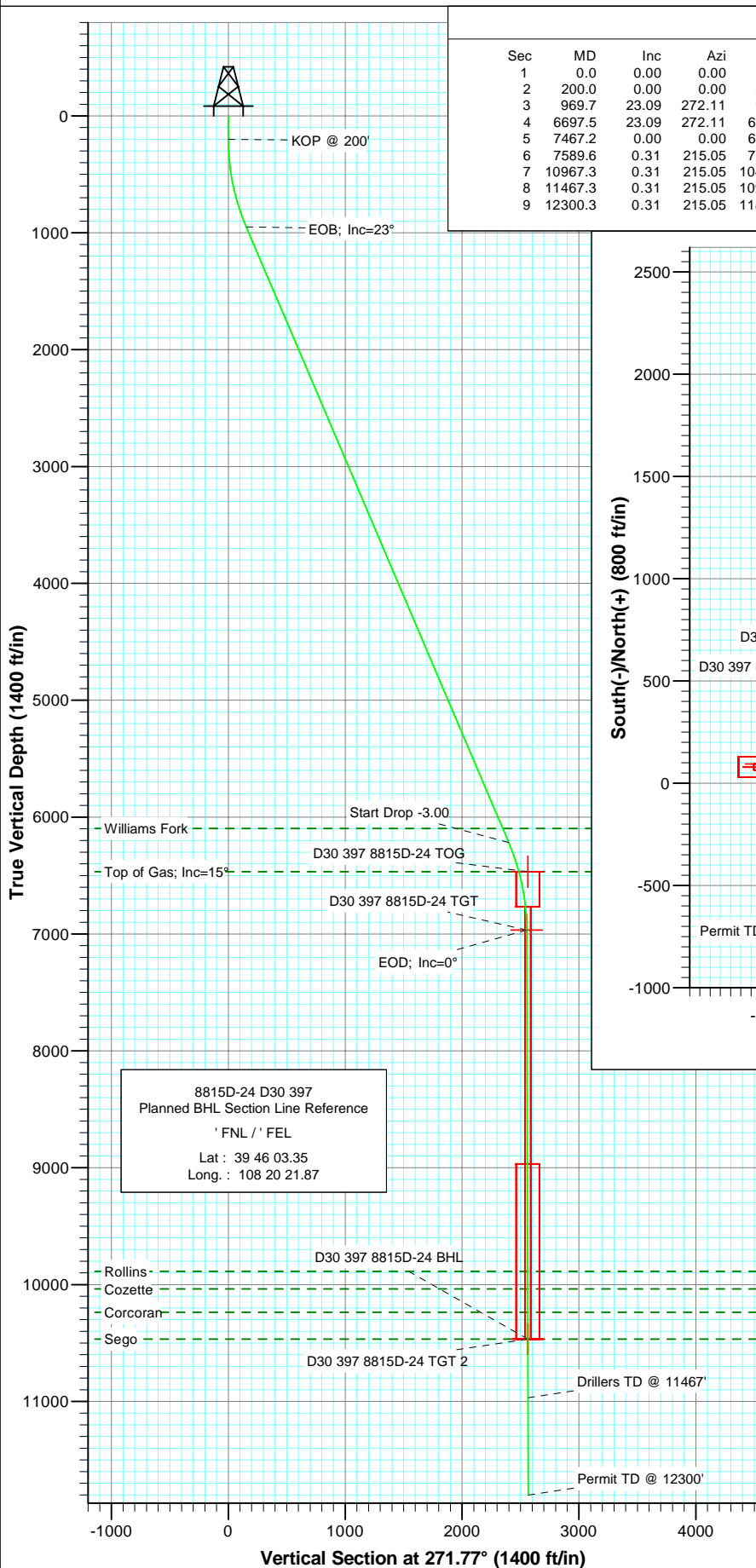
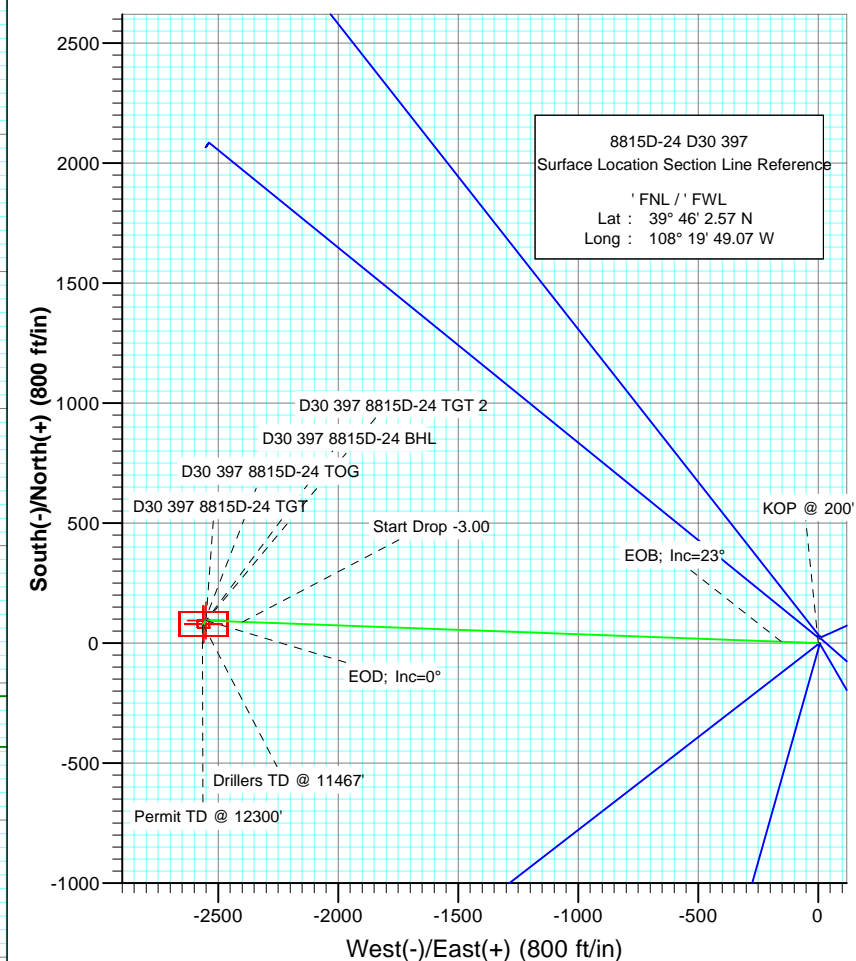




