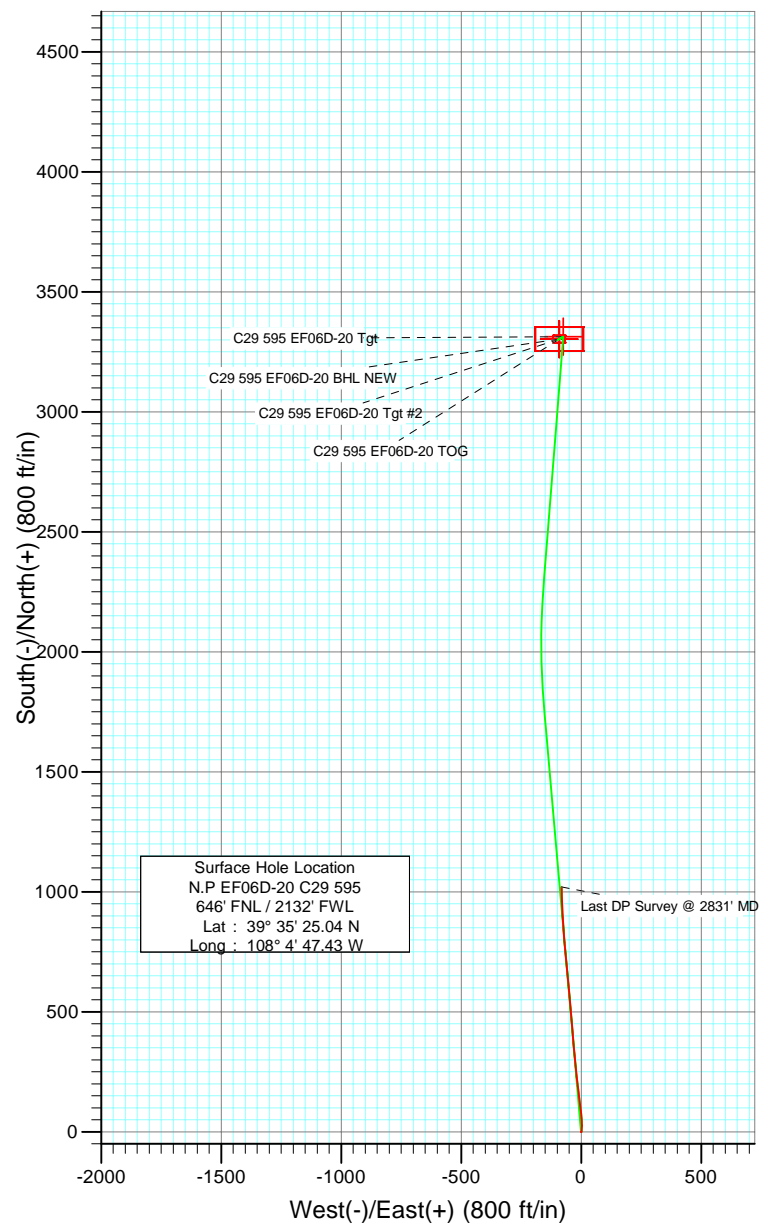
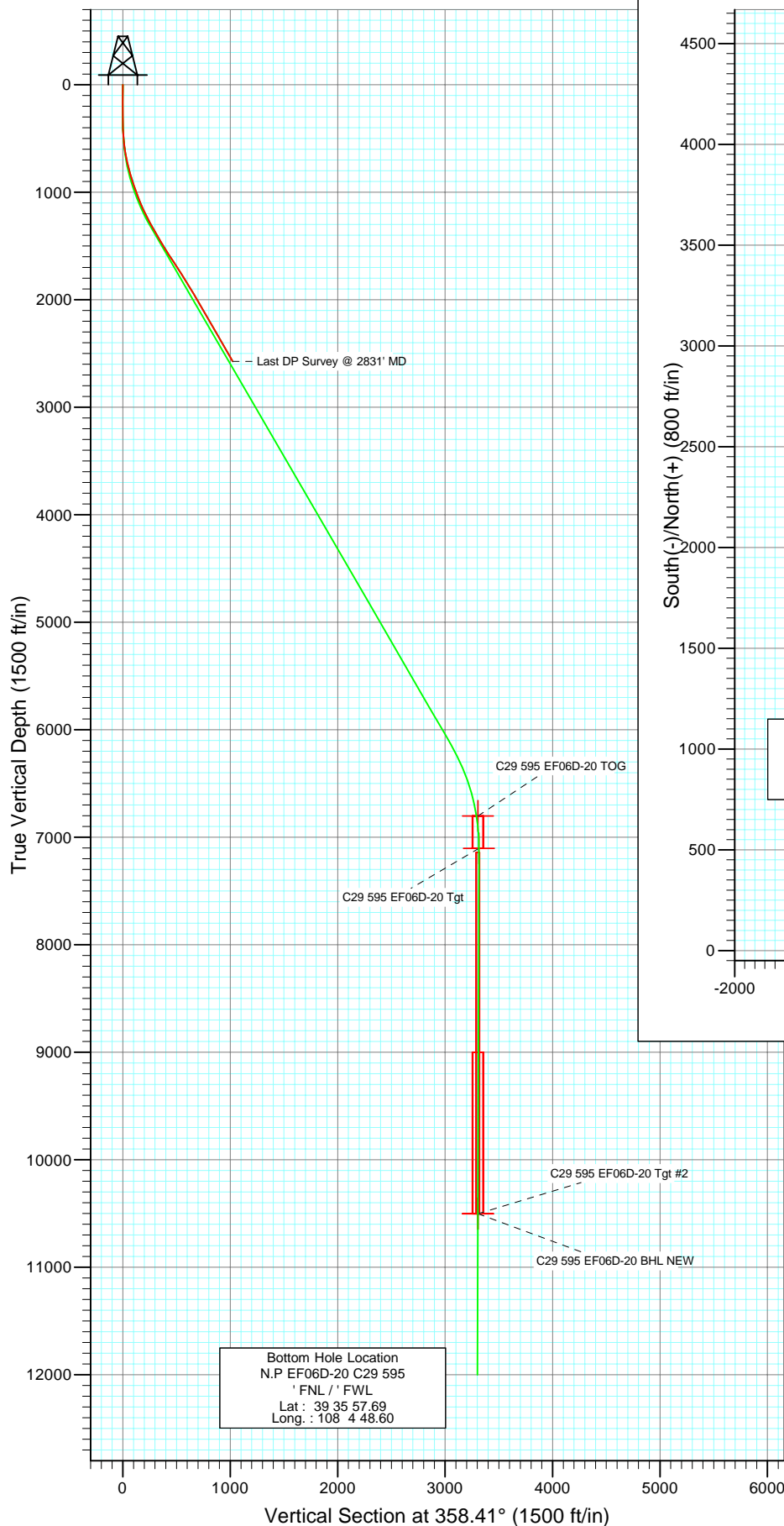




