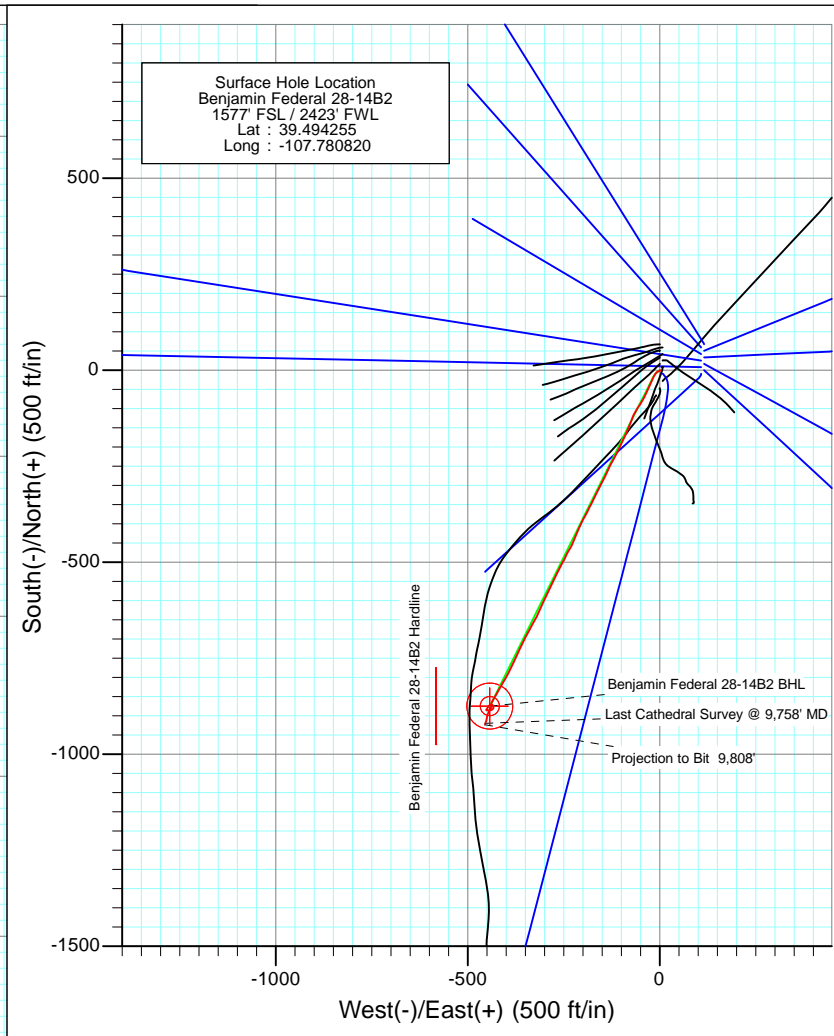
