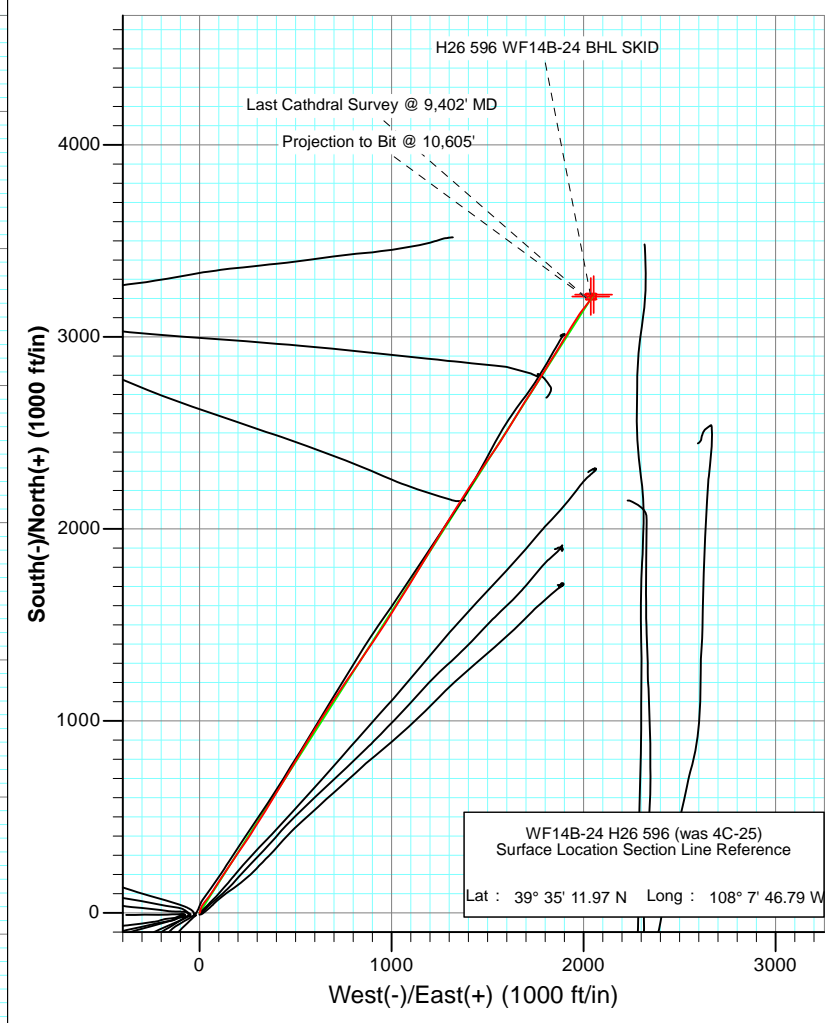
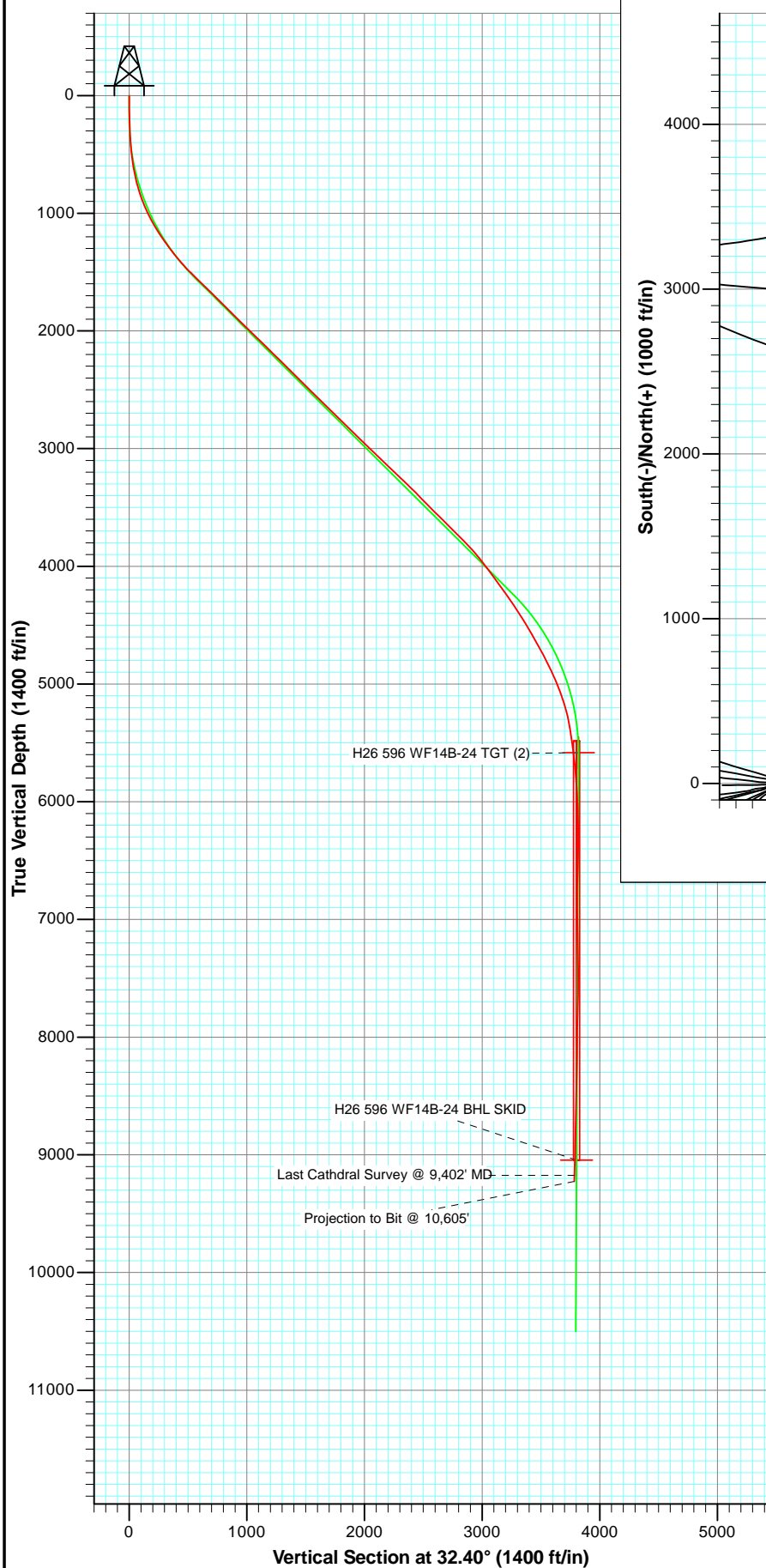




