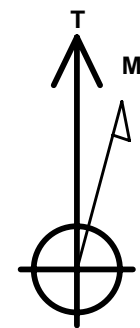
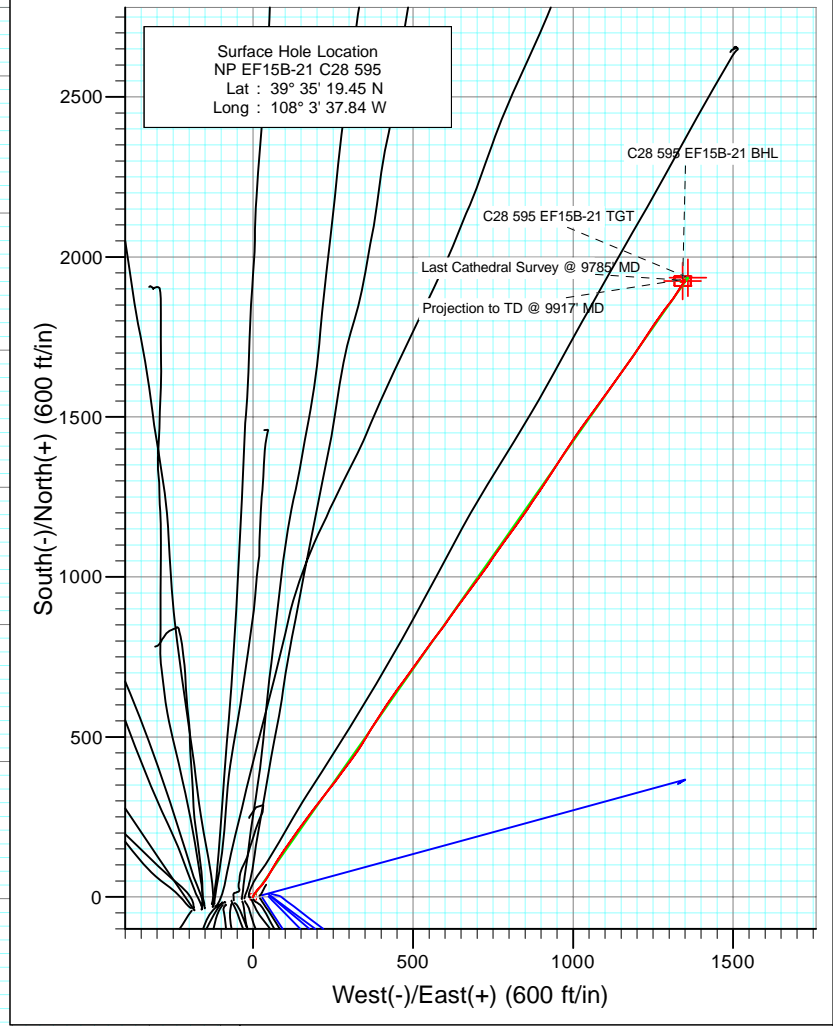
