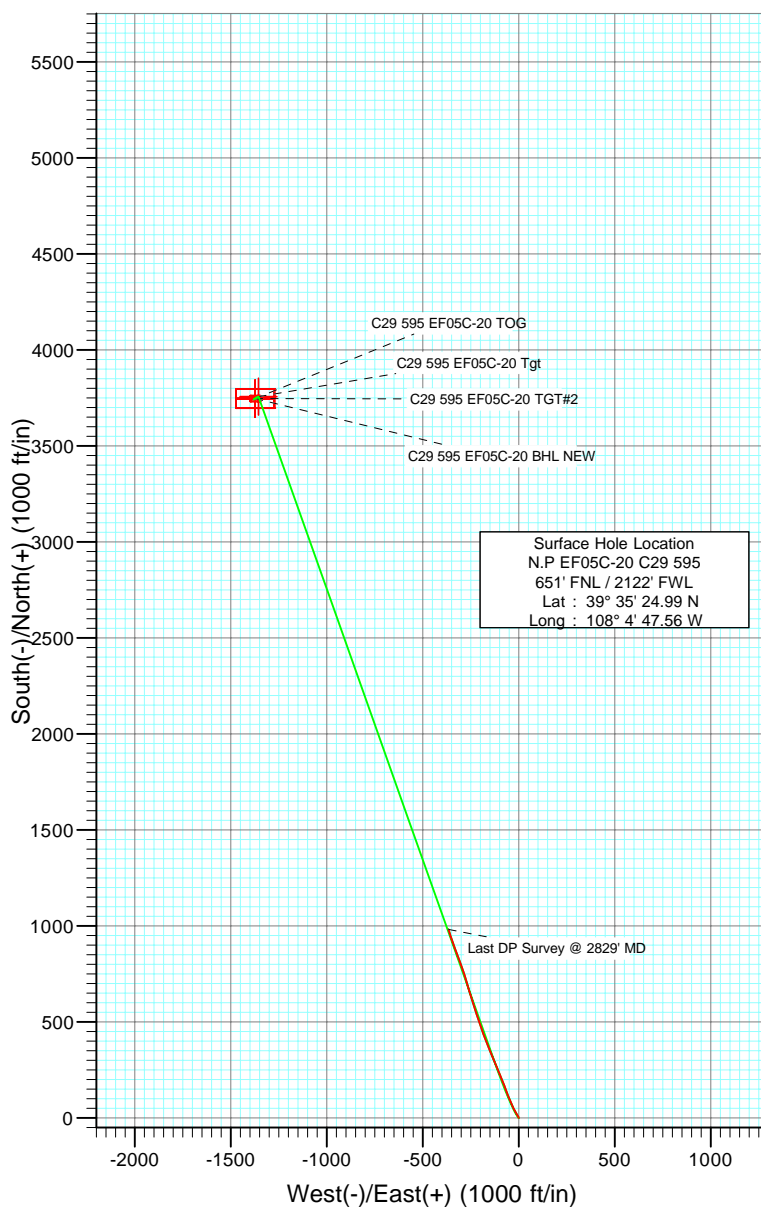
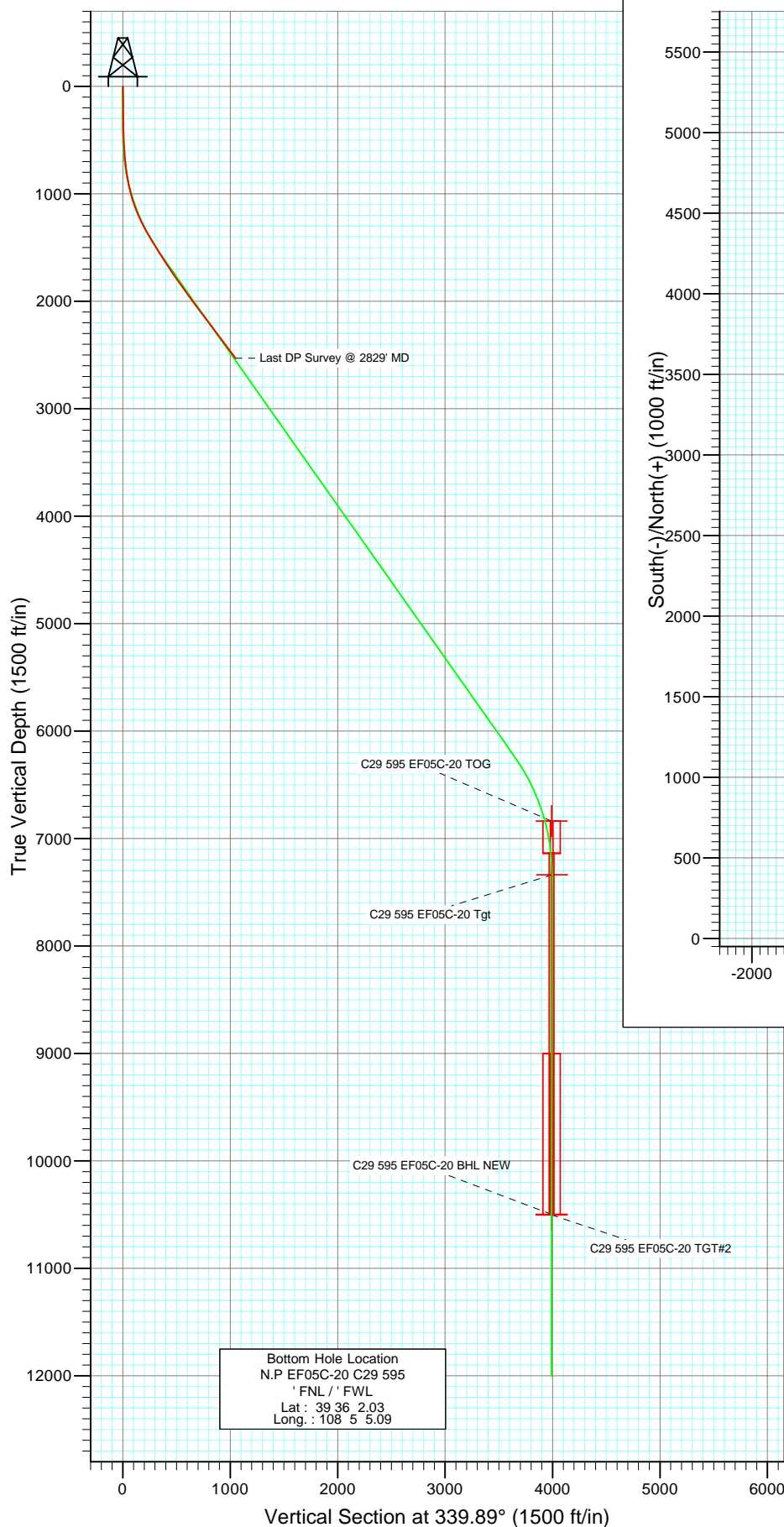




