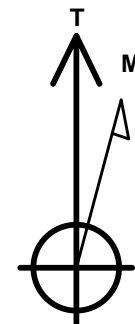
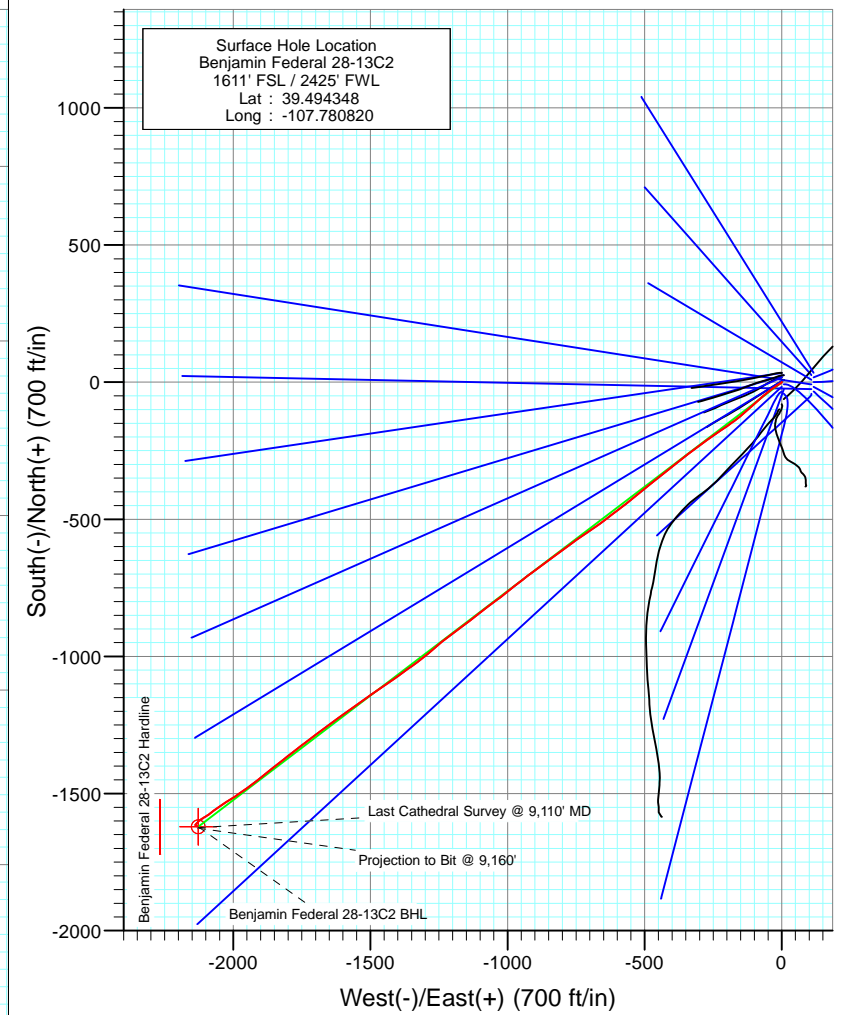