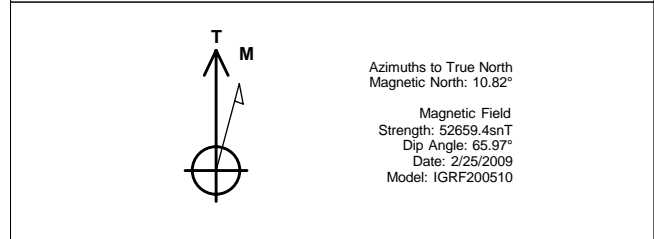
Project: Eureka Unit
Site: Sec 19-T3S-R97W
Well: 8815D-24 D30 397
Wellbore: DD
Plan: Plan #1



SECTION DETAILS											
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	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	969.7	23.09	272.11	949.0	5.6	-152.9	3.00	272.11	153.0		
4	6697.5	23.09	272.11	6218.0	88.5	-2397.8	0.00	0.00	2399.4		
5	7467.2	0.00	0.00	6967.0	94.1	-2550.7	3.00	180.00	2552.4	D30 397 8815D-24 TGT	
6	7589.6	0.31	215.05	7089.3	93.8	-2550.9	0.25	215.05	2552.6		
7	10967.3	0.31	215.05	10467.0	79.1	-2561.2	0.00	0.00	2562.5	D30 397 8815D-24 BHL	
8	11467.3	0.31	215.05	10967.0	76.9	-2562.8	0.00	0.00	2563.9		
9	12300.3	0.31	215.05	11800.0	73.2	-2565.3	0.00	0.00	2566.4		