Project: North Piceance
Site: C29 595 Pad (NENW Sec29-T5S-R95W)
Well: N.P EF06D-20 C29 595
Wellbore: DD
Design: DD



Azimuths to True North
Magnetic North: 10.84°

Magnetic Field
Strength: 52663.9snT
Dip Angle: 65.91°
Date: 11/16/2007
Model: IGRF200510

FORMATION TOP DETAILS

No formation data is available

DESIGN DETAILS: DD

Job#:85665; LR
KB @ 7032.0ft (Patterson 185)

Target	Azimuth	Origin	N/S	E/W	From TVD
No Target (Freehand)	358.41	Slot	0.0	0.0	0.0

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well N.P EF06D-20 C29 595
Project:	North Piceance	TVD Reference:	KB @ 7032.0ft (Patterson 185)
Site:	C29 595 Pad (NENW Sec29-T5S-R95W)	MD Reference:	KB @ 7032.0ft (Patterson 185)
Well:	N.P EF06D-20 C29 595	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	EDM 2003.21 US Multi Users DB

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

Site	C29 595 Pad (NENW Sec29-T5S-R95W)				
Site Position:		Northing:	1,650,184.70 ft	Latitude:	39° 35' 24.74 N
From:	Lat/Long	Easting:	2,273,122.40 ft	Longitude:	108° 4' 46.43 W
Position Uncertainty:	0.0 ft	Slot Radius:	in	Grid Convergence:	-1.63 °

Well	N.P EF06D-20 C29 595					
Well Position	+N/-S	0.0 ft	Northing:	1,650,217.17 ft	Latitude:	39° 35' 25.04 N
	+E/-W	0.0 ft	Easting:	2,273,044.94 ft	Longitude:	108° 4' 47.43 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	7,010.0 ft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	11/16/2007	10.85	65.91	52,664