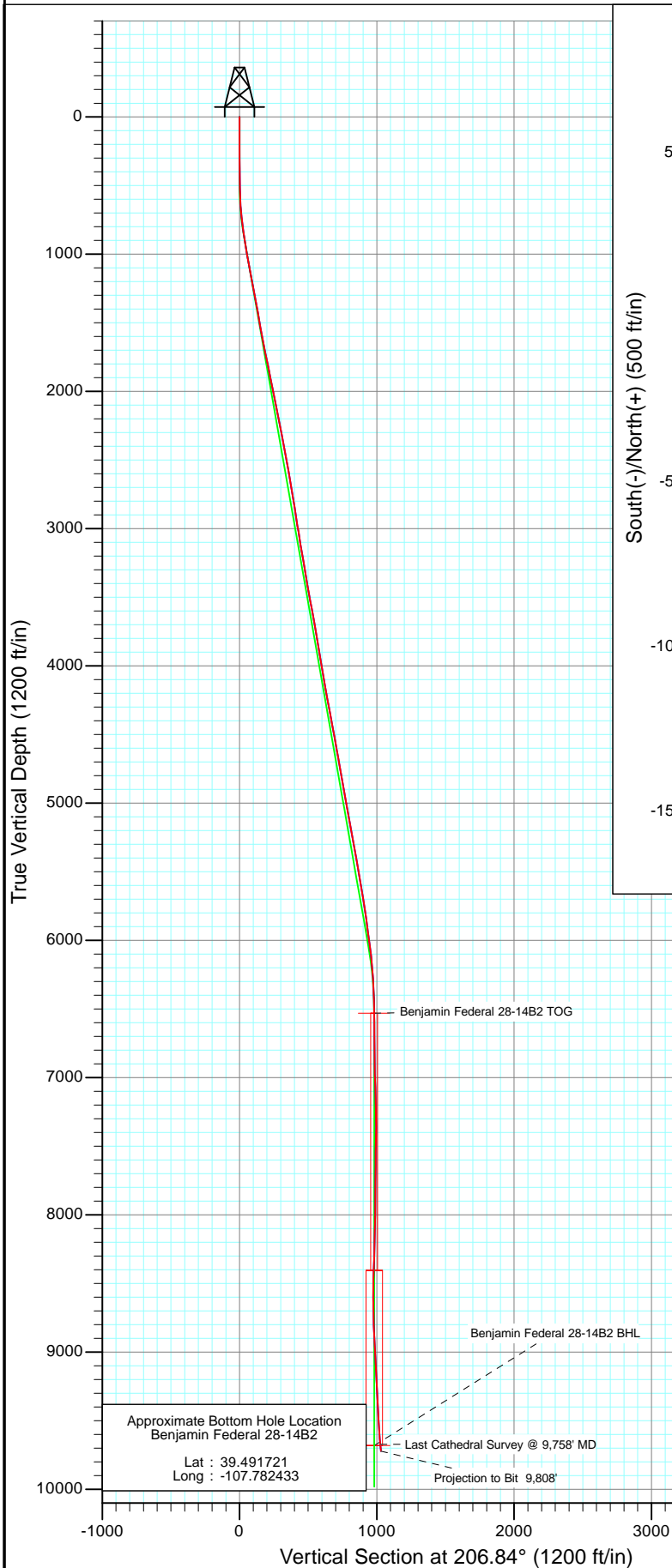