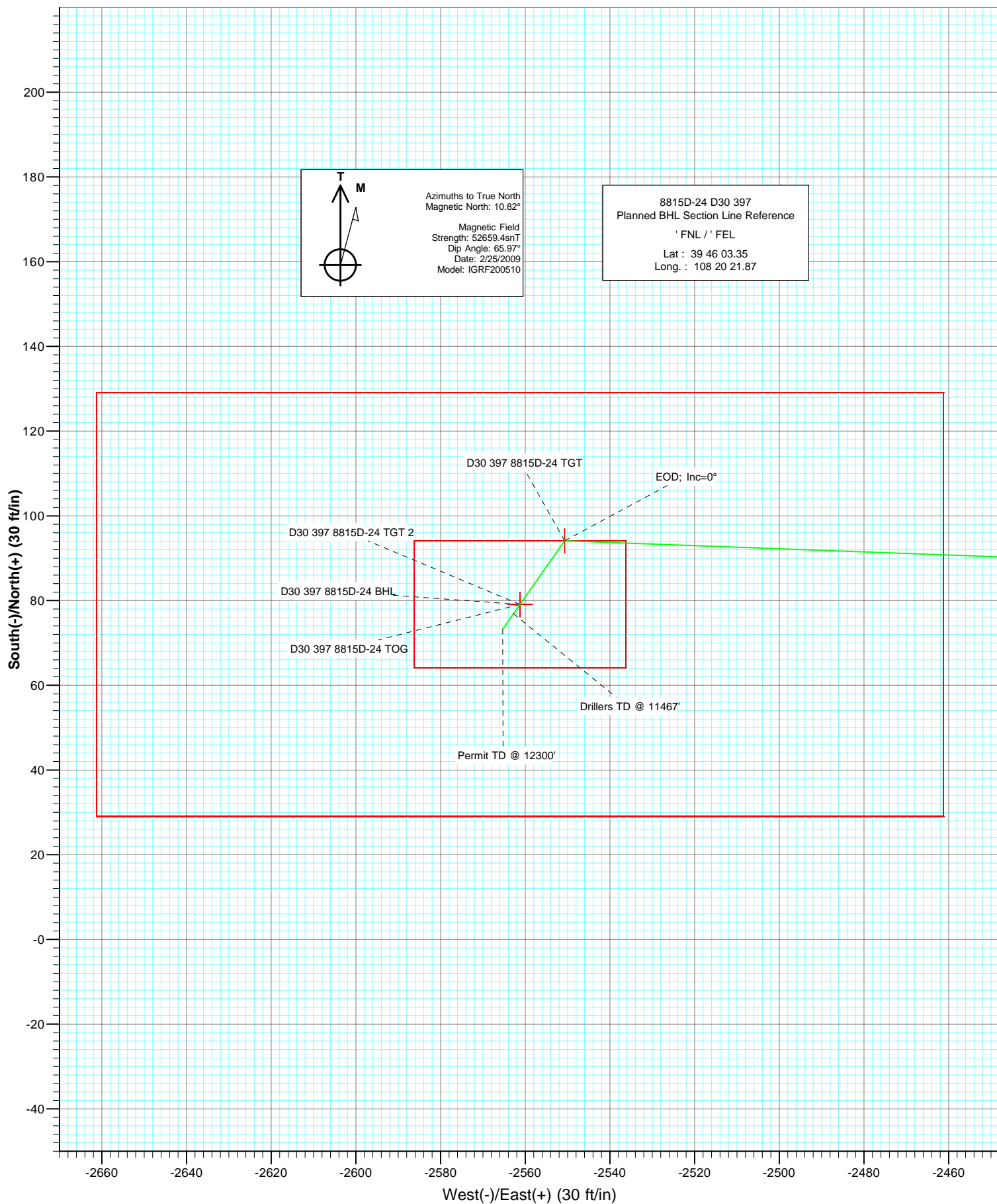
FORMATION TOP DETAILS		
TVDPath	MDPath	Formation
6097.0	6566.0	Williams Fork
6467.0	6961.3	Top of Gas; Inc=15°
9887.0	10387.3	Rollins
10037.0	10537.3	Cozette
10237.0	10737.3	Corcoran
10467.0	10967.3	Sego



DESIGN DETAILS: Plan #1				
Job# 95xxx; LR				
KB 8815D-24 D30 @ 7362.0ft (Original Well Elev)				
Target	Azimuth	Origin Type	N/S	E/W From TVD
D30 397 8815D-24 BHL	271.77 Slot	0.0	0.0	0.0



Project: Eureka Unit
Site: Sec 19-T3S-R97W
Well: 8815D-24 D30 397
Wellbore: DD
Plan: Plan #1



Cathedral Energy Services

Planning Report

Database:	EDM 2003.21 US Multi Users DB	Local Co-ordinate Reference:	Well 8815D-24 D30 397
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KB 8815D-24 D30 @ 7362.0ft (Original Well Elev)
Project:	Eureka Unit	MD Reference:	KB 8815D-24 D30 @ 7362.0ft (Original Well Elev)
Site:	Sec 19-T3S-R97W	North Reference:	True
Well:	8815D-24 D30 397	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	Sec 19-T3S-R97W			
Site Position:		Northing:	1,716,819.85 ft	Latitude: 39° 46' 2.82 N
From:	Lat/Long	Easting:	2,204,516.45 ft	Longitude: 108° 19' 48.89 W
Position Uncertainty:	0.0 ft	Slot Radius:	in	Grid Convergence: -1.79 °

Well	8815D-24 D30 397			
Well Position	+N/-S	0.0 ft	Northing:	1,716,794.99 ft
	+E/-W	0.0 ft	Easting:	2,204,501.61 ft
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft
			Ground Level:	7,340.0 ft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	2/25/2009	10.82	65.97	52,659

