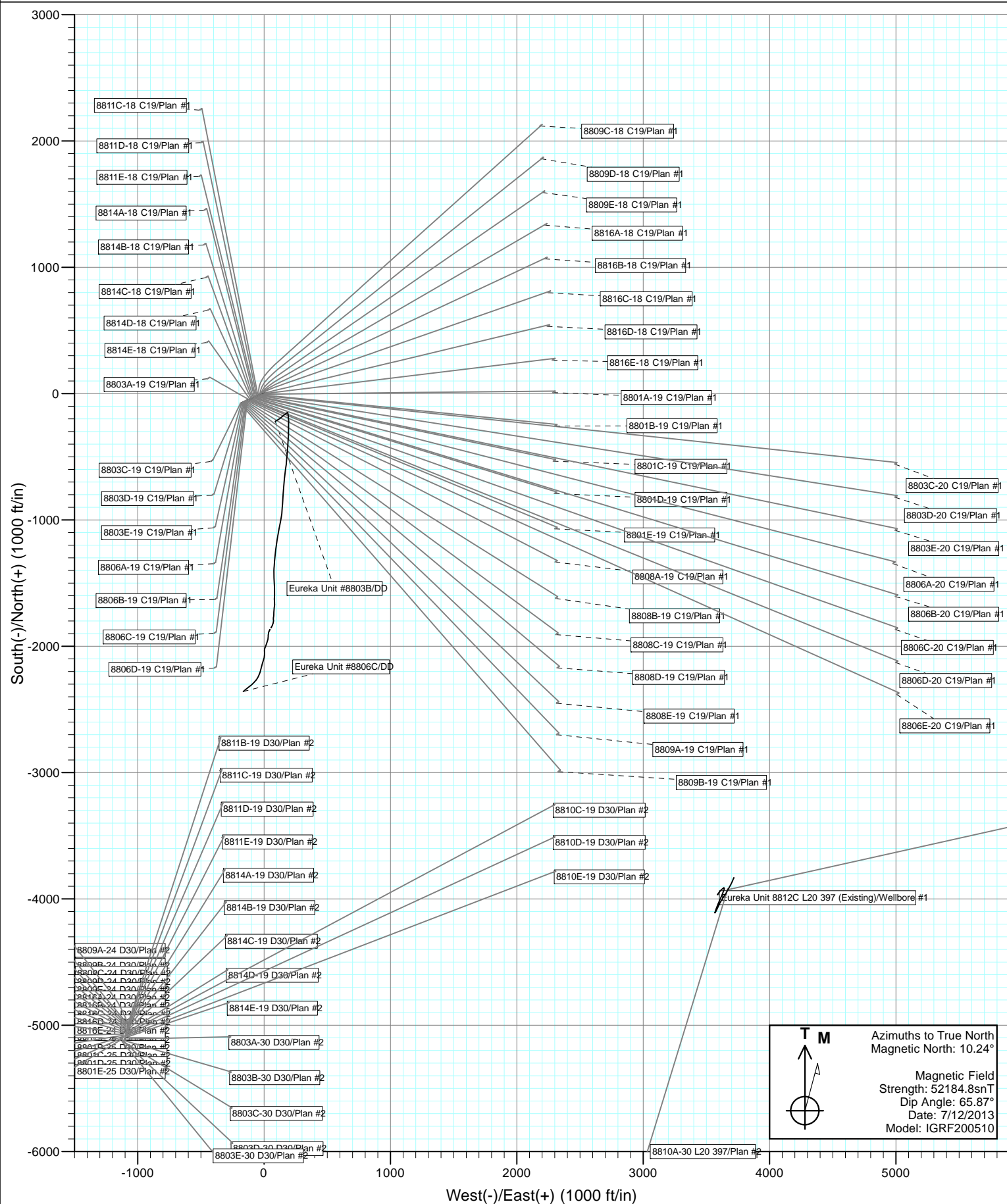
Plan #1
8816B-18 C19
WELL @ 7166.0ft (Original Well Elev)
Ground Elevation @ 7133.0
North American Datum 1983
Well 8816B-18 C19, True North