Project: North Piceance
 Site: C29 595 Pad (NENW Sec29-T5S-R95W)
 Well: N.P EF05C-20 C29 595
 Wellbore: DD
 Design: DD



FORMATION TOP DETAILS

No formation data is available

Azimuths to True North
 Magnetic North: 10.72°

Magnetic Field
 Strength: 52571.7snT
 Dip Angle: 65.88°
 Date: 10/27/2008
 Model: IGRF200510

DESIGN DETAILS: DD

Job#:85623; LR
 KB @ 7032.0ft (Patterson 185)

Target	Azimuth	Origin	N/S	E/W	From TVD
No Target (Freehand)	339.89	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 EF05C-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 EF05C-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 EF05C-20 C29 595					
Well Position	+N/-S	0.0 ft	Northing:	1,650,212.37 ft	Latitude:	39° 35' 24.99 N
	+E/-W	0.0 ft	Easting:	2,273,034.68 ft	Longitude:	108° 4' 47.56 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	10/27/2008	10.72	65.88	52,572

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	339.89	

Survey Program	Date	12/22/2008			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
234.0	2,829.0	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		
234.0	1.40	338.10	234.0	2.7	-1.1	2.9	0.60	0.60		
296.0	0.90	349.10	296.0	3.8	-1.4	4.1	0.88	-0.81		
389.0	1.00	344.40	389.0	5.3	-1.8	5.6	0.14	0.11		
481.0	1.80	341.00	480.9	7.5	-2.5	7.9	0.87	0.87		
572.0	3.30	325.40	571.8	11.0	-4.4	11.8	1.80	1.65		
664.0	5.30	326.50	663.6	16.7	-8.3	18.5	2.18	2.17		
756.0	7.40	330.40	755.0	25.4	-13.6	28.5	2.33	2.28		
848.0	9.80	332.40	846.0	37.5	-20.1	42.1	2.63	2.61		
939.0	12.40	335.30	935.2	53.2	-27.8	59.5	2.92	2.86		
1,031.0	15.90	335.70	1,024.4	73.7	-37.1	82.0	3.81	3.80		
1,123.0	19.90	337.60	1,112.0	99.7	-48.3	110.2	4.39	4.35		
1,214.0	23.40	338.80	1,196.5	130.8	-60.7	143.7	3.88	3.85		