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	271.77

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	
969.7	23.09	272.11	949.0	5.6	-152.9	3.00	3.00	0.00	272.11	
6,697.5	23.09	272.11	6,218.0	88.5	-2,397.8	0.00	0.00	0.00	0.00	
7,467.2	0.00	0.00	6,967.0	94.1	-2,550.7	3.00	-3.00	0.00	180.00	D30 397 8815D-24 TC
7,589.6	0.31	215.05	7,089.3	93.8	-2,550.9	0.25	0.25	-118.47	215.05	
10,967.3	0.31	215.05	10,467.0	79.1	-2,561.2	0.00	0.00	0.00	0.00	D30 397 8815D-24 BI
11,467.3	0.31	215.05	10,967.0	76.9	-2,562.8	0.00	0.00	0.00	0.00	
12,300.3	0.31	215.05	11,800.0	73.2	-2,565.3	0.00	0.00	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	EDM 2003.21 US Multi Users DB	Local Co-ordinate Reference:	Well 8815D-24 D30 397
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KB 8815D-24 D30 @ 7362.0ft (Original Well Elev)
Project:	Eureka Unit	MD Reference:	KB 8815D-24 D30 @ 7362.0ft (Original Well Elev)
Site:	Sec 19-T3S-R97W	North Reference:	True
Well:	8815D-24 D30 397	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	
30.0	0.00	0.00	30.0	0.0	0.0	0.0	0.00	0.00	
60.0	0.00	0.00	60.0	0.0	0.0	0.0	0.00	0.00	
90.0	0.00	0.00	90.0	0.0	0.0	0.0	0.00	0.00	
120.0	0.00	0.00	120.0	0.0	0.0	0.0	0.00	0.00	
150.0	0.00	0.00	150.0	0.0	0.0	0.0	0.00	0.00	
180.0	0.00	0.00	180.0	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'
210.0	0.30	272.11	210.0	0.0	0.0	0.0	3.00	3.00	
240.0	1.20	272.11	240.0	0.0	-0.4	0.4	3.00	3.00	
270.0	2.10	272.11	270.0	0.0	-1.3	1.3	3.00	3.00	
300.0	3.00	272.11	300.0	0.1	-2.6	2.6	3.00	3.00	
330.0	3.90	272.11	329.9	0.2	-4.4	4.4	3.00	3.00	
360.0	4.80	272.11	359.8	0.2	-6.7	6.7	3.00	3.00	
390.0	5.70	272.11	389.7	0.3	-9.4	9.4	3.00	3.00	
420.0	6.60	272.11	419.5	0.5	-12.6	12.7	3.00	3.00	
450.0	7.50	272.11	449.3	0.6	-16.3	16.3	3.00	3.00	
480.0	8.40	272.11	479.0	0.8	-20.5	20.5	3.00	3.00	
510.0	9.30	272.11	508.6	0.9	-25.1	25.1	3.00	3.00	
540.0	10.20	272.11	538.2	1.1	-30.2	30.2	3.00	3.00	
570.0	11.10	272.11	567.7	1.3	-35.7	35.7	3.00	3.00	
600.0	12.00	272.11	597.1	1.5	-41.7	41.7	3.00	3.00	
630.0	12.90	272.11	626.4	1.8	-48.2	48.2	3.00	3.00	
660.0	13.80	272.11	655.6	2.0	-55.1	55.1	3.00	3.00	
690.0	14.70	272.11	684.6	2.3	-62.5	62.5	3.00	3.00	
720.0	15.60	272.11	713.6	2.6	-70.3	70.4	3.00	3.00	
750.0	16.50	272.11	742.4	2.9	-78.6	78.6	3.00	3.00	
780.0	17.40	272.11	771.1	3.2	-87.3	87.4	3.00	3.00	
810.0	18.30	272.11	799.7	3.6	-96.5	96.6	3.00	3.00	
840.0	19.20	272.11	828.1	3.9	-106.2	106.2	3.00	3.00	
870.0	20.10	272.11	856.3	4.3	-116.2	116.3	3.00	3.00	
900.0	21.00	272.11	884.4	4.7	-126.8	126.8	3.00	3.00	
930.0	21.90	272.11	912.4	5.1	-137.7	137.8	3.00	3.00	
960.0	22.80	272.11	940.1	5.5	-149.1	149.2	3.00	3.00	
969.7	23.09	272.11	949.0	5.6	-152.9	153.0	3.00	3.00	EOB; Inc=23°
990.0	23.09	272.11	967.7	5.9	-160.9	161.0	0.00	0.00	
1,020.0	23.09	272.11	995.3	6.4	-172.6	172.7	0.00	0.00	
1,050.0	23.09	272.11	1,022.9	6.8	-184.4	184.5	0.00	0.00	
1,080.0	23.09	272.11	1,050.5	7.2	-196.1	196.3	0.00	0.00	
1,110.0	23.09	272.11	1,078.1	7.7	-207.9	208.0	0.00	0.00	
1,140.0	23.09	272.11	1,105.7	8.1	-219.7	219.8	0.00	0.00	
