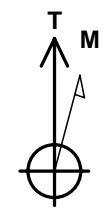
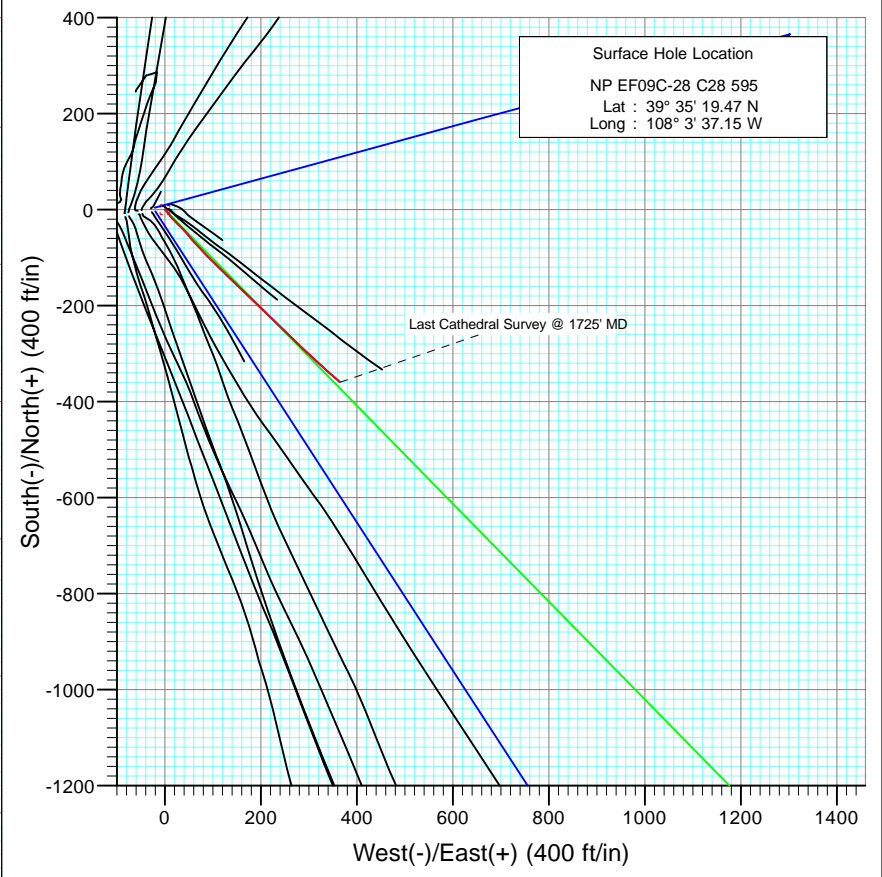
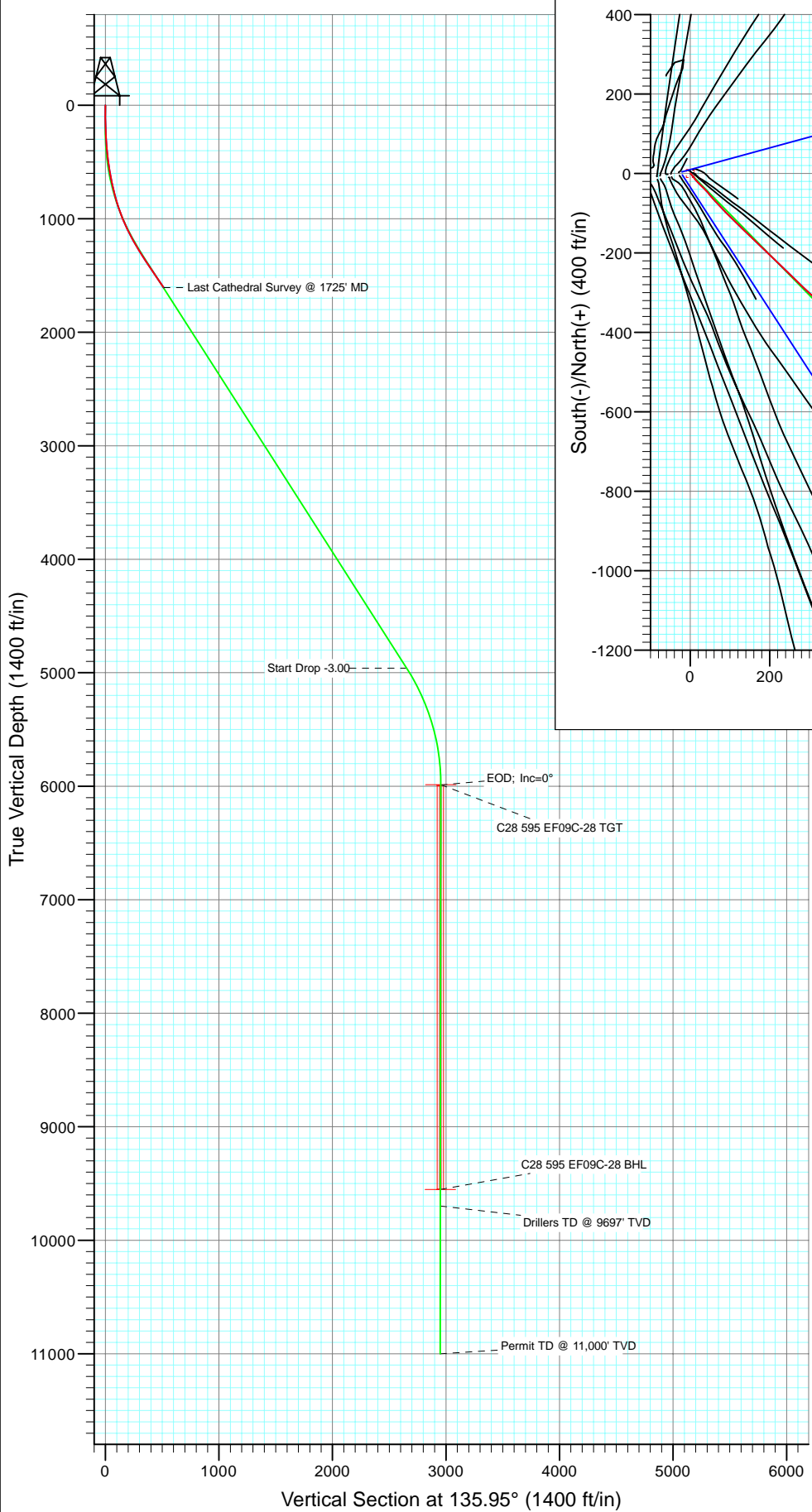