Surface Hole Location
8816B-18 C19
Lat : 39.781110
Long : -108.326194

M Azimuths to True North
Magnetic North: 10.24°

Magnetic Field
Strength: 52184.8snT
Dip Angle: 65.87°
Date: 7/12/2013
Model: IGRF200510





Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well 8816B-18 C19
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 7166.0ft (Original Well Elev)
Project:	Eureka Unit	MD Reference:	WELL @ 7166.0ft (Original Well Elev)
Site:	C19 Pad (S19-T3S-R97W)	North Reference:	True
Well:	8816B-18 C19	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Project	Eureka Unit		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Central Zone		

Site		C19 Pad (S19-T3S-R97W)			
Site Position:		Northing:	1,721,669.90 ft	Latitude:	39.780853
From:	Lat/Long	Easting:	2,205,630.31 ft	Longitude:	-108.326824
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	-1.78 °

Well	8816B-18 C19					
Well Position	+N/-S	0.0 ft	Northing:	1,721,757.88 ft	Latitude:	39.781110
	+E/-W	0.0 ft	Easting:	2,205,810.14 ft	Longitude:	-108.326194
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	7,133.0 ft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	7/12/2013	10.24	65.87	52,185

Design	Plan #1			
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	64.59

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	
300.0	0.00	0.00	300.0	0.0	0.0	0.00	0.00	0.00	0.00	
500.0	6.00	40.00	499.6	8.0	6.7	3.00	3.00	0.00	40.00	
1,132.7	24.26	64.94	1,108.2	89.2	147.0	3.00	2.89	3.94	32.19	
6,359.3	24.26	64.94	5,873.2	998.9	2,092.5	0.00	0.00	0.00	0.00	
7,168.1	0.00	0.00	6,658.0	1,070.4	2,245.3	3.00	-3.00	0.00	180.00	8816B-18 C19 VP
8,952.8	0.33	236.35	8,442.7	1,067.6	2,241.0	0.02	0.02	-6.93	236.35	
11,204.1	0.33	236.35	10,694.0	1,060.4	2,230.3	0.00	0.00	0.00	0.00	8816B-18 C19 PBHL
12,249.1	0.33	236.35	11,739.0	1,057.1	2,225.3	0.00	0.00	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well 8816B-18 C19
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 7166.0ft (Original Well Elev)
Project:	Eureka Unit	MD Reference:	WELL @ 7166.0ft (Original Well Elev)
Site:	C19 Pad (S19-T3S-R97W)	North Reference:	True
Well:	8816B-18 C19	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	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	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	KOP @ 300'
400.0	3.00	40.00	400.0	2.0	1.7	2.4	3.00	3.00	
500.0	6.00	40.00	499.6	8.0	6.7	9.5	3.00	3.00	
600.0	8.69	50.64	598.8	16.8	15.9	21.6	3.00	2.69	
700.0	11.53	56.18	697.3	27.2	30.1	38.8	3.00	2.84	
800.0	14.43	59.53	794.7	39.0	49.1	61.1	3.00	2.91	
900.0	17.37	61.78	890.8	52.4	73.0	88.4	3.00	2.94	
1,000.0	20.32	63.39	985.5	67.3	101.7	120.7	3.00	2.95	
1,100.0	23.29	64.60	1,078.3	83.5	135.1	157.9	3.00	2.97	
1,132.7	24.26	64.94	1,108.2	89.2	147.0	171.1	3.00	2.97	EOB @ Inc. = 24.26°
1,200.0	24.26	64.94	1,169.6	100.9	172.1	198.7	0.00	0.00	
1,300.0	24.26	64.94	1,260.8	118.3	209.3	239.8	0.00	0.00	