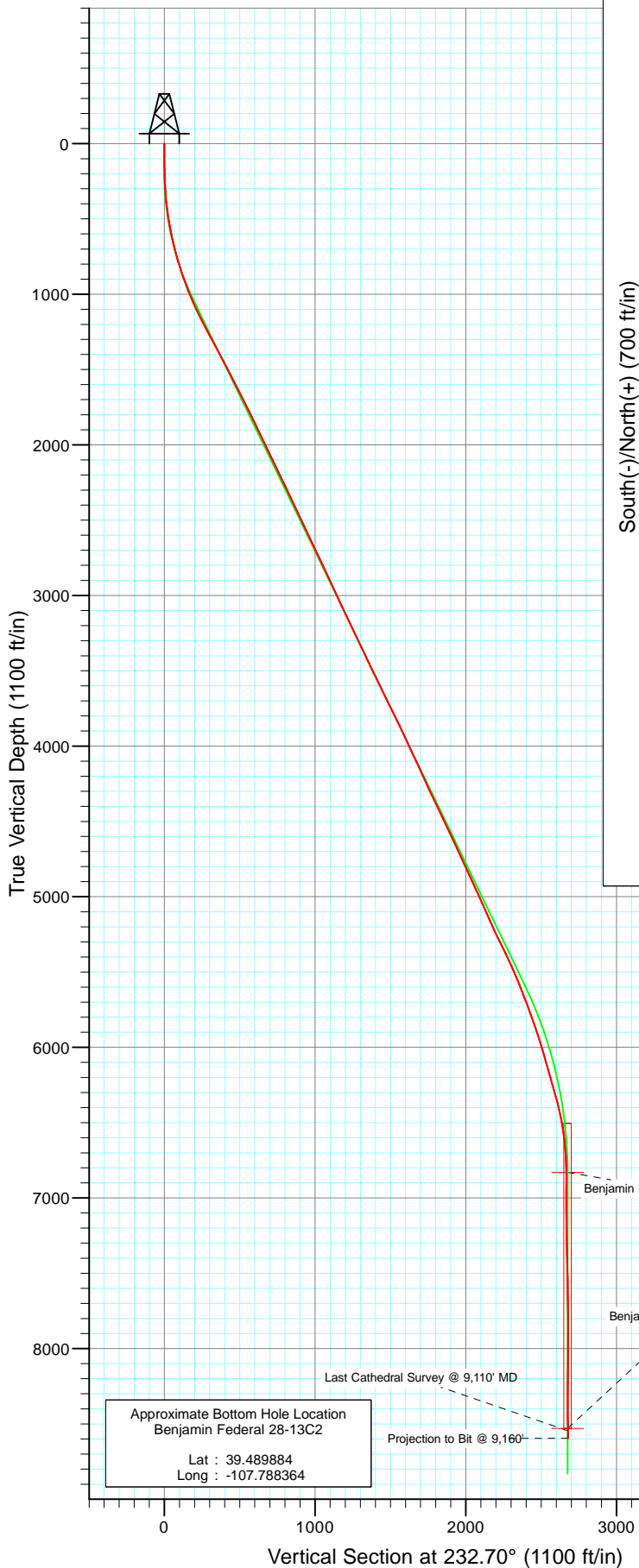