1,170.0	23.09	272.11	1,133.3	8.5	-231.4	231.6	0.00	0.00	
1,200.0	23.09	272.11	1,160.9	9.0	-243.2	243.3	0.00	0.00	
1,230.0	23.09	272.11	1,188.5	9.4	-254.9	255.1	0.00	0.00	
1,260.0	23.09	272.11	1,216.1	9.8	-266.7	266.9	0.00	0.00	
1,290.0	23.09	272.11	1,243.7	10.3	-278.4	278.6	0.00	0.00	
1,320.0	23.09	272.11	1,271.3	10.7	-290.2	290.4	0.00	0.00	
1,350.0	23.09	272.11	1,298.9	11.1	-302.0	302.2	0.00	0.00	
1,380.0	23.09	272.11	1,326.5	11.6	-313.7	313.9	0.00	0.00	
1,410.0	23.09	272.11	1,354.1	12.0	-325.5	325.7	0.00	0.00	
1,440.0	23.09	272.11	1,381.7	12.4	-337.2	337.5	0.00	0.00	
1,470.0	23.09	272.11	1,409.3	12.9	-349.0	349.2	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	EDM 2003.21 US Multi Users DB	Local Co-ordinate Reference:	Well 8815D-24 D30 397
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KB 8815D-24 D30 @ 7362.0ft (Original Well Elev)
Project:	Eureka Unit	MD Reference:	KB 8815D-24 D30 @ 7362.0ft (Original Well Elev)
Site:	Sec 19-T3S-R97W	North Reference:	True
Well:	8815D-24 D30 397	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
1,500.0	23.09	272.11	1,436.8	13.3	-360.7	361.0	0.00	0.00	
1,530.0	23.09	272.11	1,464.4	13.7	-372.5	372.8	0.00	0.00	
1,560.0	23.09	272.11	1,492.0	14.2	-384.3	384.5	0.00	0.00	
1,590.0	23.09	272.11	1,519.6	14.6	-396.0	396.3	0.00	0.00	
1,620.0	23.09	272.11	1,547.2	15.0	-407.8	408.0	0.00	0.00	
1,650.0	23.09	272.11	1,574.8	15.5	-419.5	419.8	0.00	0.00	
1,680.0	23.09	272.11	1,602.4	15.9	-431.3	431.6	0.00	0.00	
1,710.0	23.09	272.11	1,630.0	16.3	-443.1	443.3	0.00	0.00	
1,740.0	23.09	272.11	1,657.6	16.8	-454.8	455.1	0.00	0.00	
1,770.0	23.09	272.11	1,685.2	17.2	-466.6	466.9	0.00	0.00	
1,800.0	23.09	272.11	1,712.8	17.6	-478.3	478.6	0.00	0.00	
1,830.0	23.09	272.11	1,740.4	18.1	-490.1	490.4	0.00	0.00	
1,860.0	23.09	272.11	1,768.0	18.5	-501.8	502.2	0.00	0.00	
1,890.0	23.09	272.11	1,795.6	18.9	-513.6	513.9	0.00	0.00	
1,920.0	23.09	272.11	1,823.2	19.4	-525.4	525.7	0.00	0.00	
1,950.0	23.09	272.11	1,850.8	19.8	-537.1	537.5	0.00	0.00	
1,980.0	23.09	272.11	1,878.4	20.2	-548.9	549.2	0.00	0.00	
2,010.0	23.09	272.11	1,906.0	20.7	-560.6	561.0	0.00	0.00	
2,040.0	23.09	272.11	1,933.6	21.1	-572.4	572.8	0.00	0.00	
2,070.0	23.09	272.11	1,961.2	21.6	-584.1	584.5	0.00	0.00	
2,100.0	23.09	272.11	1,988.8	22.0	-595.9	596.3	0.00	0.00	
2,130.0	23.09	272.11	2,016.4	22.4	-607.7	608.1	0.00	0.00	
2,160.0	23.09	272.11	2,044.0	22.9	-619.4	619.8	0.00	0.00	
2,190.0	23.09	272.11	2,071.6	23.3	-631.2	631.6	0.00	0.00	
2,220.0	23.09	272.11	2,099.2	23.7	-642.9	643.4	0.00	0.00	
2,250.0	23.09	272.11	2,126.8	24.2	-654.7	655.1	0.00	0.00	
2,280.0	23.09	272.11	2,154.4	24.6	-666.4	666.9	0.00	0.00	
2,310.0	23.09	272.11	2,182.0	25.0	-678.2	678.7	0.00	0.00	
2,340.0	23.09	272.11	2,209.5	25.5	-690.0	690.4	0.00	0.00	
2,370.0	23.09	272.11	2,237.1	25.9	-701.7	702.2	0.00	0.00	
2,400.0	23.09	272.11	2,264.7	26.3	-713.5	714.0	0.00	0.00	
2,430.0	23.09	272.11	2,292.3	26.8	-725.2	725.7	0.00	0.00	
2,460.0	23.09	272.11	2,319.9	27.2	-737.0	737.5	0.00	0.00	
2,490.0	23.09	272.11	2,347.5	27.6	-748.8	749.2	0.00	0.00	