Project: Mamm Creek
 Site: K28NW Pad
 Well: Benjamin Federal 28-14B2
 Wellbore: DD
 Design: FINAL



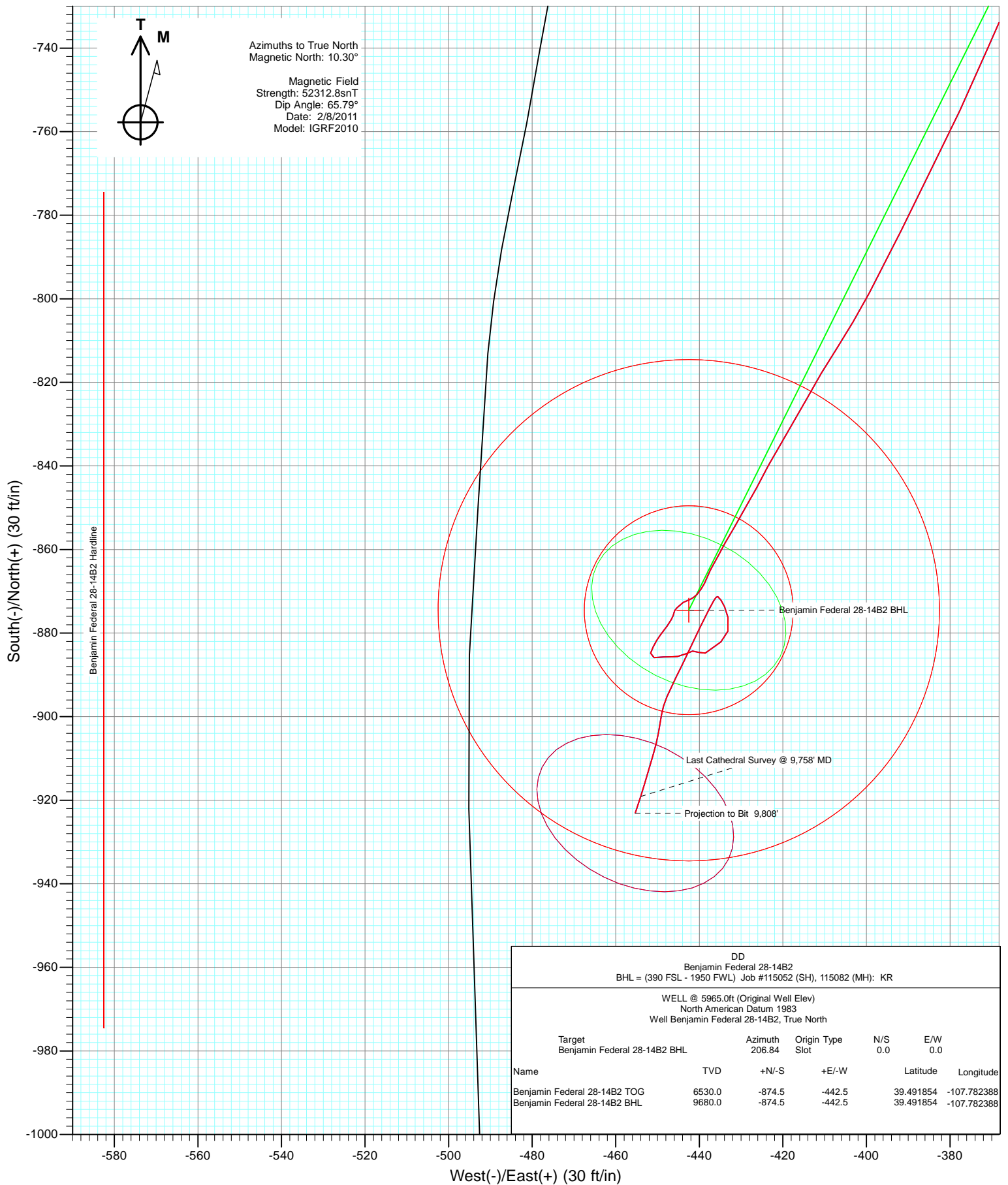
Azimuths to True North
 Magnetic North: 10.30°

Magnetic Field
 Strength: 52312.8snT
 Dip Angle: 65.79°
 Date: 2/8/2011
 Model: IGRF2010

DD Benjamin Federal 28-14B2 BHL = (390 FSL - 1950 FWL) Job #115052 (SH), 115082 (MH): KR					
WELL @ 5965.0ft (Original Well Elev) North American Datum 1983 Well Benjamin Federal 28-14B2, True North					
Target	Azimuth	Origin	Type	N/S	E/W
Benjamin Federal 28-14B2 BHL	206.84	Slot		0.0	0.0
Name	TVD	+N/-S	+E/-W	Latitude	Longitude
Benjamin Federal 28-14B2 TOG	6530.0	-874.5	-442.5	39.491854	-107.782388
Benjamin Federal 28-14B2 BHL	9680.0	-874.5	-442.5	39.491854	-107.782388