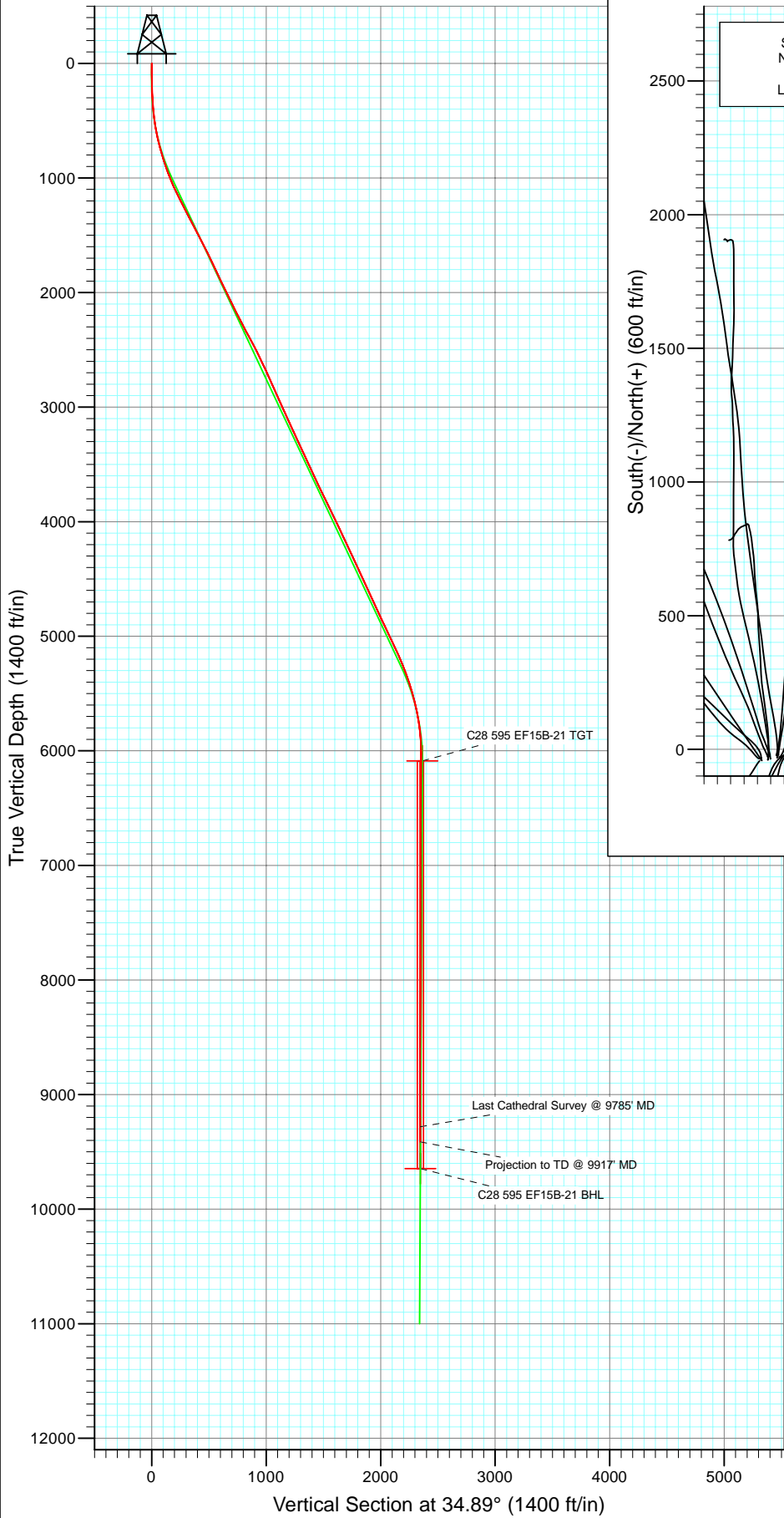