Project: Mamm Creek
 Site: K28NW Pad
 Well: Benjamin Federal 28-13C2
 Wellbore: DD
 Design: FINAL

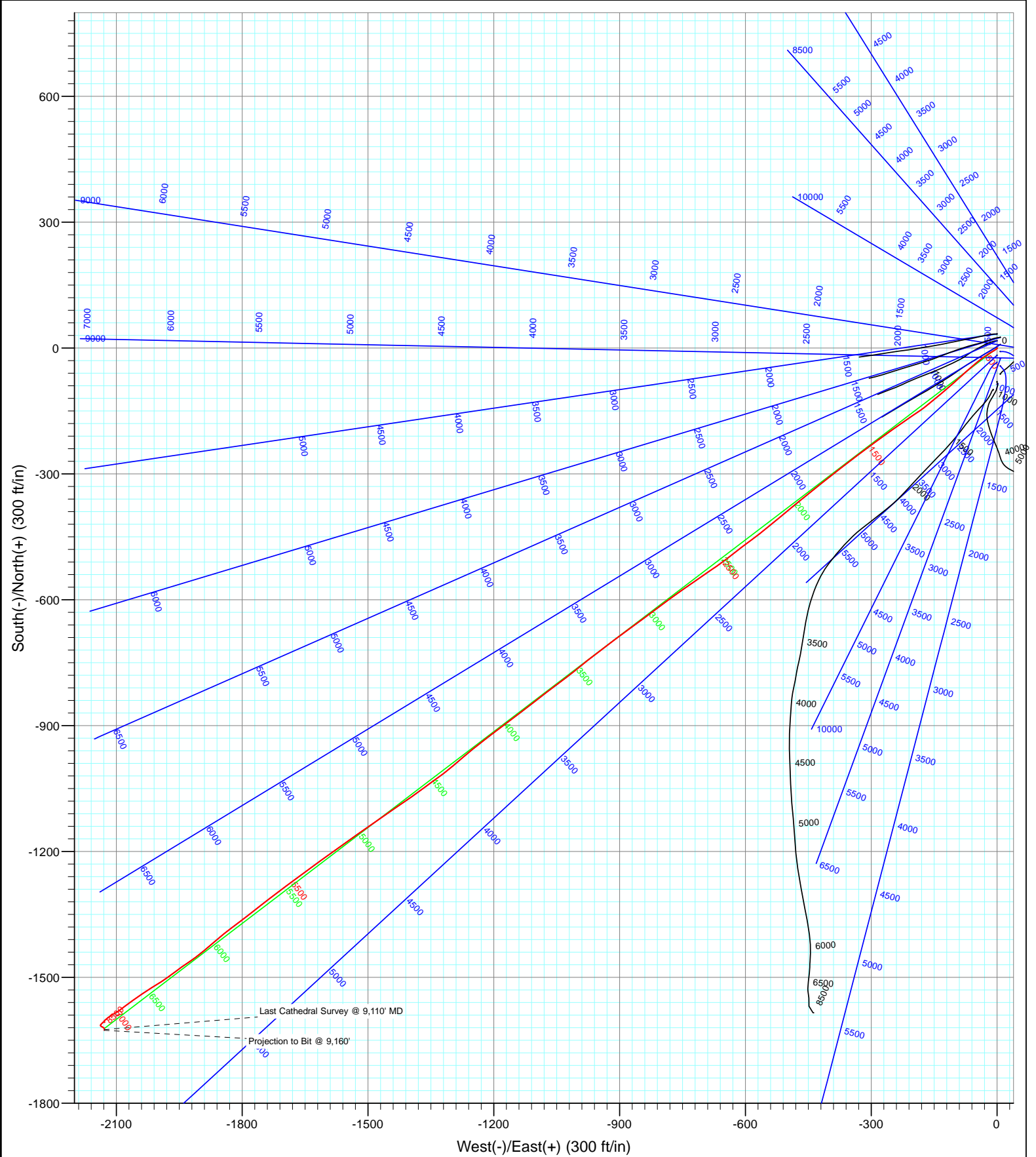


Azimuths to True North
 Magnetic North: 10.28°
 Magnetic Field
 Strength: 52297.6snT
 Dip Angle: 65.78°
 Date: 4/4/2011
 Model: IGRF2010

DD Benjamin Federal 28-13C2 BHL = (25 FSL - 240 FWL) Job #115030 (SH), 115151 (MH): KR					
KBE @ 5965.0ft (Nabors M15) North American Datum 1983 Well Benjamin Federal 28-13C2, True North					
Target Benjamin Federal 28-13C2 BHL	TVD 8530.0	Azimuth 232.70	Origin Type Slot	N/S 0.0	E/W 0.0
Name Benjamin Federal 28-13C2 BHL		+N/-S -1621.1	+E/-W -2127.7	Latitude 39.489897	Longitude -107.788359
				From TVD 0.0	