Project: North Piceance
Site: H26 596
Well: WF14B-24 H26 596 (was 4C-25)
Wellbore: DD
Plan: FINAL



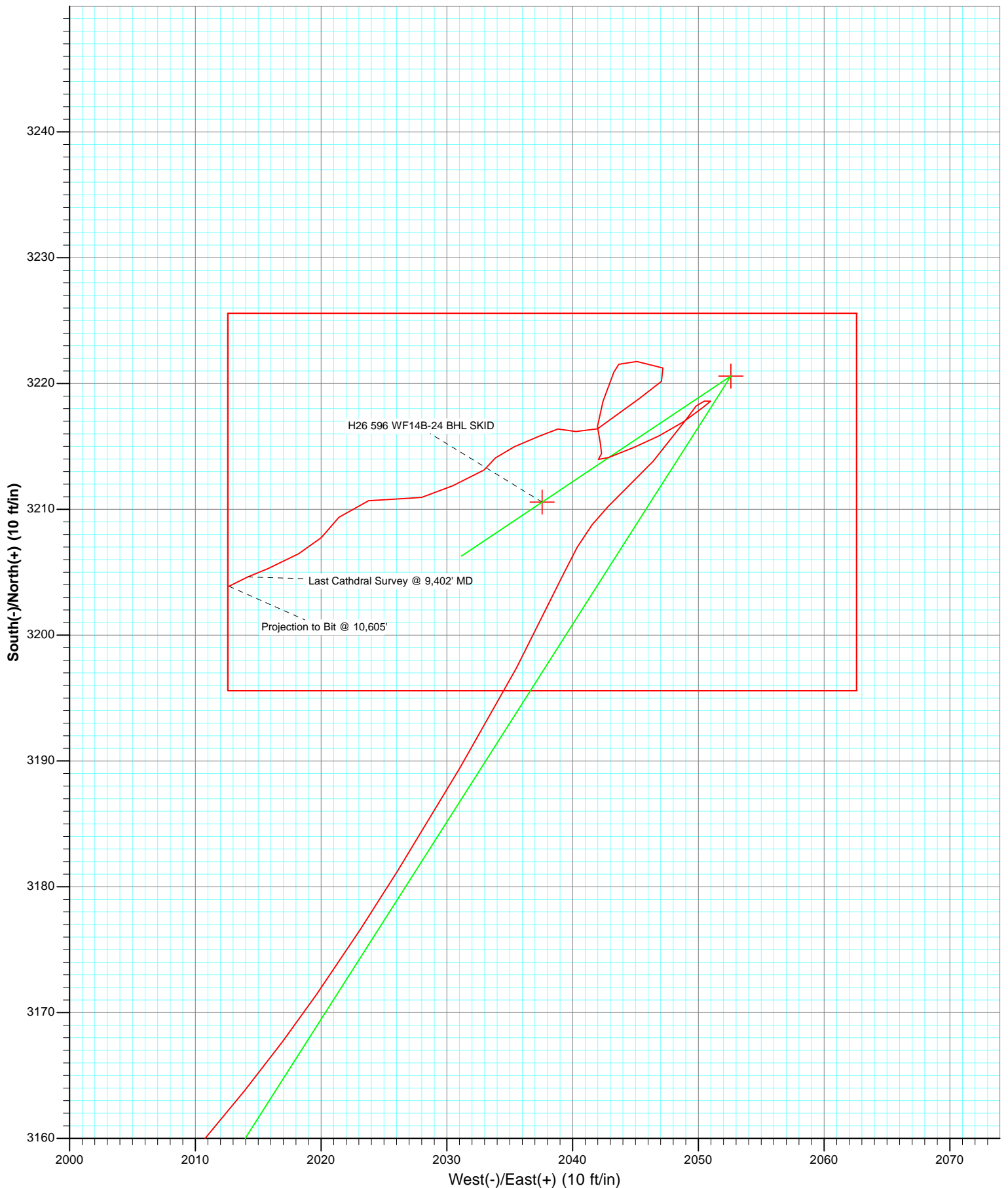
Azimuths to True North
Magnetic North: 10.43°