Project: North Piceance
 Site: C28 595 (S28-T5S-R95W)
 Well: NP EF15B-21 C28 595
 Wellbore: DD
 Design: Final

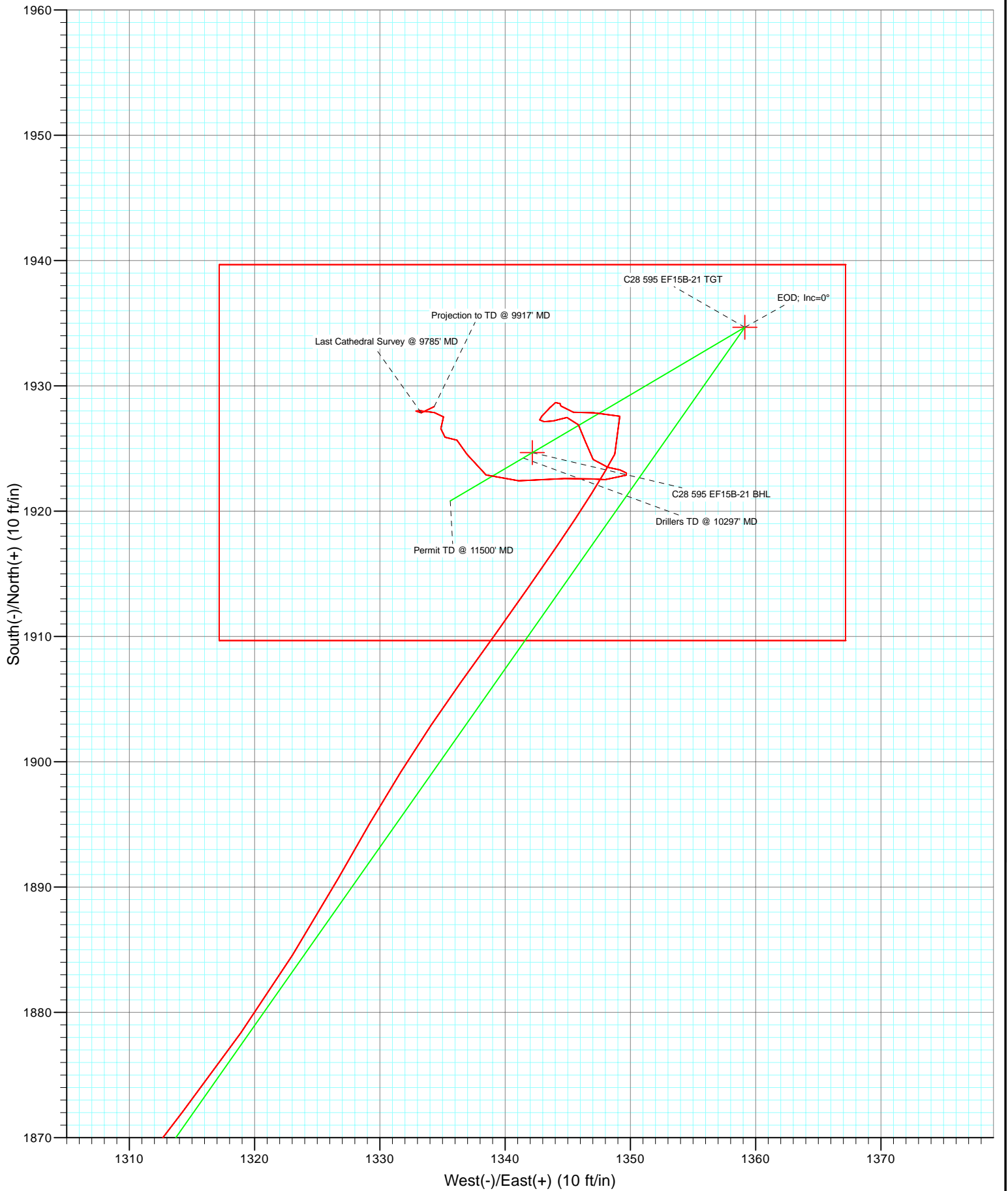


Azimuths to True North
 Magnetic North: 10.55°
 Magnetic Field
 Strength: 52416.4snT
 Dip Angle: 65.84°
 Date: 3/17/2010
 Model: IGRF2010

DD NP EF15B-21 C28 595 105108 (SH); LR						
KBE @ 6197.0ft (Nabors M13) North American Datum 1983 Well NP EF15B-21 C28 595, True North						
Type	Target	Azimuth	Origin	Type	N/S	E/W From TVD
Target	C28 595 EF15B-21 BHL	34.89	Slot	0.0	0.0	0.0
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	
C28 595 EF15B-21 BHL	9647.0	1924.7	1342.239° 35'	38.48 N	108° 3' 20.63 W	



Project: North Piceance
Site: C28 595 (S28-T5S-R95W)
Well: NP EF15B-21 C28 595
Wellbore: DD
Design: Final



Cathedral Energy Services

Survey Report

Company: EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference: Well NP EF15B-21 C28 595
Project: North Piceance	TVD Reference: KBE @ 6197.0ft (Nabors M13)
Site: C28 595 (S28-T5S-R95W)	MD Reference: KBE @ 6197.0ft (Nabors M13)
Well: NP EF15B-21 C28 595	North Reference: True
Wellbore: DD	Survey Calculation Method: Minimum Curvature
Design: DD	Database: EDM 5000.1 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 C28 595 (S28-T5S-R95W)					
Site Position:	Northing: 1,649,466.64 ft	Latitude: 39° 35' 19.10 N			
From: Lat/Long	Easting: 2,278,319.64 ft	Longitude: 108° 3' 39.81 W			
Position Uncertainty: 0.0 ft	Slot Radius: 13.200 in	Grid Convergence: -1.62 °			