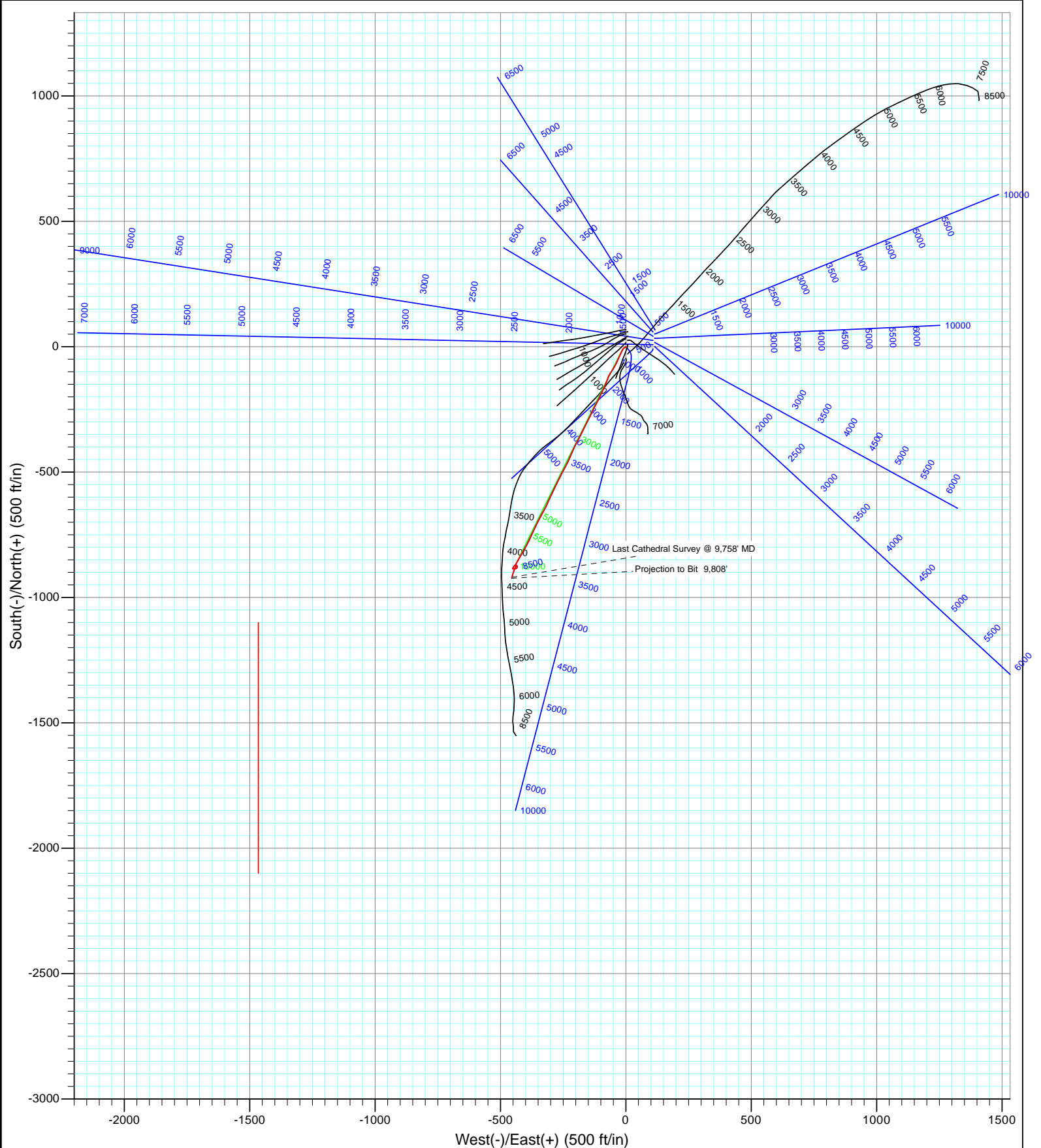


Project: Mamm Creek
Site: K28NW Pad
Well: Benjamin Federal 28-14B2
Wellbore: DD
Design: FINAL





Project: Mamm Creek
Site: K28NW Pad
Well: Benjamin Federal 28-14B2
Wellbore: DD
Design: FINAL



Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Benjamin Federal 28-14B2
Project:	Mamm Creek	TVD Reference:	WELL @ 5965.0ft (Original Well Elev)
Site:	K28NW Pad	MD Reference:	WELL @ 5965.0ft (Original Well Elev)
Well:	Benjamin Federal 28-14B2	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	EDM 5000.1 US 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 28-14B2					
Well Position	+N/-S	0.0 ft	Northing:	1,612,994.07 ft	Latitude:	39.494255
	+E/-W	0.0 ft	Easting:	2,356,407.89 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	2/8/2011	10.30	65.79	52,313