Cathedral Energy Services

Planning Report

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Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KB 8815D-24 D30 @ 7362.0ft (Original Well Elev)
Project:	Eureka Unit	MD Reference:	KB 8815D-24 D30 @ 7362.0ft (Original Well Elev)
Site:	Sec 19-T3S-R97W	North Reference:	True
Well:	8815D-24 D30 397	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
2,500.0	23.09	272.11	2,356.7	27.8	-752.7	753.2	0.00	0.00	
2,600.0	23.09	272.11	2,448.7	29.2	-791.9	792.4	0.00	0.00	
2,700.0	23.09	272.11	2,540.7	30.7	-831.1	831.6	0.00	0.00	
2,800.0	23.09	272.11	2,632.7	32.1	-870.2	870.8	0.00	0.00	
2,900.0	23.09	272.11	2,724.7	33.6	-909.4	910.0	0.00	0.00	
3,000.0	23.09	272.11	2,816.7	35.0	-948.6	949.3	0.00	0.00	
3,100.0	23.09	272.11	2,908.7	36.4	-987.8	988.5	0.00	0.00	
3,200.0	23.09	272.11	3,000.6	37.9	-1,027.0	1,027.7	0.00	0.00	
3,300.0	23.09	272.11	3,092.6	39.3	-1,066.2	1,066.9	0.00	0.00	
3,400.0	23.09	272.11	3,184.6	40.8	-1,105.4	1,106.1	0.00	0.00	
3,500.0	23.09	272.11	3,276.6	42.2	-1,144.6	1,145.4	0.00	0.00	
3,600.0	23.09	272.11	3,368.6	43.7	-1,183.8	1,184.6	0.00	0.00	
3,700.0	23.09	272.11	3,460.6	45.1	-1,223.0	1,223.8	0.00	0.00	
3,800.0	23.09	272.11	3,552.6	46.6	-1,262.2	1,263.0	0.00	0.00	
3,900.0	23.09	272.11	3,644.6	48.0	-1,301.4	1,302.2	0.00	0.00	
4,000.0	23.09	272.11	3,736.6	49.5	-1,340.6	1,341.4	0.00	0.00	
4,100.0	23.09	272.11	3,828.5	50.9	-1,379.8	1,380.7	0.00	0.00	
4,200.0	23.09	272.11	3,920.5	52.3	-1,418.9	1,419.9	0.00	0.00	
4,300.0	23.09	272.11	4,012.5	53.8	-1,458.1	1,459.1	0.00	0.00	
4,400.0	23.09	272.11	4,104.5	55.2	-1,497.3	1,498.3	0.00	0.00	
4,500.0	23.09	272.11	4,196.5	56.7	-1,536.5	1,537.5	0.00	0.00	
4,600.0	23.09	272.11	4,288.5	58.1	-1,575.7	1,576.8	0.00	0.00	
4,700.0	23.09	272.11	4,380.5	59.6	-1,614.9	1,616.0	0.00	0.00	
4,800.0	23.09	272.11	4,472.5	61.0	-1,654.1	1,655.2	0.00	0.00	
4,900.0	23.09	272.11	4,564.4	62.5	-1,693.3	1,694.4	0.00	0.00	
5,000.0	23.09	272.11	4,656.4	63.9	-1,732.5	1,733.6	0.00	0.00	
5,100.0	23.09	272.11	4,748.4	65.4	-1,771.7	1,772.9	0.00	0.00	
5,200.0	23.09	272.11	4,840.4	66.8	-1,810.9	1,812.1	0.00	0.00	
5,300.0	23.09	272.11	4,932.4	68.3	-1,850.1	1,851.3	0.00	0.00	
5,400.0	23.09	272.11	5,024.4	69.7	-1,889.3	1,890.5	0.00	0.00	
5,500.0	23.09	272.11	5,116.4	71.1	-1,928.4	1,929.7	0.00	0.00	
5,600.0	23.09	272.11	5,208.4	72.6	-1,967.6	1,968.9	0.00	0.00	
5,700.0	23.09	272.11	5,300.4	74.0	-2,006.8	2,008.2	0.00	0.00	
5,800.0	23.09	272.11	5,392.3	75.5	-2,046.0	2,047.4	0.00	0.00	
5,900.0	23.09	272.11	5,484.3	76.9	-2,085.2	2,086.6	0.00	0.00	
6,000.0	23.09	272.11	5,576.3	78.4	-2,124.4	2,125.8	0.00	0.00	
6,100.0	23.09	272.11	5,668.3	79.8	-2,163.6	2,165.0	0.00	0.00	
6,200.0	23.09	272.11	5,760.3	81.3	-2,202.8	2,204.3	0.00	0.00	
6,300.0	23.09	272.11	5,852.3	82.7	-2,242.0	2,243.5	0.00	0.00	
6,400.0	23.09	272.11	5,944.3	84.2	-2,281.2	2,282.7	0.00	0.00	
6,500.0	23.09	272.11	6,036.3	85.6	-2,320.4	2,321.9	0.00	0.00	
6,566.0	23.09	272.11	6,097.0	86.6	-2,346.3	2,347.8	0.00	0.00	Williams Fork
6,600.0	23.09	272.11	6,128.3	87.0	-2,359.6	2,361.1	0.00	0.00	
6,697.5	23.09	272.11	6,218.0	88.5	-2,397.8	2,399.4	0.00	0.00	Start Drop -3.00
6,700.0	23.02	272.11	6,220.2	88.5	-2,398.8	2,400.3	3.00	-3.00	
6,800.0	20.02	272.11	6,313.3	89.8	-2,435.4	2,437.0	3.00	-3.00	
6,900.0	17.02	272.11	6,408.1	91.0	-2,467.1	2,468.8	3.00	-3.00	
6,961.3	15.18	272.11	6,467.0	91.6	-2,484.1	2,485.8	3.00	-3.00	Top of Gas; Inc=15°
6,980.6	14.60	272.11	6,485.7	91.8	-2,489.1	2,490.7	3.00	-3.00	D30 397 8815D-24 TOG
7,000.0	14.02	272.11	6,504.4	92.0	-2,493.9	2,495.5	3.00	-3.00	
7,100.0	11.02	272.11	6,602.0	92.8	-2,515.5	2,517.2	3.00	-3.00	
7,200.0	8.02	272.11	6,700.6	93.4	-2,532.0	2,533.7	3.00	-3.00	