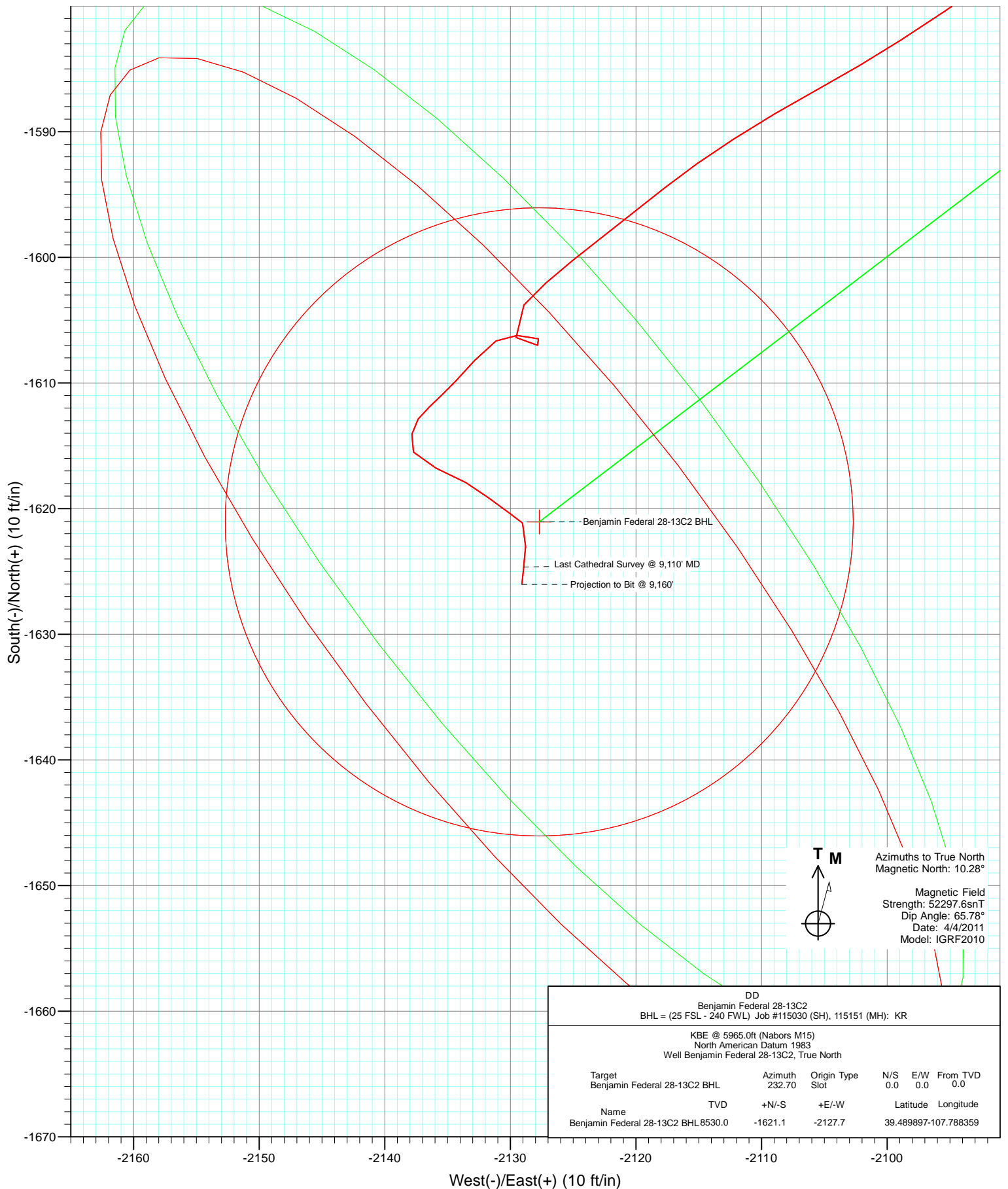


Project: Mamm Creek
Site: K28NW Pad
Well: Benjamin Federal 28-13C2
Wellbore: DD
Design: FINAL





Project: Mamm Creek
Site: K28NW Pad
Well: Benjamin Federal 28-13C2
Wellbore: DD
Design: FINAL



Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Benjamin Federal 28-13C2
Project:	Mamm Creek	TVD Reference:	KBE @ 5965.0ft (Nabors M15)
Site:	K28NW Pad	MD Reference:	KBE @ 5965.0ft (Nabors M15)
Well:	Benjamin Federal 28-13C2	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	USA EDM 5000 Multi Users DB

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

Site		K28NW Pad			
Site Position:		Northing:	1,613,160.16 ft	Latitude:	39.494711
From:	Lat/Long	Easting:	2,356,412.22 ft	Longitude:	-107.780819
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	-1.44 °