Magnetic Field
Strength: 52284.8nT
Dip Angle: 65.79°
Date: 6/1/2011
Model: IGRF2010

DD							
WF14B-24 H26 596 (was 4C-25)							
115222/D 7588 (SH); LR 115376/D 108655 (MH); SC							
WELL @ 6114.0ft (Original Well Elev)							
GL @ 6052.0							
North American Datum 1983							
Well WF14B-24 H26 596 (was 4C-25), True North							
Type	Target	Azimuth	Origin Type	N/S	E/W	From TVD	
	H26 596 WF14B-24 BHL SKID	32.40	Slot	0.0	0.0	0.0	
	TVD	+N/-S	+E/-W	Latitude	Longitude		
H26 596 WF14B-24 TGT (2)	5584.0	3220.6	2052.6	39° 35' 43.80 N	108° 7' 20.57 W		
H26 596 WF14B-24 BHL SKID	9044.0	3210.6	2037.6	39° 35' 43.70 N	108° 7' 20.76 W		



Project: North Piceance
Site: H26 596
Well: WF14B-24 H26 596 (was 4C-25)
Wellbore: DD
Plan: FINAL



Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well WF14B-24 H26 596 (was 4C-25)
Project:	North Piceance	TVD Reference:	WELL @ 6114.0ft (Original Well Elev)
Site:	H26 596	MD Reference:	WELL @ 6114.0ft (Original Well Elev)
Well:	WF14B-24 H26 596 (was 4C-25)	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	USA EDM 5000 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		H26 596			
Site Position:		Northing:	1,649,294.53 ft	Latitude:	39° 35' 11.93 N
From:	Map	Easting:	2,258,943.98 ft	Longitude:	108° 7' 47.14 W
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	-1.66 °

Well	WF14B-24 H26 596 (was 4C-25)					
Well Position	+N/-S	0.0 ft	Northing:	1,649,297.76 ft	Latitude:	39° 35' 11.97 N
	+E/-W	0.0 ft	Easting:	2,258,971.48 ft	Longitude:	108° 7' 46.79 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	6,092.0 ft

Wellbore	DD				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	6/1/2011	10.43	65.79	52,285