Project: North Piceance  
 Site: C28 595 (S28-T5S-R95W)  
 Well: NP EF09C-28 C28 595  
 Wellbore: DD  
 Design: DD



Azimuths to True North  
 Magnetic North: 10.52°  
 Magnetic Field  
 Strength: 52390.4snT  
 Dip Angle: 65.83°  
 Date: 6/19/2010  
 Model: IGRF2010

DESIGN DETAILS: DD

105263; LR  
 KBE @ 6197.0ft (Original Well Elev)

Target	Azimuth	Origin Slot	N/S	E/W	From TVD
C28 595 EF09C-28 BHL	135.95		0.0	0.0	0.0

# Cathedral Energy Services

## Survey Report

<b>Company:</b> EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b> Well NP EF09C-28 C28 595
<b>Project:</b> North Piceance	<b>TVD Reference:</b> KBE @ 6197.0ft (Original Well Elev)
<b>Site:</b> C28 595 (S28-T5S-R95W)	<b>MD Reference:</b> KBE @ 6197.0ft (Original Well Elev)
<b>Well:</b> NP EF09C-28 C28 595	<b>North Reference:</b> True
<b>Wellbore:</b> DD	<b>Survey Calculation Method:</b> Minimum Curvature
<b>Design:</b> DD	<b>Database:</b> EDM 5000.1 US Multi Users Db

<b>Project</b> North Piceance		
<b>Map System:</b> US State Plane 1983	<b>System Datum:</b> Mean Sea Level	
<b>Geo Datum:</b> North American Datum 1983		
<b>Map Zone:</b> Colorado Central Zone		

<b>Site</b> C28 595 (S28-T5S-R95W)					
<b>Site Position:</b>		<b>Northing:</b> 1,649,466.64 ft	<b>Latitude:</b> 39° 35' 19.10 N		
<b>From:</b> Lat/Long		<b>Easting:</b> 2,278,319.64 ft	<b>Longitude:</b> 108° 3' 39.81 W		
<b>Position Uncertainty:</b> 0.0 ft		<b>Slot Radius:</b> 13.200 in	<b>Grid Convergence:</b> -1.62 °		

<b>Well</b> NP EF09C-28 C28 595					
<b>Well Position</b>	<b>+N/-S</b> 0.0 ft	<b>Northing:</b> 1,649,497.79 ft	<b>Latitude:</b> 39° 35' 19.47 N		
	<b>+E/-W</b> 0.0 ft	<b>Easting:</b> 2,278,528.43 ft	<b>Longitude:</b> 108° 3' 37.15 W		
<b>Position Uncertainty</b>	0.0 ft	<b>Wellhead Elevation:</b> ft	<b>Ground Level:</b> 6,175.0 ft		

<b>Wellbore</b> DD					
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2010	6/19/2010	10.52	65.83	52,390