1,392.4	24.26	64.94	1,345.0	134.4	243.7	277.8	0.00	0.00	A-Groove (TVD)
1,400.0	24.26	64.94	1,351.9	135.7	246.5	280.9	0.00	0.00	
1,500.0	24.26	64.94	1,443.1	153.1	283.7	322.0	0.00	0.00	
1,572.3	24.26	64.94	1,509.0	165.7	310.6	351.7	0.00	0.00	B-Groove (TVD)
1,600.0	24.26	64.94	1,534.3	170.5	321.0	363.1	0.00	0.00	
1,700.0	24.26	64.94	1,625.4	187.9	358.2	404.2	0.00	0.00	
1,800.0	24.26	64.94	1,716.6	205.3	395.4	445.3	0.00	0.00	
1,900.0	24.26	64.94	1,807.8	222.7	432.6	486.3	0.00	0.00	
2,000.0	24.26	64.94	1,898.9	240.1	469.8	527.4	0.00	0.00	
2,100.0	24.26	64.94	1,990.1	257.5	507.1	568.5	0.00	0.00	
2,200.0	24.26	64.94	2,081.3	274.9	544.3	609.6	0.00	0.00	
2,300.0	24.26	64.94	2,172.4	292.3	581.5	650.7	0.00	0.00	
2,400.0	24.26	64.94	2,263.6	309.8	618.7	691.8	0.00	0.00	
2,500.0	24.26	64.94	2,354.8	327.2	656.0	732.9	0.00	0.00	
2,600.0	24.26	64.94	2,445.9	344.6	693.2	774.0	0.00	0.00	
2,700.0	24.26	64.94	2,537.1	362.0	730.4	815.1	0.00	0.00	
2,800.0	24.26	64.94	2,628.3	379.4	767.6	856.2	0.00	0.00	
2,900.0	24.26	64.94	2,719.4	396.8	804.9	897.2	0.00	0.00	
3,000.0	24.26	64.94	2,810.6	414.2	842.1	938.3	0.00	0.00	
3,004.8	24.26	64.94	2,815.0	415.0	843.9	940.3	0.00	0.00	Wasatch (TVD)
3,100.0	24.26	64.94	2,901.8	431.6	879.3	979.4	0.00	0.00	
3,200.0	24.26	64.94	2,992.9	449.0	916.5	1,020.5	0.00	0.00	
3,300.0	24.26	64.94	3,084.1	466.4	953.7	1,061.6	0.00	0.00	
3,400.0	24.26	64.94	3,175.3	483.8	991.0	1,102.7	0.00	0.00	
3,500.0	24.26	64.94	3,266.4	501.2	1,028.2	1,143.8	0.00	0.00	
3,600.0	24.26	64.94	3,357.6	518.6	1,065.4	1,184.9	0.00	0.00	
3,700.0	24.26	64.94	3,448.8	536.0	1,102.6	1,226.0	0.00	0.00	
3,800.0	24.26	64.94	3,539.9	553.4	1,139.9	1,267.1	0.00	0.00	
3,900.0	24.26	64.94	3,631.1	570.9	1,177.1	1,308.2	0.00	0.00	
4,000.0	24.26	64.94	3,722.3	588.3	1,214.3	1,349.2	0.00	0.00	
4,100.0	24.26	64.94	3,813.4	605.7	1,251.5	1,390.3	0.00	0.00	
4,200.0	24.26	64.94	3,904.6	623.1	1,288.7	1,431.4	0.00	0.00	
4,300.0	24.26	64.94	3,995.8	640.5	1,326.0	1,472.5	0.00	0.00	
4,400.0	24.26	64.94	4,086.9	657.9	1,363.2	1,513.6	0.00	0.00	
4,500.0	24.26	64.94	4,178.1	675.3	1,400.4	1,554.7	0.00	0.00	
4,600.0	24.26	64.94	4,269.3	692.7	1,437.6	1,595.8	0.00	0.00	
4,700.0	24.26	64.94	4,360.5	710.1	1,474.9	1,636.9	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well 8816B-18 C19
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 7166.0ft (Original Well Elev)
Project:	Eureka Unit	MD Reference:	WELL @ 7166.0ft (Original Well Elev)
Site:	C19 Pad (S19-T3S-R97W)	North Reference:	True
Well:	8816B-18 C19	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	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	24.26	64.94	4,451.6	727.5	1,512.1	1,678.0	0.00	0.00	
4,900.0	24.26	64.94	4,542.8	744.9	1,549.3	1,719.1	0.00	0.00	
5,000.0	24.26	64.94	4,634.0	762.3	1,586.5	1,760.2	0.00	0.00	
5,100.0	24.26	64.94	4,725.1	779.7	1,623.7	1,801.2	0.00	0.00	