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well N.P EF05C-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 EF05C-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
1,306.0	27.00	339.30	1,279.8	167.4	-74.7	182.9	3.92	3.91	
1,398.0	29.20	337.90	1,360.9	207.8	-90.5	226.2	2.50	2.39	
1,489.0	30.80	337.50	1,439.7	249.9	-107.8	271.7	1.77	1.76	
1,581.0	32.60	337.50	1,518.0	294.5	-126.3	320.0	1.96	1.96	
1,672.0	33.10	337.40	1,594.4	340.1	-145.2	369.3	0.55	0.55	
1,764.0	33.50	338.50	1,671.3	386.9	-164.2	419.8	0.79	0.43	
1,856.0	33.90	339.80	1,747.9	434.6	-182.3	470.8	0.90	0.43	
1,947.0	35.80	341.50	1,822.6	483.7	-199.5	522.8	2.34	2.09	
2,039.0	35.00	340.70	1,897.6	534.1	-216.8	576.1	1.00	-0.87	
2,130.0	36.50	342.30	1,971.4	584.5	-233.7	629.2	1.94	1.65	
2,223.0	36.70	343.10	2,046.1	637.5	-250.2	684.6	0.56	0.22	
2,314.0	37.40	344.40	2,118.7	690.1	-265.5	739.3	1.15	0.77	
2,406.0	37.10	341.90	2,191.9	743.4	-281.6	794.9	1.68	-0.33	
2,498.0	36.80	339.40	2,265.5	795.6	-299.9	850.2	1.67	-0.33	
2,590.0	37.20	340.00	2,338.9	847.5	-319.1	905.5	0.59	0.43	
2,681.0	36.90	340.70	2,411.6	899.1	-337.6	960.4	0.57	-0.33	
2,779.0	36.40	341.50	2,490.2	954.5	-356.5	1,018.9	0.71	-0.51	
2,829.0	36.40	341.50	2,530.4	982.6	-366.0	1,048.5	0.00	0.00	Last DP Survey @ 2829' 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 EF05C-20 BHL - survey misses target center by 8492.6ft at 2829.0ft MD (2530.4 TVD, 982.6 N, -366.0 E) - Rectangle (sides W30.0 H50.0 D0.0)	0.00	0.00	10,497.0	3,747.8	-1,372.1	1,653,997.60	2,271,769.57	39° 36' 2.03 N	108° 5' 5.09 W
C29 595 EF05C-20 TGT - survey misses target center by 8498.3ft at 2829.0ft MD (2530.4 TVD, 982.6 N, -366.0 E) - Rectangle (sides W100.0 H200.0 D0.0)	0.00	0.00	10,503.0	3,747.8	-1,372.1	1,653,997.59	2,271,769.57	39° 36' 2.03 N	108° 5' 5.09 W
C29 595 EF05C-20 Tgt - survey misses target center by 5637.7ft at 2829.0ft MD (2530.4 TVD, 982.6 N, -366.0 E) - Point	0.00	0.00	7,337.0	3,757.8	-1,355.1	1,654,007.13	2,271,786.83	39° 36' 2.13 N	108° 5' 4.87 W
C29 595 EF05C-20 TOC - survey misses target center by 5215.8ft at 2829.0ft MD (2530.4 TVD, 982.6 N, -366.0 E) - Rectangle (sides W100.0 H200.0 D300.0)	0.00	0.00	6,837.0	3,747.8	-1,372.1	1,653,997.59	2,271,769.57	39° 36' 2.03 N	108° 5' 5.09 W

Survey Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment	
		+N/-S (ft)	+E/-W (ft)		
2,829.0	2,530.4	982.6	-366.0	Last DP Survey @ 2829' MD	

Checked By: _____ Approved By: _____ Date: _____