Well NP EF15B-21 C28 595					
Well Position	+N/-S 0.0 ft	Northing: 1,649,498.34 ft	Latitude: 39° 35' 19.46 N		
	+E/-W 0.0 ft	Easting: 2,278,479.75 ft	Longitude: 108° 3' 37.78 W		
Position Uncertainty	0.0 ft	Wellhead Elevation: ft	Ground Level: 6,175.0 ft		

Wellbore DD					
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	3/17/2010	10.55	65.84	52,416

Design DD					
Audit Notes:					
Version: 1.0	Phase: ACTUAL	Tie On Depth: 0.0			
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.0	0.0	0.0	34.89	

Survey Program Date 6/4/2010					
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
172.0	9,917.0	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		
172.0	0.90	20.90	172.0	1.3	0.5	1.3	0.52	0.52		
202.0	1.70	22.60	202.0	1.9	0.7	2.0	2.67	2.67		
233.0	2.00	12.60	233.0	2.8	1.0	2.9	1.42	0.97		
264.0	2.60	21.60	263.9	4.0	1.4	4.1	2.25	1.94		
295.0	3.10	30.20	294.9	5.4	2.1	5.6	2.12	1.61		
325.0	3.90	31.40	324.8	7.0	3.0	7.5	2.68	2.67		
356.0	4.70	29.90	355.8	9.0	4.2	9.8	2.61	2.58		
387.0	4.50	30.70	386.7	11.1	5.5	12.3	0.68	-0.65		
418.0	5.70	33.80	417.5	13.4	6.9	15.0	3.97	3.87		
448.0	6.50	37.10	447.4	16.0	8.8	18.2	2.91	2.67		
479.0	6.90	40.90	478.2	18.8	11.1	21.8	1.93	1.29		
510.0	8.40	42.20	508.9	21.9	13.8	25.9	4.87	4.84		