5,200.0	24.26	64.94	4,816.3	797.1	1,661.0	1,842.3	0.00	0.00	
5,300.0	24.26	64.94	4,907.5	814.5	1,698.2	1,883.4	0.00	0.00	
5,400.0	24.26	64.94	4,998.6	832.0	1,735.4	1,924.5	0.00	0.00	
5,434.4	24.26	64.94	5,030.0	837.9	1,748.2	1,938.7	0.00	0.00	Wasatch G (TVD)
5,500.0	24.26	64.94	5,089.8	849.4	1,772.6	1,965.6	0.00	0.00	
5,600.0	24.26	64.94	5,181.0	866.8	1,809.9	2,006.7	0.00	0.00	
5,700.0	24.26	64.94	5,272.1	884.2	1,847.1	2,047.8	0.00	0.00	
5,800.0	24.26	64.94	5,363.3	901.6	1,884.3	2,088.9	0.00	0.00	
5,900.0	24.26	64.94	5,454.5	919.0	1,921.5	2,130.0	0.00	0.00	
6,000.0	24.26	64.94	5,545.6	936.4	1,958.7	2,171.1	0.00	0.00	
6,100.0	24.26	64.94	5,636.8	953.8	1,996.0	2,212.1	0.00	0.00	
6,200.0	24.26	64.94	5,728.0	971.2	2,033.2	2,253.2	0.00	0.00	
6,257.1	24.26	64.94	5,780.0	981.1	2,054.4	2,276.7	0.00	0.00	Molina Base (TVD)
6,300.0	24.26	64.94	5,819.1	988.6	2,070.4	2,294.3	0.00	0.00	
6,359.3	24.26	64.94	5,873.2	998.9	2,092.5	2,318.7	0.00	0.00	Start 3° Drop
6,400.0	23.04	64.94	5,910.5	1,005.9	2,107.3	2,335.0	3.00	-3.00	
6,500.0	20.04	64.94	6,003.5	1,021.4	2,140.5	2,371.7	3.00	-3.00	
6,600.0	17.04	64.94	6,098.3	1,034.9	2,169.3	2,403.5	3.00	-3.00	
6,700.0	14.04	64.94	6,194.6	1,046.2	2,193.6	2,430.3	3.00	-3.00	
6,800.0	11.04	64.94	6,292.2	1,055.4	2,213.3	2,452.0	3.00	-3.00	
6,900.0	8.04	64.94	6,390.8	1,062.4	2,228.3	2,468.6	3.00	-3.00	
7,000.0	5.04	64.94	6,490.2	1,067.3	2,238.6	2,480.0	3.00	-3.00	
7,100.0	2.04	64.94	6,590.0	1,069.9	2,244.2	2,486.2	3.00	-3.00	
7,168.1	0.00	0.00	6,658.0	1,070.4	2,245.3	2,487.4	3.00	-3.00	EOD @ Inc. = 0° - Williams Fork (TVD)
7,200.0	0.01	236.35	6,689.9	1,070.4	2,245.3	2,487.4	0.02	0.02	
7,300.0	0.02	236.35	6,789.9	1,070.4	2,245.3	2,487.4	0.02	0.02	
7,400.0	0.04	236.35	6,889.9	1,070.4	2,245.2	2,487.3	0.02	0.02	
7,500.0	0.06	236.35	6,989.9	1,070.3	2,245.2	2,487.2	0.02	0.02	
7,600.0	0.08	236.35	7,089.9	1,070.2	2,245.1	2,487.1	0.02	0.02	
7,700.0	0.10	236.35	7,189.9	1,070.1	2,244.9	2,486.9	0.02	0.02	
7,800.0	0.12	236.35	7,289.9	1,070.0	2,244.8	2,486.8	0.02	0.02	
7,900.0	0.13	236.35	7,389.9	1,069.9	2,244.6	2,486.5	0.02	0.02	
8,000.0	0.15	236.35	7,489.9	1,069.8	2,244.4	2,486.3	0.02	0.02	
8,100.0	0.17	236.35	7,589.9	1,069.6	2,244.1	2,486.0	0.02	0.02	
8,200.0	0.19	236.35	7,689.9	1,069.5	2,243.9	2,485.7	0.02	0.02	
8,300.0	0.21	236.35	7,789.9	1,069.3	2,243.6	2,485.4	0.02	0.02	
8,400.0	0.23	236.35	7,889.9	1,069.0	2,243.3	2,485.0	0.02	0.02	
8,500.0	0.25	236.35	7,989.9	1,068.8	2,242.9	2,484.6	0.02	0.02	
8,600.0	0.26	236.35	8,089.9	1,068.6	2,242.6	2,484.1	0.02	0.02	
8,700.0	0.28	236.35	8,189.9	1,068.3	2,242.2	2,483.7	0.02	0.02	
8,800.0	0.30	236.35	8,289.9	1,068.0	2,241.7	2,483.2	0.02	0.02	
8,900.0	0.32	236.35	8,389.9	1,067.7	2,241.3	2,482.6	0.02	0.02	
8,952.8	0.33	236.35	8,442.7	1,067.6	2,241.0	2,482.3	0.02	0.02	
9,000.0	0.33	236.35	8,489.9	1,067.4	2,240.8	2,482.1	0.00	0.00	
9,100.0	0.33	236.35	8,589.9	1,067.1	2,240.3	2,481.5	0.00	0.00	