<b>Design</b> DD					
<b>Audit Notes:</b>					
<b>Version:</b> 1.0	<b>Phase:</b> ACTUAL	<b>Tie On Depth:</b> 0.0			
<b>Vertical Section:</b>	<b>Depth From (TVD) (ft)</b>	<b>+N/-S (ft)</b>	<b>+E/-W (ft)</b>	<b>Direction (°)</b>	
	0.0	0.0	0.0	135.95	

<b>Survey Program</b>		<b>Date</b> 6/21/2010			
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
169.0	1,725.0	Survey #1 (DD)	MWD	Geolink MWD	

<b>Survey</b>									
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	
169.0	0.80	104.10	169.0	-0.3	1.1	1.0	0.47	0.47	
199.0	0.90	138.60	199.0	-0.5	1.5	1.4	1.71	0.33	
230.0	1.60	140.80	230.0	-1.0	1.9	2.1	2.26	2.26	
261.0	2.40	135.60	261.0	-1.8	2.7	3.2	2.64	2.58	
291.0	3.30	142.70	290.9	-3.0	3.6	4.7	3.22	3.00	
322.0	4.20	141.30	321.9	-4.6	4.9	6.7	2.92	2.90	
352.0	5.20	143.20	351.8	-6.5	6.4	9.1	3.37	3.33	
382.0	5.80	139.90	381.6	-8.8	8.2	12.0	2.26	2.00	
413.0	6.00	144.70	412.5	-11.3	10.1	15.1	1.72	0.65	
443.0	5.80	141.00	442.3	-13.7	12.0	18.2	1.43	-0.67	
473.0	6.80	145.40	472.1	-16.4	13.9	21.5	3.70	3.33	
504.0	7.80	139.40	502.9	-19.5	16.3	25.4	4.05	3.23	

# Cathedral Energy Services

## Survey Report

<b>Company:</b> EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b> Well NP EF09C-28 C28 595
<b>Project:</b> North Piceance	<b>TVD Reference:</b> KBE @ 6197.0ft (Original Well Elev)
<b>Site:</b> C28 595 (S28-T5S-R95W)	<b>MD Reference:</b> KBE @ 6197.0ft (Original Well Elev)
<b>Well:</b> NP EF09C-28 C28 595	<b>North Reference:</b> True
<b>Wellbore:</b> DD	<b>Survey Calculation Method:</b> Minimum Curvature
<b>Design:</b> DD	<b>Database:</b> 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
565.0	9.30	133.00	563.2	-26.0	22.6	34.4	2.91	2.46	
660.0	11.20	137.10	656.7	-38.0	34.5	51.3	2.14	2.00	
755.0	13.90	137.90	749.4	-53.2	48.5	72.0	2.85	2.84	
850.0	16.60	138.60	841.0	-71.9	65.1	96.9	2.85	2.84	
945.0	19.80	135.20	931.3	-93.5	85.4	126.6	3.55	3.37	
1,040.0	22.00	134.50	1,020.0	-117.4	109.5	160.4	2.33	2.32	
1,135.0	26.10	134.40	1,106.8	-144.5	137.1	199.1	4.32	4.32	
1,231.0	29.60	132.70	1,191.6	-175.3	169.6	243.9	3.74	3.65	
1,326.0	31.80	135.10	1,273.3	-209.0	204.5	292.4	2.65	2.32	
1,422.0	32.90	133.90	1,354.4	-245.0	241.2	343.7	1.33	1.15	
1,517.0	33.80	133.10	1,433.8	-280.9	279.1	395.9	1.05	0.95	
1,613.0	33.50	133.00	1,513.7	-317.2	317.9	449.1	0.32	-0.31	
1,708.0	35.20	131.20	1,592.1	-353.1	357.7	502.5	2.08	1.79	
1,725.0	35.10	130.70	1,606.0	-359.6	365.1	512.3	1.79	-0.59	

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
C28 595 EF09C-28 BHL - hit/miss target - Shape	0.00	0.00	9,552.0	-2,120.3	2,050.8	1,647,320.55	2,280,518.67	39° 34' 58.51 N	108° 3' 10.96 W
- survey misses target center by 8311.5ft at 1725.0ft MD (1606.0 TVD, -359.6 N, 365.1 E)									
- Rectangle (sides W30.0 H50.0 D0.0)									
C28 595 EF09C-28 TGT - survey misses target center by 5015.7ft at 1725.0ft MD (1606.0 TVD, -359.6 N, 365.1 E)	0.00	0.00	5,987.0	-2,110.3	2,067.8	1,647,330.03	2,280,535.94	39° 34' 58.61 N	108° 3' 10.74 W
- Point									

Survey Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
1,725.0	1,606.0	-359.6	365.1	Last Cathedral Survey @ 1725' MD

Checked By: \_\_\_\_\_ Approved By: \_\_\_\_\_ Date: \_\_\_\_\_