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	206.84	

Survey Program	Date	2/28/2011			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
124.0	9,808.0	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		
124.0	0.70	91.70	124.0	0.0	0.8	-0.3	0.56	0.56		
155.0	0.80	140.20	155.0	-0.2	1.1	-0.3	2.01	0.32		
186.0	0.20	121.90	186.0	-0.4	1.3	-0.2	1.98	-1.94		
216.0	0.10	150.90	216.0	-0.4	1.3	-0.2	0.41	-0.33		
247.0	0.70	206.40	247.0	-0.6	1.3	0.0	2.09	1.94		
277.0	0.50	242.00	277.0	-0.9	1.1	0.3	1.38	-0.67		
308.0	0.70	179.40	308.0	-1.1	0.9	0.6	2.09	0.65		
339.0	0.70	197.40	339.0	-1.5	0.9	0.9	0.71	0.00		
369.0	0.50	288.00	369.0	-1.6	0.7	1.1	2.88	-0.67		
400.0	0.90	241.50	400.0	-1.7	0.4	1.3	2.14	1.29		
431.0	1.20	273.80	431.0	-1.8	-0.2	1.7	2.10	0.97		
462.0	1.00	287.00	462.0	-1.7	-0.8	1.8	1.04	-0.65		

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Benjamin Federal 28-14B2
Project:	Mamm Creek	TVD Reference:	WELL @ 5965.0ft (Original Well Elev)
Site:	K28NW Pad	MD Reference:	WELL @ 5965.0ft (Original Well Elev)
Well:	Benjamin Federal 28-14B2	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	EDM 5000.1 US 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
493.0	1.20	245.70	493.0	-1.7	-1.3	2.1	2.57	0.65	
524.0	1.60	245.80	524.0	-2.0	-2.0	2.7	1.29	1.29	
554.0	2.20	246.70	553.9	-2.4	-2.9	3.5	2.00	2.00	
585.0	2.80	251.40	584.9	-2.9	-4.2	4.5	2.04	1.94	
616.0	3.40	240.40	615.9	-3.6	-5.7	5.8	2.72	1.94	
647.0	3.50	233.60	646.8	-4.6	-7.3	7.4	1.36	0.32	
678.0	4.30	225.30	677.7	-6.0	-8.8	9.4	3.15	2.58	
770.0	7.60	207.90	769.2	-13.8	-14.1	18.7	4.05	3.59	
862.0	8.80	202.30	860.3	-25.7	-19.7	31.8	1.57	1.30	
955.0	9.70	206.80	952.1	-39.3	-25.9	46.7	1.24	0.97	
1,047.0	10.50	204.90	1,042.7	-53.8	-32.9	62.9	0.94	0.87	
1,139.0	10.70	205.90	1,133.1	-69.1	-40.2	79.8	0.30	0.22	
1,231.0	9.80	209.50	1,223.6	-83.6	-47.8	96.2	1.20	-0.98	
1,323.0	10.30	216.50	1,314.2	-97.0	-56.5	112.1	1.43	0.54	
1,415.0	10.50	208.20	1,404.7	-111.0	-65.4	128.6	1.64	0.22	
1,474.0	10.50	201.60	1,462.7	-120.8	-69.9	139.3	2.04	0.00	
1,543.0	10.50	197.80	1,530.6	-132.6	-74.1	151.8	1.00	0.00	
1,638.0	10.90	206.30	1,623.9	-148.9	-80.7	169.3	1.71	0.42	