Cathedral Energy Services

Planning Report

Database:	EDM 2003.21 US Multi Users DB	Local Co-ordinate Reference:	Well 8815D-24 D30 397
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KB 8815D-24 D30 @ 7362.0ft (Original Well Elev)
Project:	Eureka Unit	MD Reference:	KB 8815D-24 D30 @ 7362.0ft (Original Well Elev)
Site:	Sec 19-T3S-R97W	North Reference:	True
Well:	8815D-24 D30 397	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
7,300.0	5.02	272.11	6,800.0	93.8	-2,543.4	2,545.1	3.00	-3.00	
7,400.0	2.02	272.11	6,899.8	94.1	-2,549.5	2,551.2	3.00	-3.00	
7,467.2	0.00	0.00	6,967.0	94.1	-2,550.7	2,552.4	3.00	-3.00	EOD; Inc=0° - D30 397 8815D-24 TGT
7,500.0	0.08	215.05	6,999.8	94.1	-2,550.7	2,552.4	0.25	0.25	
7,589.6	0.31	215.05	7,089.3	93.8	-2,550.9	2,552.6	0.25	0.25	
7,600.0	0.31	215.05	7,099.8	93.8	-2,550.9	2,552.6	0.00	0.00	
7,700.0	0.31	215.05	7,199.8	93.4	-2,551.2	2,552.9	0.00	0.00	
7,800.0	0.31	215.05	7,299.8	92.9	-2,551.5	2,553.2	0.00	0.00	
7,900.0	0.31	215.05	7,399.8	92.5	-2,551.8	2,553.5	0.00	0.00	
8,000.0	0.31	215.05	7,499.8	92.0	-2,552.1	2,553.8	0.00	0.00	
8,100.0	0.31	215.05	7,599.8	91.6	-2,552.5	2,554.1	0.00	0.00	
8,200.0	0.31	215.05	7,699.8	91.2	-2,552.8	2,554.4	0.00	0.00	
8,300.0	0.31	215.05	7,799.8	90.7	-2,553.1	2,554.6	0.00	0.00	
8,400.0	0.31	215.05	7,899.8	90.3	-2,553.4	2,554.9	0.00	0.00	
8,500.0	0.31	215.05	7,999.8	89.9	-2,553.7	2,555.2	0.00	0.00	
8,600.0	0.31	215.05	8,099.8	89.4	-2,554.0	2,555.5	0.00	0.00	
8,700.0	0.31	215.05	8,199.8	89.0	-2,554.3	2,555.8	0.00	0.00	
8,800.0	0.31	215.05	8,299.8	88.5	-2,554.6	2,556.1	0.00	0.00	
8,900.0	0.31	215.05	8,399.8	88.1	-2,554.9	2,556.4	0.00	0.00	
9,000.0	0.31	215.05	8,499.7	87.7	-2,555.2	2,556.7	0.00	0.00	
9,100.0	0.31	215.05	8,599.7	87.2	-2,555.5	2,557.0	0.00	0.00	
9,200.0	0.31	215.05	8,699.7	86.8	-2,555.8	2,557.3	0.00	0.00	
9,300.0	0.31	215.05	8,799.7	86.4	-2,556.1	2,557.6	0.00	0.00	
9,400.0	0.31	215.05	8,899.7	85.9	-2,556.4	2,557.9	0.00	0.00	
9,500.0	0.31	215.05	8,999.7	85.5	-2,556.7	2,558.2	0.00	0.00	
9,600.0	0.31	215.05	9,099.7	85.0	-2,557.1	2,558.5	0.00	0.00	
9,700.0	0.31	215.05	9,199.7	84.6	-2,557.4	2,558.8	0.00	0.00	
9,800.0	0.31	215.05	9,299.7	84.2	-2,557.7	2,559.0	0.00	0.00	
9,900.0	0.31	215.05	9,399.7	83.7	-2,558.0	2,559.3	0.00	0.00	
10,000.0	0.31	215.05	9,499.7	83.3	-2,558.3	2,559.6	0.00	0.00	
10,100.0	0.31	215.05	9,599.7	82.9	-2,558.6	2,559.9	0.00	0.00	
10,200.0	0.31	215.05	9,699.7	82.4	-2,558.9	2,560.2	0.00	0.00	
10,300.0	0.31	215.05	9,799.7	82.0	-2,559.2	2,560.5	0.00	0.00	
10,387.3	0.31	215.05	9,887.0	81.6	-2,559.5	2,560.8	0.00	0.00	Rollins
10,400.0	0.31	215.05	9,899.7	81.6	-2,559.5	2,560.8	0.00	0.00	
10,500.0	0.31	215.05	9,999.7	81.1	-2,559.8	2,561.1	0.00	0.00	
10,537.3	0.31	215.05	10,037.0	81.0	-2,559.9	2,561.2	0.00	0.00	Cozette
10,600.0	0.31	215.05	10,099.7	80.7	-2,560.1	2,561.4	0.00	0.00	
10,700.0	0.31	215.05	10,199.7	80.2	-2,560.4	2,561.7	0.00	0.00	
10,737.3	0.31	215.05	10,237.0	80.1	-2,560.5	2,561.8	0.00	0.00	Corcoran
10,800.0	0.31	215.05	10,299.7	79.8	-2,560.7	2,562.0	0.00	0.00	
10,900.0	0.31	215.05	10,399.7	79.4	-2,561.0	2,562.3	0.00	0.00	
10,967.3	0.31	215.05	10,467.0	79.1	-2,561.2	2,562.5	0.00	0.00	Sego - D30 397 8815D-24 BHL - D30 397 8815
11,000.0	0.31	215.05	10,499.7	78.9	-2,561.3	2,562.6	0.00	0.00	
11,100.0	0.31	215.05	10,599.7	78.5	-2,561.6	2,562.9	0.00	0.00	
11,200.0	0.31	215.05	10,699.7	78.1	-2,562.0	2,563.1	0.00	0.00	
11,300.0	0.31	215.05	10,799.7	77.6	-2,562.3	2,563.4	0.00	0.00	
11,400.0	0.31	215.05	10,899.7	77.2	-2,562.6	2,563.7	0.00	0.00	
11,467.3	0.31	215.05	10,967.0	76.9	-2,562.8	2,563.9	0.00	0.00	Drillers TD @ 11467'
11,500.0	0.31	215.05	10,999.7	76.7	-2,562.9	2,564.0	0.00	0.00	
11,600.0	0.31	215.05	11,099.7	76.3	-2,563.2	2,564.3	0.00	0.00	
11,700.0	0.31	215.05	11,199.7	75.9	-2,563.5	2,564.6	0.00	0.00	