Well	Benjamin Federal 28-13C2					
Well Position	+N/-S	0.0 ft	Northing:	1,613,027.93 ft	Latitude:	39.494348
	+E/-W	0.0 ft	Easting:	2,356,408.75 ft	Longitude:	-107.780820
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,943.0 ft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	4/4/2011	10.28	65.78	52,298

Design	DD				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(ft)	(ft)	(ft)	(°)	
	0.0	0.0	0.0	232.70	

Survey Program	Date	4/16/2011			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
125.0	9,160.0	Survey #1 (DD)	MWD	Geolink MWD	

Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Formations / Comments	
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00		
125.0	0.40	146.00	125.0	-0.4	0.2	0.0	0.32	0.32		
156.0	0.60	241.30	156.0	-0.5	0.2	0.2	2.42	0.65		
186.0	0.90	209.70	186.0	-0.8	-0.1	0.6	1.67	1.00		
217.0	1.90	223.40	217.0	-1.4	-0.6	1.3	3.38	3.23		
247.0	2.30	243.30	247.0	-2.0	-1.4	2.4	2.75	1.33		
278.0	3.10	233.00	277.9	-2.8	-2.7	3.8	3.01	2.58		
309.0	4.00	233.80	308.9	-4.0	-4.2	5.7	2.91	2.90		
339.0	4.60	234.60	338.8	-5.3	-6.0	8.0	2.01	2.00		
370.0	5.70	241.40	369.7	-6.7	-8.4	10.8	4.05	3.55		
401.0	6.00	241.40	400.5	-8.2	-11.2	13.9	0.97	0.97		
432.0	7.20	239.60	431.3	-10.0	-14.3	17.4	3.93	3.87		
463.0	8.20	237.90	462.0	-12.2	-17.8	21.5	3.31	3.23		

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Benjamin Federal 28-13C2
Project:	Mamm Creek	TVD Reference:	KBE @ 5965.0ft (Nabors M15)
Site:	K28NW Pad	MD Reference:	KBE @ 5965.0ft (Nabors M15)
Well:	Benjamin Federal 28-13C2	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	USA EDM 5000 Multi Users DB