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well NP EF15B-21 C28 595
Project:	North Piceance	TVD Reference:	KBE @ 6197.0ft (Nabors M13)
Site:	C28 595 (S28-T5S-R95W)	MVD Reference:	KBE @ 6197.0ft (Nabors M13)
Well:	NP EF15B-21 C28 595	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
540.0	8.70	42.90	538.5	25.2	16.8	30.3	1.06	1.00	
571.0	9.70	41.80	569.1	28.9	20.2	35.2	3.28	3.23	
602.0	11.20	41.10	599.6	33.1	23.9	40.8	4.86	4.84	
633.0	11.80	39.20	630.0	37.8	27.9	47.0	2.29	1.94	
666.0	12.70	37.20	662.3	43.3	32.2	54.0	3.01	2.73	
697.0	14.00	35.50	692.4	49.1	36.4	61.1	4.38	4.19	
729.0	14.30	33.50	723.4	55.5	40.9	68.9	1.79	0.94	
761.0	15.40	32.10	754.4	62.4	45.3	77.1	3.62	3.44	
793.0	16.20	31.20	785.2	69.9	49.9	85.8	2.61	2.50	
825.0	17.40	29.70	815.8	77.8	54.6	95.0	3.99	3.75	
858.0	17.80	30.10	847.3	86.5	59.5	105.0	1.27	1.21	
889.0	19.10	31.40	876.7	94.9	64.5	114.8	4.40	4.19	
921.0	19.90	30.10	906.8	104.1	70.0	125.4	2.84	2.50	
953.0	20.60	31.60	936.9	113.6	75.7	136.5	2.72	2.19	
985.0	20.50	33.10	966.8	123.1	81.7	147.7	1.67	-0.31	
1,017.0	21.30	32.70	996.7	132.7	87.9	159.1	2.54	2.50	
1,048.0	22.10	34.90	1,025.5	142.2	94.3	170.6	3.68	2.58	
1,080.0	23.10	35.30	1,055.1	152.3	101.3	182.9	3.16	3.12	
1,112.0	24.50	34.00	1,084.3	162.9	108.7	195.8	4.67	4.37	
1,143.0	26.20	36.00	1,112.3	173.7	116.3	209.0	6.14	5.48	
1,175.0	26.70	36.00	1,141.0	185.3	124.7	223.3	1.56	1.56	
1,271.0	26.80	36.30	1,226.7	220.2	150.2	266.5	0.18	0.10	
1,366.0	27.30	35.90	1,311.3	255.1	175.6	309.7	0.56	0.53	
1,461.0	27.30	36.70	1,395.8	290.2	201.4	353.2	0.39	0.00	
1,557.0	27.90	39.20	1,480.8	325.2	228.8	397.6	1.36	0.62	
1,652.0	27.70	37.70	1,564.9	359.9	256.3	441.9	0.77	-0.21	
1,693.0	26.90	34.70	1,601.3	375.1	267.4	460.7	3.88	-1.95	
1,845.0	25.40	37.80	1,737.7	429.1	307.0	527.6	1.33	-0.99	
1,940.0	25.90	33.90	1,823.4	462.5	331.1	568.7	1.85	0.53	
2,035.0	24.80	29.40	1,909.2	497.0	352.4	609.3	2.33	-1.16	
2,130.0	25.60	32.20	1,995.2	531.8	373.1	649.6	1.51	0.84	
2,226.0	26.20	32.90	2,081.6	567.1	395.7	691.5	0.70	0.62	
2,321.0	27.60	33.80	2,166.3	603.0	419.3	734.5	1.53	1.47	
2,417.0	27.50	36.30	2,251.4	639.4	444.8	778.9	1.21	-0.10	
2,512.0	28.10	36.70	2,335.4	675.0	471.2	823.2	0.66	0.63	
2,607.0	28.60	34.60	2,419.0	711.6	497.5	868.3	1.17	0.53	
2,702.0	26.20	35.70	2,503.4	747.4	522.6	912.0	2.58	-2.53	
2,798.0	25.50	36.60	2,589.8	781.2	547.3	953.8	0.84	-0.73	
2,892.0	25.30	36.50	2,674.7	813.6	571.3	994.1	0.22	-0.21	
2,986.0	24.60	36.20	2,759.9	845.5	594.8	1,033.8	0.76	-0.74	
3,081.0	23.40	36.00	2,846.7	876.7	617.6	1,072.4	1.27	-1.26	
3,177.0	23.90	34.90	2,934.6	908.1	639.9	1,110.9	0.69	0.52	
3,272.0	24.80	36.40	3,021.2	939.9	662.7	1,150.1	1.15	0.95	
3,367.0	24.60	37.10	3,107.5	971.7	686.5	1,189.7	0.37	-0.21	
3,462.0	24.30	36.50	3,194.0	1,003.2	710.1	1,229.0	0.41	-0.32	
3,558.0	24.70	34.10	3,281.3	1,035.7	733.0	1,268.8	1.12	0.42	
3,653.0	25.30	35.10	3,367.4	1,068.7	755.8	1,309.0	0.77	0.63	
3,749.0	24.50	34.40	3,454.5	1,102.0	778.9	1,349.4	0.89	-0.83	
3,845.0	24.90	37.00	3,541.7	1,134.5	802.3	1,389.5	1.21	0.42	
3,940.0	25.40	35.50	3,627.7	1,167.1	826.2	1,429.9	0.85	0.53	
4,035.0	26.60	34.40	3,713.1	1,201.2	850.0	1,471.5	1.36	1.26	
4,130.0	25.80	34.30	3,798.3	1,235.8	873.7	1,513.4	0.84	-0.84	
4,225.0	24.70	34.10	3,884.3	1,269.4	896.5	1,554.0	1.16	-1.16	