9,200.0	0.33	236.35	8,689.9	1,066.8	2,239.9	2,480.9	0.00	0.00	
9,300.0	0.33	236.35	8,789.9	1,066.5	2,239.4	2,480.4	0.00	0.00	
9,400.0	0.33	236.35	8,889.9	1,066.1	2,238.9	2,479.8	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well 8816B-18 C19
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 7166.0ft (Original Well Elev)
Project:	Eureka Unit	MD Reference:	WELL @ 7166.0ft (Original Well Elev)
Site:	C19 Pad (S19-T3S-R97W)	North Reference:	True
Well:	8816B-18 C19	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	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
9,500.0	0.33	236.35	8,989.9	1,065.8	2,238.4	2,479.2	0.00	0.00	
9,600.0	0.33	236.35	9,089.9	1,065.5	2,238.0	2,478.7	0.00	0.00	
9,700.0	0.33	236.35	9,189.9	1,065.2	2,237.5	2,478.1	0.00	0.00	
9,800.0	0.33	236.35	9,289.9	1,064.9	2,237.0	2,477.5	0.00	0.00	
9,900.0	0.33	236.35	9,389.9	1,064.6	2,236.5	2,477.0	0.00	0.00	
10,000.0	0.33	236.35	9,489.9	1,064.2	2,236.0	2,476.4	0.00	0.00	
10,100.0	0.33	236.35	9,589.9	1,063.9	2,235.6	2,475.8	0.00	0.00	
10,200.0	0.33	236.35	9,689.9	1,063.6	2,235.1	2,475.3	0.00	0.00	
10,300.0	0.33	236.35	9,789.9	1,063.3	2,234.6	2,474.7	0.00	0.00	
10,400.0	0.33	236.35	9,889.9	1,063.0	2,234.1	2,474.1	0.00	0.00	
10,404.1	0.33	236.35	9,894.0	1,063.0	2,234.1	2,474.1	0.00	0.00	Cameo Coals (TVD)
10,500.0	0.33	236.35	9,989.9	1,062.7	2,233.7	2,473.6	0.00	0.00	
10,600.0	0.33	236.35	10,089.9	1,062.3	2,233.2	2,473.0	0.00	0.00	
10,700.0	0.33	236.35	10,189.9	1,062.0	2,232.7	2,472.4	0.00	0.00	
10,800.0	0.33	236.35	10,289.9	1,061.7	2,232.2	2,471.8	0.00	0.00	
10,900.0	0.33	236.35	10,389.9	1,061.4	2,231.7	2,471.3	0.00	0.00	
11,000.0	0.33	236.35	10,489.9	1,061.1	2,231.3	2,470.7	0.00	0.00	
11,100.0	0.33	236.35	10,589.9	1,060.7	2,230.8	2,470.1	0.00	0.00	
11,104.1	0.33	236.35	10,594.0	1,060.7	2,230.8	2,470.1	0.00	0.00	Rollins (TVD)
11,204.1	0.33	236.35	10,694.0	1,060.4	2,230.3	2,469.6	0.00	0.00	TD @ 11,204.1' MD
11,264.1	0.33	236.35	10,754.0	1,060.2	2,230.0	2,469.2	0.00	0.00	Cozzette (SSTVD)
11,300.0	0.33	236.35	10,789.9	1,060.1	2,229.8	2,469.0	0.00	0.00	
11,400.0	0.33	236.35	10,889.9	1,059.8	2,229.4	2,468.4	0.00	0.00	
11,464.1	0.33	236.35	10,954.0	1,059.6	2,229.1	2,468.1	0.00	0.00	Corcoran (TVD)
11,500.0	0.33	236.35	10,989.9	1,059.5	2,228.9	2,467.9	0.00	0.00	
11,600.0	0.33	236.35	11,089.9	1,059.2	2,228.4	2,467.3	0.00	0.00	
11,700.0	0.33	236.35	11,189.9	1,058.8	2,227.9	2,466.7	0.00	0.00	
11,749.1	0.33	236.35	11,239.0	1,058.7	2,227.7	2,466.5	0.00	0.00	Sego (TVD)
11,800.0	0.33	236.35	11,289.9	1,058.5	2,227.5	2,466.2	0.00	0.00	
11,900.0	0.33	236.35	11,389.9	1,058.2	2,227.0	2,465.6	0.00	0.00	
12,000.0	0.33	236.35	11,489.9	1,057.9	2,226.5	2,465.0	0.00	0.00	
12,100.0	0.33	236.35	11,589.9	1,057.6	2,226.0	2,464.5	0.00	0.00	
12,200.0	0.33	236.35	11,689.9	1,057.3	2,225.5	2,463.9	0.00	0.00	
12,249.1	0.33	236.35	11,739.0	1,057.1	2,225.3	2,463.6	0.00	0.00	Permit TD @ 12,249.1' MD

Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
8816B-18 C19 VP - hit/miss target - Shape	0.00	0.00	6,658.0	1,070.4	2,245.3	1,722,757.92	2,208,087.65	39.784048	-108.318205
8816B-18 C19 PBHL - plan hits target center - Rectangle (sides W30.0 H50.0 D0.0)	0.00	0.00	10,694.0	1,060.4	2,230.3	1,722,748.41	2,208,072.34	39.784020	-108.318258

Cathedral Energy Services

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well 8816B-18 C19
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 7166.0ft (Original Well Elev)
Project:	Eureka Unit	MD Reference:	WELL @ 7166.0ft (Original Well Elev)
Site:	C19 Pad (S19-T3S-R97W)	North Reference:	True
Well:	8816B-18 C19	Survey Calculation Method:	Minimum Curvature
Wellbore:	DD		
Design:	Plan #1		

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,392.4	1,345.0	A-Groove (TVD)		0.00	
1,572.3	1,509.0	B-Groove (TVD)		0.00	
3,004.8	2,815.0	Wasatch (TVD)		0.00	
5,434.4	5,030.0	Wasatch G (TVD)		0.00	
6,257.1	5,780.0	Molina Base (TVD)		0.00	
7,168.1	6,658.0	Williams Fork (TVD)		0.00	
10,404.1	9,894.0	Cameo Coals (TVD)		0.00	
11,104.1	10,594.0	Rollins (TVD)		0.00	
11,264.1	10,754.0	Cozzette (SSTVD)		0.00	
11,464.1	10,954.0	Corcoran (TVD)		0.00	
11,749.1	11,239.0	Sego (TVD)		0.00	

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
300.0	300.0	0.0	0.0	KOP @ 300'
1,132.7	1,108.2	89.2	147.0	EOB @ Inc. = 24.26°
6,359.3	5,873.2	998.9	2,092.5	Start 3° Drop
7,168.1	6,658.0	1,070.4	2,245.3	EOD @ Inc. = 0°
11,204.1	10,694.0	1,060.4	2,230.3	TD @ 11,204.1' MD
12,249.1	11,739.0	1,057.1	2,225.3	Permit TD @ 12,249.1' MD