1,733.0	11.40	203.70	1,717.1	-165.5	-88.5	187.7	0.75	0.53	
1,828.0	11.30	201.70	1,810.3	-182.8	-95.7	206.3	0.43	-0.11	
1,923.0	11.20	209.40	1,903.5	-199.5	-103.7	224.8	1.58	-0.11	
2,018.0	11.40	205.30	1,996.6	-216.0	-112.2	243.4	0.87	0.21	
2,113.0	11.70	209.40	2,089.7	-232.9	-121.0	262.4	0.92	0.32	
2,208.0	10.80	206.90	2,182.9	-249.2	-129.7	280.9	1.08	-0.95	
2,303.0	11.50	203.40	2,276.1	-265.8	-137.5	299.3	1.02	0.74	
2,398.0	11.10	207.20	2,369.2	-282.7	-145.5	317.9	0.89	-0.42	
2,493.0	9.80	208.10	2,462.7	-297.9	-153.4	335.1	1.38	-1.37	
2,588.0	10.30	203.70	2,556.2	-312.8	-160.7	351.7	0.96	0.53	
2,683.0	10.10	210.00	2,649.7	-327.8	-168.2	368.5	1.19	-0.21	
2,778.0	8.60	202.60	2,743.4	-341.6	-175.1	383.9	2.02	-1.58	
2,873.0	9.10	210.30	2,837.3	-354.6	-181.7	398.5	1.35	0.53	
2,969.0	9.80	205.20	2,932.0	-368.6	-189.0	414.2	1.14	0.73	
3,063.0	8.60	208.70	3,024.8	-382.0	-195.7	429.2	1.41	-1.28	
3,158.0	9.70	206.90	3,118.6	-395.4	-202.8	444.3	1.20	1.16	
3,254.0	9.90	203.50	3,213.2	-410.1	-209.7	460.6	0.64	0.21	
3,349.0	9.40	202.90	3,306.8	-424.8	-216.0	476.5	0.54	-0.53	
3,444.0	10.00	201.50	3,400.5	-439.6	-222.0	492.5	0.68	0.63	
3,539.0	10.30	205.50	3,494.0	-454.9	-228.7	509.2	0.81	0.32	
3,635.0	11.00	211.50	3,588.3	-470.5	-237.2	526.9	1.37	0.73	
3,730.0	10.20	204.70	3,681.7	-485.9	-245.5	544.3	1.56	-0.84	
3,824.0	9.10	209.60	3,774.4	-499.9	-252.6	560.1	1.46	-1.17	
3,919.0	9.40	206.60	3,868.2	-513.4	-259.8	575.4	0.60	0.32	
4,014.0	9.80	206.70	3,961.8	-527.5	-266.9	591.2	0.42	0.42	
4,110.0	9.40	204.60	4,056.5	-541.9	-273.8	607.2	0.55	-0.42	
4,205.0	10.10	206.90	4,150.1	-556.4	-280.8	623.3	0.84	0.74	
4,301.0	10.10	206.30	4,244.6	-571.5	-288.4	640.1	0.11	0.00	
4,396.0	10.70	204.30	4,338.1	-587.0	-295.7	657.3	0.74	0.63	
4,491.0	10.40	203.70	4,431.5	-602.9	-302.8	674.6	0.34	-0.32	
4,587.0	10.50	203.30	4,525.9	-618.8	-309.7	692.0	0.13	0.10	
4,682.0	10.60	206.50	4,619.3	-634.6	-317.0	709.4	0.63	0.11	
4,777.0	9.20	208.80	4,712.8	-649.1	-324.6	725.7	1.53	-1.47	
4,872.0	10.10	207.40	4,806.5	-663.1	-332.1	741.6	0.98	0.95	
4,968.0	10.40	209.70	4,901.0	-678.1	-340.3	758.7	0.53	0.31	