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Formations / Comments
494.0	8.70	233.20	492.7	-14.7	-21.6	26.1	2.75	1.61	
524.0	9.50	237.10	522.3	-17.4	-25.5	30.8	3.37	2.67	
555.0	10.30	236.50	552.8	-20.4	-29.9	36.1	2.60	2.58	
586.0	10.90	234.20	583.3	-23.6	-34.6	41.8	2.37	1.94	
617.0	12.30	231.10	613.7	-27.4	-39.6	48.1	4.94	4.52	
648.0	13.10	232.80	643.9	-31.6	-44.9	54.9	2.85	2.58	
678.0	14.00	229.90	673.1	-36.0	-50.4	61.9	3.76	3.00	
709.0	14.70	226.90	703.1	-41.1	-56.2	69.6	3.29	2.26	
740.0	15.60	229.60	733.0	-46.5	-62.2	77.6	3.69	2.90	
771.0	16.00	228.60	762.9	-52.0	-68.6	86.1	1.56	1.29	
863.0	17.90	228.90	850.9	-69.7	-88.7	112.8	2.07	2.07	
956.0	20.70	228.10	938.6	-90.1	-111.8	143.5	3.02	3.01	
1,048.0	22.90	230.50	1,024.0	-112.3	-137.7	177.6	2.58	2.39	
1,140.0	25.60	230.90	1,107.9	-136.2	-166.9	215.3	2.94	2.93	
1,231.0	27.70	236.20	1,189.3	-160.4	-199.8	256.1	3.48	2.31	
1,324.0	27.70	235.70	1,271.6	-184.6	-235.6	299.3	0.25	0.00	
1,403.0	27.70	232.90	1,341.6	-206.0	-265.4	336.0	1.65	0.00	
1,541.0	28.40	234.00	1,463.3	-244.7	-317.5	400.8	0.63	0.51	
1,636.0	27.50	232.60	1,547.3	-271.3	-353.2	445.4	1.17	-0.95	
1,731.0	26.60	232.50	1,631.9	-297.5	-387.5	488.6	0.95	-0.95	
1,827.0	26.50	230.40	1,717.7	-324.3	-421.1	531.5	0.98	-0.10	
1,922.0	26.50	230.80	1,802.8	-351.2	-453.8	573.8	0.19	0.00	
2,017.0	26.50	231.10	1,887.8	-377.9	-486.8	616.2	0.14	0.00	
2,112.0	26.40	230.70	1,972.8	-404.6	-519.6	658.5	0.22	-0.11	
2,207.0	25.50	230.60	2,058.3	-430.9	-551.7	700.0	0.95	-0.95	
2,302.0	25.20	233.80	2,144.1	-455.9	-583.9	740.7	1.48	-0.32	
2,397.0	24.40	232.00	2,230.4	-479.9	-615.6	780.5	1.16	-0.84	
2,492.0	25.20	232.60	2,316.6	-504.2	-647.2	820.4	0.88	0.84	
2,588.0	25.50	236.00	2,403.4	-528.2	-680.5	861.4	1.55	0.31	
2,683.0	25.40	234.80	2,489.1	-551.4	-714.1	902.2	0.55	-0.11	
2,778.0	26.20	235.80	2,574.7	-574.9	-748.1	943.5	0.96	0.84	
2,873.0	25.50	233.20	2,660.2	-599.0	-781.9	984.9	1.40	-0.74	
2,968.0	25.00	233.40	2,746.1	-623.2	-814.4	1,025.4	0.53	-0.53	
3,063.0	24.70	233.60	2,832.3	-646.9	-846.4	1,065.4	0.33	-0.32	
3,158.0	25.80	233.20	2,918.2	-671.1	-879.0	1,105.9	1.17	1.16	
3,253.0	24.40	233.70	3,004.2	-695.1	-911.3	1,146.2	1.49	-1.47	
3,348.0	25.80	232.40	3,090.3	-719.3	-943.5	1,186.5	1.58	1.47	
3,443.0	25.70	232.10	3,175.8	-744.6	-976.2	1,227.7	0.17	-0.11	
3,538.0	25.40	230.90	3,261.5	-770.1	-1,008.2	1,268.7	0.63	-0.32	
3,633.0	25.40	233.40	3,347.4	-795.1	-1,040.4	1,309.4	1.13	0.00	
3,729.0	24.60	232.60	3,434.4	-819.5	-1,072.8	1,350.0	0.90	-0.83	
3,824.0	25.50	231.90	3,520.4	-844.1	-1,104.6	1,390.2	1.00	0.95	
3,919.0	26.90	232.90	3,605.7	-869.7	-1,137.8	1,432.2	1.55	1.47	
4,014.0	26.90	232.60	3,690.4	-895.7	-1,172.1	1,475.2	0.14	0.00	
4,108.0	26.10	233.30	3,774.5	-921.0	-1,205.5	1,517.1	0.91	-0.85	
4,204.0	25.00	230.80	3,861.1	-946.5	-1,238.2	1,558.5	1.60	-1.15	
4,299.0	25.40	230.30	3,947.1	-972.2	-1,269.4	1,598.9	0.48	0.42	
4,394.0	25.10	229.20	4,033.0	-998.3	-1,300.3	1,639.4	0.59	-0.32	
4,490.0	25.00	235.00	4,120.0	-1,023.3	-1,332.4	1,680.0	2.56	-0.10	
4,585.0	23.80	233.20	4,206.5	-1,046.3	-1,364.2	1,719.2	1.49	-1.26	
4,681.0	24.60	234.40	4,294.1	-1,069.5	-1,395.9	1,758.5	0.98	0.83	
4,776.0	26.20	236.10	4,379.9	-1,092.7	-1,429.4	1,799.2	1.85	1.68	
4,871.0	25.10	234.70	4,465.5	-1,116.1	-1,463.3	1,840.3	1.32	-1.16	