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well NP EF15B-21 C28 595
Project:	North Piceance	TVD Reference:	KBE @ 6197.0ft (Nabors M13)
Site:	C28 595 (S28-T5S-R95W)	MVD Reference:	KBE @ 6197.0ft (Nabors M13)
Well:	NP EF15B-21 C28 595	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
4,321.0	26.50	32.30	3,970.8	1,304.1	919.2	1,595.4	2.04	1.87	
4,416.0	25.10	32.90	4,056.4	1,338.9	941.4	1,636.7	1.50	-1.47	
4,512.0	26.20	33.60	4,142.9	1,373.7	964.2	1,678.3	1.19	1.15	
4,607.0	25.00	33.60	4,228.6	1,407.8	986.9	1,719.3	1.26	-1.26	
4,702.0	24.70	33.80	4,314.8	1,441.1	1,009.1	1,759.2	0.33	-0.32	
4,798.0	25.50	36.00	4,401.7	1,474.4	1,032.4	1,799.9	1.28	0.83	
4,893.0	23.90	37.00	4,488.0	1,506.4	1,056.0	1,839.6	1.74	-1.68	
4,988.0	24.50	34.20	4,574.7	1,538.0	1,078.6	1,878.6	1.36	0.63	
5,083.0	24.40	36.20	4,661.2	1,570.2	1,101.3	1,917.9	0.88	-0.11	
5,178.0	25.10	36.40	4,747.4	1,602.2	1,124.8	1,957.6	0.74	0.74	
5,273.0	25.70	35.80	4,833.3	1,635.1	1,148.9	1,998.4	0.69	0.63	
5,369.0	25.40	35.30	4,919.9	1,668.8	1,172.9	2,039.8	0.38	-0.31	
5,464.0	26.00	34.20	5,005.5	1,702.7	1,196.4	2,081.0	0.81	0.63	
5,559.0	25.00	33.30	5,091.2	1,736.7	1,219.1	2,121.9	1.13	-1.05	
5,654.0	23.40	32.40	5,177.9	1,769.4	1,240.3	2,160.8	1.73	-1.68	
5,750.0	21.80	35.90	5,266.5	1,799.9	1,260.9	2,197.6	2.18	-1.67	
5,845.0	19.20	36.70	5,355.5	1,826.7	1,280.6	2,230.9	2.75	-2.74	
5,941.0	17.50	36.10	5,446.6	1,851.1	1,298.6	2,261.1	1.78	-1.77	
6,036.0	14.60	37.60	5,537.9	1,872.1	1,314.3	2,287.4	3.08	-3.05	
6,131.0	12.70	29.20	5,630.2	1,890.7	1,326.7	2,309.7	2.89	-2.00	
6,227.0	9.40	35.80	5,724.4	1,906.3	1,336.4	2,328.1	3.68	-3.44	
6,322.0	6.80	34.40	5,818.4	1,917.2	1,344.1	2,341.4	2.74	-2.74	
6,418.0	3.60	27.90	5,914.0	1,924.6	1,348.8	2,350.1	3.38	-3.33	
6,512.0	1.30	292.70	6,008.0	1,927.6	1,349.2	2,352.8	4.19	-2.45	
6,607.0	1.30	262.50	6,103.0	1,927.9	1,347.1	2,351.9	0.71	0.00	
6,703.0	0.70	288.60	6,198.9	1,927.9	1,345.5	2,351.0	0.77	-0.62	
6,893.0	0.10	38.00	6,388.9	1,928.4	1,344.5	2,350.8	0.39	-0.32	
6,989.0	0.20	317.40	6,484.9	1,928.6	1,344.4	2,350.9	0.22	0.10	
7,084.0	0.30	260.10	6,579.9	1,928.7	1,344.0	2,350.8	0.27	0.11	
7,179.0	0.50	211.00	6,674.9	1,928.3	1,343.6	2,350.2	0.40	0.21	
7,275.0	0.70	231.50	6,770.9	1,927.5	1,342.9	2,349.2	0.30	0.21	
7,370.0	0.40	71.10	6,865.9	1,927.3	1,342.8	2,348.9	1.14	-0.32	
7,466.0	0.30	171.50	6,961.9	1,927.1	1,343.1	2,349.0	0.56	-0.10	
7,561.0	0.90	66.30	7,056.9	1,927.2	1,343.8	2,349.5	1.07	0.63	
7,657.0	0.50	94.20	7,152.9	1,927.5	1,344.9	2,350.3	0.54	-0.42	
7,752.0	0.90	138.10	7,247.9	1,926.9	1,345.9	2,350.4	0.68	0.42	
7,847.0	1.00	174.50	7,342.9	1,925.5	1,346.4	2,349.6	0.63	0.11	
7,943.0	0.90	136.70	7,438.9	1,924.1	1,347.0	2,348.8	0.65	-0.10	
8,038.0	0.80	96.70	7,533.9	1,923.5	1,348.2	2,348.9	0.62	-0.11	
8,134.0	0.40	114.10	7,629.9	1,923.3	1,349.2	2,349.3	0.45	-0.42	
8,229.0	0.30	117.80	7,724.9	1,923.0	1,349.7	2,349.4	0.11	-0.11	
8,325.0	0.30	258.70	7,820.9	1,922.9	1,349.7	2,349.3	0.59	0.00	
8,420.0	0.80	258.20	7,915.9	1,922.7	1,348.8	2,348.6	0.53	0.53	
8,515.0	0.20	255.70	8,010.9	1,922.5	1,348.0	2,348.0	0.63	-0.63	
8,611.0	1.10	276.40	8,106.8	1,922.6	1,346.9	2,347.4	0.95	0.94	
8,706.0	1.50	266.80	8,201.8	1,922.6	1,344.7	2,346.2	0.48	0.42	
8,833.0	1.80	267.50	8,328.8	1,922.4	1,341.1	2,344.0	0.24	0.24	
8,928.0	1.50	295.60	8,423.7	1,922.9	1,338.5	2,342.9	0.90	-0.32	
9,024.0	1.40	340.40	8,519.7	1,924.5	1,337.0	2,343.4	1.16	-0.10	
9,119.0	0.50	273.20	8,614.7	1,925.7	1,336.2	2,343.8	1.36	-0.95	
9,214.0	0.70	292.40	8,709.7	1,925.9	1,335.2	2,343.5	0.30	0.21	
9,309.0	0.60	24.90	8,804.7	1,926.6	1,334.9	2,343.8	0.99	-0.11	
9,404.0	0.60	0.20	8,899.7	1,927.5	1,335.1	2,344.7	0.27	0.00	