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Benjamin Federal 28-14B2
Project:	Mamm Creek	TVD Reference:	WELL @ 5965.0ft (Original Well Elev)
Site:	K28NW Pad	MD Reference:	WELL @ 5965.0ft (Original Well Elev)
Well:	Benjamin Federal 28-14B2	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	EDM 5000.1 US 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
5,063.0	10.80	208.40	4,994.3	-693.4	-348.7	776.2	0.49	0.42	
5,158.0	10.60	205.90	5,087.7	-709.1	-356.8	793.8	0.53	-0.21	
5,253.0	9.70	205.00	5,181.2	-724.2	-364.0	810.5	0.96	-0.95	
5,349.0	10.50	202.60	5,275.7	-739.6	-370.8	827.3	0.94	0.83	
5,444.0	9.90	205.90	5,369.2	-755.0	-377.7	844.1	0.88	-0.63	
5,540.0	9.20	206.00	5,463.9	-769.3	-384.6	860.1	0.73	-0.73	
5,634.0	10.40	206.30	5,556.5	-783.6	-391.7	876.1	1.28	1.28	
5,729.0	9.80	207.90	5,650.0	-798.5	-399.3	892.7	0.70	-0.63	
5,824.0	9.00	212.90	5,743.8	-811.9	-407.1	908.2	1.20	-0.84	
5,919.0	7.30	208.40	5,837.8	-823.4	-414.0	921.6	1.91	-1.79	
6,015.0	7.90	211.30	5,933.0	-834.4	-420.3	934.3	0.74	0.62	
6,110.0	7.00	205.90	6,027.2	-845.2	-426.2	946.6	1.20	-0.95	
6,205.0	6.60	213.20	6,121.5	-855.0	-431.8	957.8	1.00	-0.42	
6,239.0	6.60	208.90	6,155.3	-858.3	-433.8	961.7	1.45	0.00	
6,270.0	5.70	207.50	6,186.1	-861.2	-435.3	965.0	2.94	-2.90	
6,300.0	5.00	209.80	6,216.0	-863.7	-436.7	967.8	2.44	-2.33	
6,335.0	4.20	201.60	6,250.8	-866.2	-437.9	970.6	2.95	-2.29	
6,366.0	3.60	208.80	6,281.8	-868.1	-438.8	972.7	2.49	-1.94	
6,395.0	2.80	211.70	6,310.7	-869.5	-439.6	974.3	2.81	-2.76	
6,429.0	2.60	226.20	6,344.7	-870.8	-440.6	975.9	2.09	-0.59	
6,490.0	1.20	250.70	6,405.7	-871.9	-442.2	977.7	2.60	-2.30	
6,584.0	1.00	240.40	6,499.6	-872.7	-443.8	979.0	0.30	-0.21	
6,678.0	1.40	222.20	6,593.6	-873.9	-445.3	980.8	0.58	0.43	
6,774.0	0.40	167.20	6,689.6	-875.1	-446.0	982.2	1.27	-1.04	
6,869.0	0.50	218.70	6,784.6	-875.8	-446.2	982.9	0.42	0.11	
6,964.0	0.80	195.70	6,879.6	-876.7	-446.7	983.9	0.41	0.32	
7,059.0	1.40	222.80	6,974.6	-878.2	-447.6	985.7	0.82	0.63	
7,154.0	2.10	213.80	7,069.5	-880.5	-449.4	988.6	0.79	0.74	
7,250.0	1.00	204.80	7,165.5	-882.7	-450.7	991.1	1.17	-1.15	
7,281.0	1.60	210.40	7,196.5	-883.4	-451.1	991.8	1.98	1.94	
7,344.0	1.30	193.20	7,259.5	-884.8	-451.7	993.4	0.83	-0.48	
7,440.0	1.30	90.30	7,355.5	-885.9	-450.8	994.0	2.12	0.00	
7,535.0	1.50	82.60	7,450.4	-885.7	-448.5	992.8	0.29	0.21	
7,630.0	0.60	103.10	7,545.4	-885.7	-446.8	992.0	1.01	-0.95	
7,725.0	1.40	80.10	7,640.4	-885.6	-445.2	991.2	0.93	0.84	
7,820.0	1.10	62.00	7,735.4	-885.0	-443.2	989.7	0.52	-0.32	
7,915.0	1.00	74.00	7,830.4	-884.3	-441.6	988.4	0.25	-0.11	
8,011.0	1.20	124.90	7,926.3	-884.6	-440.0	988.0	1.00	0.21	
8,106.0	0.90	53.40	8,021.3	-884.8	-438.6	987.5	1.32	-0.32	
8,201.0	1.40	56.50	8,116.3	-883.7	-437.0	985.8	0.53	0.53	
8,296.0	1.90	52.10	8,211.3	-882.1	-434.8	983.4	0.54	0.53	
8,390.0	2.00	14.80	8,305.2	-879.5	-433.1	980.3	1.33	0.11	
8,484.0	2.10	346.60	8,399.2	-876.3	-433.1	977.4	1.07	0.11	
8,579.0	1.20	334.20	8,494.1	-873.7	-434.0	975.5	1.01	-0.95	
8,674.0	1.00	328.50	8,589.1	-872.1	-434.8	974.5	0.24	-0.21	
8,769.0	0.40	291.70	8,684.1	-871.3	-435.6	974.1	0.76	-0.63	
8,864.0	1.50	210.80	8,779.1	-872.2	-436.5	975.3	1.57	1.16	
8,959.0	2.80	206.40	8,874.0	-875.3	-438.2	978.9	1.38	1.37	
9,054.0	3.50	205.80	8,968.9	-880.0	-440.5	984.1	0.74	0.74	
9,149.0	3.50	205.50	9,063.7	-885.3	-443.0	989.9	0.02	0.00	
9,244.0	3.30	206.40	9,158.5	-890.3	-445.4	995.5	0.22	-0.21	
9,339.0	3.20	203.50	9,253.4	-895.2	-447.7	1,000.9	0.20	-0.11	
9,434.0	2.40	187.50	9,348.3	-899.6	-449.0	1,005.4	1.17	-0.84	