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Benjamin Federal 28-13C2
Project:	Mamm Creek	TVD Reference:	KBE @ 5965.0ft (Nabors M15)
Site:	K28NW Pad	MD Reference:	KBE @ 5965.0ft (Nabors M15)
Well:	Benjamin Federal 28-13C2	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	USA EDM 5000 Multi Users DB

Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Formations / Comments
4,966.0	26.40	235.50	4,551.1	-1,139.7	-1,497.1	1,881.6	1.42	1.37	
5,061.0	24.60	234.60	4,636.8	-1,163.1	-1,530.7	1,922.4	1.94	-1.89	
5,157.0	24.30	235.20	4,724.2	-1,185.9	-1,563.2	1,962.1	0.41	-0.31	
5,253.0	25.20	233.90	4,811.4	-1,209.3	-1,595.9	2,002.3	1.10	0.94	
5,347.0	24.80	233.90	4,896.6	-1,232.7	-1,628.0	2,042.0	0.43	-0.43	
5,442.0	24.40	232.40	4,983.0	-1,256.4	-1,659.6	2,081.5	0.78	-0.42	
5,537.0	23.80	234.10	5,069.7	-1,279.6	-1,690.7	2,120.3	0.97	-0.63	
5,633.0	23.90	233.30	5,157.5	-1,302.6	-1,722.0	2,159.1	0.35	0.10	
5,727.0	25.20	231.60	5,243.0	-1,326.4	-1,752.9	2,198.2	1.57	1.38	
5,822.0	26.70	232.00	5,328.4	-1,352.1	-1,785.6	2,239.8	1.59	1.58	
5,917.0	25.60	233.50	5,413.7	-1,377.4	-1,818.9	2,281.6	1.35	-1.16	
6,012.0	22.90	230.30	5,500.3	-1,401.5	-1,849.7	2,320.6	3.16	-2.84	
6,108.0	21.60	229.30	5,589.2	-1,424.9	-1,877.4	2,356.9	1.41	-1.35	
6,203.0	21.40	232.00	5,677.6	-1,447.0	-1,904.3	2,391.7	1.06	-0.21	
6,298.0	20.30	236.20	5,766.3	-1,466.8	-1,931.7	2,425.5	1.95	-1.16	
6,394.0	18.60	232.90	5,856.9	-1,485.3	-1,957.8	2,457.4	2.11	-1.77	
6,489.0	17.50	235.00	5,947.2	-1,502.7	-1,981.5	2,486.9	1.35	-1.16	
6,584.0	16.70	238.50	6,038.0	-1,518.0	-2,004.9	2,514.7	1.37	-0.84	
6,679.0	16.00	237.20	6,129.1	-1,532.2	-2,027.5	2,541.3	0.83	-0.74	
6,773.0	15.30	235.50	6,219.7	-1,546.2	-2,048.6	2,566.6	0.89	-0.74	
6,867.0	15.20	232.90	6,310.3	-1,560.7	-2,068.7	2,591.3	0.74	-0.11	
6,962.0	14.50	233.50	6,402.2	-1,575.3	-2,088.2	2,615.7	0.75	-0.74	
7,057.0	10.50	241.30	6,494.9	-1,586.5	-2,105.3	2,636.2	4.56	-4.21	
7,152.0	7.40	231.60	6,588.7	-1,594.5	-2,117.7	2,650.8	3.62	-3.26	
7,248.0	3.70	232.00	6,684.3	-1,600.2	-2,125.0	2,660.1	3.85	-3.85	
7,343.0	2.70	221.40	6,779.1	-1,603.8	-2,128.9	2,665.4	1.22	-1.05	
7,438.0	1.50	136.70	6,874.1	-1,606.4	-2,129.5	2,667.4	3.12	-1.26	
7,533.0	1.10	71.30	6,969.1	-1,607.0	-2,127.8	2,666.4	1.52	-0.42	
7,628.0	1.00	285.20	7,064.1	-1,606.5	-2,127.8	2,666.1	2.11	-0.11	
7,723.0	1.10	273.50	7,159.0	-1,606.2	-2,129.5	2,667.3	0.25	0.11	
7,818.0	1.10	237.00	7,254.0	-1,606.7	-2,131.1	2,668.9	0.73	0.00	
7,913.0	1.70	221.60	7,349.0	-1,608.2	-2,132.8	2,671.2	0.74	0.63	
8,008.0	1.10	223.50	7,444.0	-1,609.9	-2,134.4	2,673.5	0.63	-0.63	
8,104.0	0.60	228.50	7,540.0	-1,610.9	-2,135.4	2,674.9	0.53	-0.52	
8,199.0	1.10	224.60	7,634.9	-1,611.9	-2,136.4	2,676.3	0.53	0.53	
8,294.0	0.50	219.60	7,729.9	-1,612.9	-2,137.3	2,677.6	0.64	-0.63	
8,389.0	1.10	194.60	7,824.9	-1,614.1	-2,137.8	2,678.7	0.72	0.63	
8,483.0	0.80	147.00	7,918.9	-1,615.5	-2,137.7	2,679.5	0.87	-0.32	
8,578.0	1.90	117.00	8,013.9	-1,616.8	-2,135.9	2,678.8	1.34	1.16	
8,673.0	1.30	114.10	8,108.8	-1,617.9	-2,133.5	2,677.6	0.64	-0.63	
8,768.0	1.40	132.70	8,203.8	-1,619.1	-2,131.7	2,676.9	0.47	0.11	
8,863.0	1.00	117.00	8,298.8	-1,620.3	-2,130.1	2,676.3	0.54	-0.42	
8,958.0	0.70	142.30	8,393.8	-1,621.1	-2,129.0	2,676.0	0.50	-0.32	
9,053.0	1.70	184.70	8,488.8	-1,623.0	-2,128.8	2,676.9	1.34	1.05	
9,110.0	1.60	185.60	8,545.7	-1,624.6	-2,128.9	2,678.0	0.18	-0.18	Last Cathedral Survey @ 9,110' MD
9,160.0	1.60	185.60	8,595.7	-1,626.0	-2,129.1	2,679.0	0.00	0.00	Projection to Bit @ 9,160'