Cathedral Energy Services

Survey Report

Company: EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference: Well NP EF15B-21 C28 595
Project: North Piceance	TVD Reference: KBE @ 6197.0ft (Nabors M13)
Site: C28 595 (S28-T5S-R95W)	MD Reference: KBE @ 6197.0ft (Nabors M13)
Well: NP EF15B-21 C28 595	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
9,499.0	0.90	257.50	8,994.7	1,927.9	1,334.4	2,344.6	1.25	0.32	
9,595.0	0.60	308.80	9,090.7	1,928.0	1,333.2	2,344.1	0.73	-0.31	
9,690.0	0.40	172.60	9,185.7	1,928.0	1,332.9	2,343.9	0.98	-0.21	
9,785.0	0.50	64.30	9,280.7	1,927.9	1,333.3	2,344.0	0.77	0.11	Last Cathedral Survey @ 9785' MD Projection to TD @ 9917' MD
9,917.0	0.50	64.30	9,412.7	1,928.3	1,334.3	2,345.0	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
C28 595 EF15B-21 TGT - survey misses target center by 13.5ft at 6590.8ft MD (6086.8 TVD, 1927.9 N, 1347.5 E) - Point	0.00	0.00	6,087.0	1,934.7	1,359.1	1,651,393.94	2,279,892.89	39° 35' 38.58 N	108° 3' 20.41 W
C28 595 EF15B-21 BHL - survey misses target center by 234.5ft at 9917.0ft MD (9412.7 TVD, 1928.3 N, 1334.3 E) - Rectangle (sides W30.0 H50.0 D0.0)	0.00	0.00	9,647.0	1,924.7	1,342.2	1,651,384.43	2,279,875.64	39° 35' 38.48 N	108° 3' 20.63 W

Survey Annotations				
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates		Comment
		+N/-S (ft)	+E/-W (ft)	
9,785.0	9,280.7	1,927.9	1,333.3	Last Cathedral Survey @ 9785' MD
9,917.0	9,412.7	1,928.3	1,334.3	Projection to TD @ 9917' MD

Checked By: _____ Approved By: _____ Date: _____