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well Benjamin Federal 28-14B2
Project:	Mamm Creek	TVD Reference:	WELL @ 5965.0ft (Original Well Elev)
Site:	K28NW Pad	MD Reference:	WELL @ 5965.0ft (Original Well Elev)
Well:	Benjamin Federal 28-14B2	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	EDM 5000.1 US 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
9,528.0	2.90	191.20	9,442.2	-903.9	-449.8	1,009.6	0.56	0.53	
9,624.0	3.90	195.60	9,538.0	-909.4	-451.1	1,015.1	1.08	1.04	
9,719.0	4.50	197.30	9,632.7	-916.1	-453.1	1,022.0	0.64	0.63	
9,758.0	4.80	197.70	9,671.6	-919.1	-454.0	1,025.1	0.77	0.77	Last Cathedral Survey @ 9,758' MD Projection to Bit 9,808'
9,808.0	4.80	197.70	9,721.4	-923.1	-455.3	1,029.2	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
Benjamin Federal 28-14 - survey misses target center by 2.4ft at 6614.4ft MD (6530.0 TVD, -873.0 N, -444.3 E) - Circle (radius 25.0)	0.00	0.00	6,530.0	-874.5	-442.5	1,612,130.93	2,355,943.56	39.491854	-107.782388
Benjamin Federal 28-14 - survey misses target center by 46.8ft at 9758.0ft MD (9671.6 TVD, -919.1 N, -454.0 E) - Circle (radius 60.0)	0.00	0.00	9,680.0	-874.5	-442.5	1,612,130.93	2,355,943.56	39.491854	-107.782388
Benjamin Federal 28-14 - survey misses target center by 9729.5ft at 0.0ft MD (0.0 TVD, 0.0 N, 0.0 E) - Polygon Point 1 Point 2	0.00	0.00	-9,680.0	-874.5	-442.5	1,612,130.93	2,355,943.56	39.491854	-107.782388
			-9,680.0	100.0	-140.0	1,612,234.41	2,355,806.12		
			-9,680.0	-100.0	-140.0	1,612,034.47	2,355,801.10		

Survey Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
9,758.0	9,671.6	-919.1	-454.0	Last Cathedral Survey @ 9,758' MD	
9,808.0	9,721.4	-923.1	-455.3	Projection to Bit 9,808'	

Checked By: _____ Approved By: _____ Date: _____