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Benjamin Federal 28-13C2
Project:	Mamm Creek	TVD Reference:	KBE @ 5965.0ft (Nabors M15)
Site:	K28NW Pad	MD Reference:	KBE @ 5965.0ft (Nabors M15)
Well:	Benjamin Federal 28-13C2	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	USA EDM 5000 Multi Users DB

Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
- Shape									
Benjamin Federal 28-13'	0.00	0.00	6,830.0	-1,621.1	-2,127.7	1,611,460.80	2,354,241.02	39.489897	-107.788359
- survey misses target center by 15.8ft at 7394.3ft MD (6830.4 TVD, -1605.4 N, -2129.8 E)									
- Point									
Benjamin Federal 28-13'	0.00	0.00	-8,530.0	-1,621.1	-2,127.7	1,611,460.80	2,354,241.02	39.489897	-107.788359
- survey misses target center by 8939.6ft at 0.0ft MD (0.0 TVD, 0.0 N, 0.0 E)									
- Polygon									
Point 1			-8,530.0	100.0	-140.0	1,611,564.28	2,354,103.58		
Point 2			-8,530.0	-100.0	-140.0	1,611,364.35	2,354,098.56		
Benjamin Federal 28-13'	0.00	0.00	8,530.0	-1,621.1	-2,127.7	1,611,460.80	2,354,241.02	39.489897	-107.788359
- survey misses target center by 3.4ft at 9094.2ft MD (8529.9 TVD, -1624.2 N, -2128.9 E)									
- Circle (radius 25.0)									

Survey Annotations					
Measured Depth	Vertical Depth	Local Coordinates			
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	Comment	
9,110.0	8,545.7	-1,624.6	-2,128.9	Last Cathedral Survey @ 9,110' MD	
9,160.0	8,595.7	-1,626.0	-2,129.1	Projection to Bit @ 9,160'	

Checked By: _____ Approved By: _____ Date: _____