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	358.41	

Survey Program	Date	12/22/2008			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
204.0	2,831.0	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		
204.0	0.30	100.70	204.0	-0.1	0.5	-0.1	0.15	0.15		
296.0	0.70	200.30	296.0	-0.7	0.6	-0.7	0.88	0.43		
389.0	2.30	19.60	389.0	0.6	1.0	0.5	3.23	1.72		
481.0	4.40	4.10	480.8	5.8	1.9	5.8	2.47	2.28		
573.0	6.90	5.90	572.4	14.8	2.7	14.8	2.72	2.72		
665.0	10.60	359.80	663.3	28.8	3.2	28.7	4.14	4.02		
757.0	13.80	356.70	753.2	48.2	2.6	48.1	3.55	3.48		
849.0	16.10	352.40	842.1	71.8	0.2	71.8	2.77	2.50		
940.0	19.10	353.80	928.8	99.1	-3.0	99.2	3.33	3.30		
1,032.0	21.00	353.50	1,015.2	130.5	-6.5	130.6	2.07	2.07		
1,124.0	22.30	351.90	1,100.7	164.1	-10.8	164.4	1.55	1.41		
1,215.0	25.40	353.90	1,184.0	200.7	-15.4	201.0	3.52	3.41		

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well N.P EF06D-20 C29 595
Project:	North Piceance	TVD Reference:	KB @ 7032.0ft (Patterson 185)
Site:	C29 595 Pad (NENW Sec29-T5S-R95W)	MD Reference:	KB @ 7032.0ft (Patterson 185)
Well:	N.P EF06D-20 C29 595	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	EDM 2003.21 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
1,307.0	28.00	353.50	1,266.1	241.7	-19.9	242.2	2.83	2.83	
1,399.0	30.50	355.20	1,346.4	286.5	-24.3	287.0	2.86	2.72	
1,490.0	29.70	354.20	1,425.1	331.9	-28.5	332.6	1.04	-0.88	
1,582.0	32.40	355.30	1,503.9	379.2	-32.8	379.9	3.00	2.93	
1,673.0	32.40	355.80	1,580.8	427.8	-36.6	428.6	0.29	0.00	
1,765.0	32.70	355.30	1,658.3	477.1	-40.5	478.1	0.44	0.33	
1,857.0	32.70	354.50	1,735.7	526.6	-44.9	527.7	0.47	0.00	
1,948.0	32.70	355.30	1,812.3	575.6	-49.2	576.7	0.47	0.00	
2,040.0	32.30	354.50	1,889.9	624.8	-53.6	626.1	0.64	-0.43	
2,132.0	30.50	353.40	1,968.4	672.5	-58.7	673.9	2.05	-1.96	
2,224.0	30.90	354.70	2,047.5	719.2	-63.5	720.7	0.84	0.43	
2,315.0	29.20	354.50	2,126.3	764.6	-67.8	766.1	1.87	-1.87	
2,407.0	29.60	355.80	2,206.5	809.6	-71.6	811.2	0.82	0.43	
2,499.0	29.80	356.80	2,286.4	855.0	-74.6	856.8	0.58	0.22	
2,591.0	30.10	357.50	2,366.1	900.9	-76.9	902.7	0.50	0.33	
2,682.0	30.30	357.70	2,444.7	946.7	-78.8	948.5	0.25	0.22	
2,774.0	29.80	358.00	2,524.4	992.7	-80.5	994.5	0.57	-0.54	
2,831.0	29.80	358.00	2,573.8	1,021.0	-81.5	1,022.9	0.00	0.00	Last DP Survey @ 2831' MD

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
C29 595 EF06D-20 Tgt - survey misses target center by 5077.2ft at 2831.0ft MD (2573.8 TVD, 1021.0 N, -81.5 E) - Point	0.00	0.00	7,104.0	3,313.5	-74.5	1,653,531.45	2,273,064.56	39° 35' 57.79 N	108° 4' 48.38 W
C29 595 EF06D-20 BHL - survey misses target center by 8250.2ft at 2831.0ft MD (2573.8 TVD, 1021.0 N, -81.5 E) - Rectangle (sides W30.0 H50.0 D0.0)	0.00	0.00	10,502.0	3,303.5	-91.5	1,653,521.96	2,273,047.29	39° 35' 57.69 N	108° 4' 48.60 W
C29 595 EF06D-20 Tgt; - survey misses target center by 8250.2ft at 2831.0ft MD (2573.8 TVD, 1021.0 N, -81.5 E) - Rectangle (sides W100.0 H200.0 D0.0)	0.00	0.00	10,502.0	3,303.5	-91.5	1,653,521.96	2,273,047.29	39° 35' 57.69 N	108° 4' 48.60 W
C29 595 EF06D-20 TOC - survey misses target center by 4804.9ft at 2831.0ft MD (2573.8 TVD, 1021.0 N, -81.5 E) - Rectangle (sides W100.0 H200.0 D300.0)	0.00	0.00	6,802.0	3,303.5	-91.5	1,653,521.96	2,273,047.29	39° 35' 57.69 N	108° 4' 48.60 W

Survey Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	+E/-W (ft)	Comment
2,831.0	2,573.8	1,021.0	-81.5	Last DP Survey @ 2831' MD

Checked By: _____ Approved By: _____ Date: _____