Cathedral Energy Services

Planning Report

Database:	EDM 2003.21 US Multi Users DB	Local Co-ordinate Reference:	Well 8815D-24 D30 397
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KB 8815D-24 D30 @ 7362.0ft (Original Well Elev)
Project:	Eureka Unit	MD Reference:	KB 8815D-24 D30 @ 7362.0ft (Original Well Elev)
Site:	Sec 19-T3S-R97W	North Reference:	True
Well:	8815D-24 D30 397	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
11,800.0	0.31	215.05	11,299.7	75.4	-2,563.8	2,564.9	0.00	0.00	
11,900.0	0.31	215.05	11,399.7	75.0	-2,564.1	2,565.2	0.00	0.00	
12,000.0	0.31	215.05	11,499.7	74.6	-2,564.4	2,565.5	0.00	0.00	
12,100.0	0.31	215.05	11,599.7	74.1	-2,564.7	2,565.8	0.00	0.00	
12,200.0	0.31	215.05	11,699.7	73.7	-2,565.0	2,566.1	0.00	0.00	
12,300.0	0.31	215.05	11,799.7	73.2	-2,565.3	2,566.4	0.00	0.00	
12,300.3	0.31	215.05	11,800.0	73.2	-2,565.3	2,566.4	0.00	0.00	

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
D30 397 8815D-24 TGT - plan hits target center - Point	0.00	0.00	6,967.0	94.1	-2,550.7	1,716,968.50	2,201,955.08	39° 46' 3.50 N	108° 20' 21.74 W
D30 397 8815D-24 TOG - plan misses target center by 75.6ft at 6980.6ft MD (6485.7 TVD, 91.8 N, -2489.1 E) - Rectangle (sides W100.0 H200.0 D300.0)	0.00	0.00	6,467.0	79.1	-2,561.2	1,716,953.81	2,201,944.08	39° 46' 3.35 N	108° 20' 21.87 W
D30 397 8815D-24 BHL - plan hits target center - Rectangle (sides W30.0 H50.0 D0.0)	0.00	0.00	10,467.0	79.1	-2,561.2	1,716,953.81	2,201,944.08	39° 46' 3.35 N	108° 20' 21.87 W
D30 397 8815D-24 TGT - plan hits target center - Rectangle (sides W100.0 H200.0 D0.0)	0.00	0.00	10,467.0	79.1	-2,561.2	1,716,953.81	2,201,944.08	39° 46' 3.35 N	108° 20' 21.87 W

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
6,566.0	6,097.0	Williams Fork		0.00	
6,961.3	6,467.0	Top of Gas; Inc=15°		0.00	
10,387.3	9,887.0	Rollins		0.00	
10,537.3	10,037.0	Cozette		0.00	
10,737.3	10,237.0	Corcoran		0.00	
10,967.3	10,467.0	Sego		0.00	

Plan Annotations

	Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
			+N/-S (ft)	+E/-W (ft)	
	200.0	200.0	0.0	0.0	KOP @ 200'
	969.7	949.0	5.6	-152.9	EOB; Inc=23°
	6,697.5	6,218.0	88.5	-2,397.8	Start Drop -3.00
	7,467.2	6,967.0	94.1	-2,550.7	EOD; Inc=0°
	11,467.3	10,967.0	93.8	-2,550.9	Drillers TD @ 11467'
	12,300.3	11,800.0	79.1	-2,561.2	Permit TD @ 12300'