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	32.40	

Survey Program	Date	11/2/2011			
From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description	
230.0	1,710.0	Survey #1 (DD)	MWD	Geolink MWD	
1,798.0	10,605.0	Survey #2 (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		
230.0	1.90	41.30	230.0	2.9	2.5	3.8	0.83	0.83		
261.0	2.40	353.90	260.9	3.9	2.8	4.8	5.77	1.61		
291.0	2.60	18.20	290.9	5.2	2.9	5.9	3.57	0.67		
322.0	3.00	28.60	321.9	6.5	3.5	7.4	2.08	1.29		
352.0	3.60	3.60	351.8	8.2	4.0	9.0	5.14	2.00		
382.0	4.20	354.60	381.8	10.2	3.9	10.7	2.85	2.00		
412.0	4.80	19.10	411.7	12.5	4.2	12.8	6.65	2.00		
443.0	5.40	22.00	442.5	15.1	5.2	15.5	2.11	1.94		
474.0	6.00	10.00	473.4	18.0	6.0	18.4	4.29	1.94		
504.0	6.70	18.20	503.2	21.2	6.9	21.6	3.81	2.33		
554.0	8.20	19.20	552.8	27.4	8.9	27.9	3.01	3.00		

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well WF14B-24 H26 596 (was 4C-25)
Project:	North Piceance	TVD Reference:	WELL @ 6114.0ft (Original Well Elev)
Site:	H26 596	MD Reference:	WELL @ 6114.0ft (Original Well Elev)
Well:	WF14B-24 H26 596 (was 4C-25)	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	USA EDM 5000 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
600.0	9.20	24.90	598.3	33.8	11.6	34.7	2.87	2.17	
645.0	10.40	30.20	642.6	40.6	15.1	42.4	3.33	2.67	
691.0	11.70	36.90	687.7	47.9	20.0	51.2	3.97	2.83	
737.0	13.70	39.50	732.6	55.8	26.3	61.2	4.52	4.35	
783.0	15.50	38.90	777.1	64.8	33.6	72.7	3.93	3.91	
829.0	17.70	36.90	821.2	75.2	41.7	85.8	4.94	4.78	
874.0	19.90	36.20	863.8	86.8	50.3	100.3	4.91	4.89	
920.0	21.90	34.50	906.8	100.2	59.8	116.7	4.54	4.35	
966.0	23.80	33.40	949.2	115.0	69.7	134.5	4.23	4.13	
1,012.0	25.90	34.40	990.9	131.1	80.5	153.8	4.66	4.57	
1,058.0	27.50	32.10	1,032.0	148.4	91.9	174.5	4.14	3.48	
1,103.0	29.10	32.00	1,071.6	166.5	103.2	195.8	3.56	3.56	
1,149.0	30.60	32.30	1,111.5	185.8	115.4	218.7	3.28	3.26	
1,195.0	32.20	33.20	1,150.8	206.0	128.3	242.7	3.62	3.48	
1,241.0	33.30	33.80	1,189.5	226.7	142.1	267.6	2.49	2.39	
1,286.0	34.50	34.40	1,226.8	247.5	156.1	292.7	2.77	2.67	
1,332.0	35.80	34.40	1,264.4	269.4	171.1	319.1	2.83	2.83	
1,378.0	36.80	34.70	1,301.5	291.8	186.5	346.3	2.21	2.17	
1,424.0	38.00	34.60	1,338.0	314.8	202.4	374.3	2.61	2.61	
1,470.0	39.80	34.10	1,373.8	338.6	218.7	403.1	3.97	3.91	
1,515.0	41.00	34.00	1,408.1	362.8	235.1	432.3	2.67	2.67	
1,561.0	42.60	33.90	1,442.4	388.2	252.2	462.9	3.48	3.48	
1,607.0	43.70	33.00	1,476.0	414.5	269.5	494.4	2.74	2.39	
1,653.0	45.20	32.30	1,508.8	441.6	286.9	526.6	3.43	3.26	
1,710.0	45.90	32.70	1,548.7	475.9	308.8	567.3	1.33	1.23	
1,798.0	46.00	31.60	1,609.9	529.5	342.4	630.5	0.91	0.11	
1,890.0	45.00	31.10	1,674.4	585.5	376.6	696.1	1.15	-1.09	
1,981.0	44.90	30.40	1,738.8	640.8	409.4	760.4	0.55	-0.11	
2,073.0	45.00	31.20	1,803.9	696.6	442.7	825.4	0.62	0.11	
2,165.0	46.10	31.70	1,868.3	752.6	477.0	891.0	1.26	1.20	
2,256.0	45.70	31.00	1,931.7	808.4	511.0	956.4	0.71	-0.44	
2,348.0	45.50	30.30	1,996.0	865.0	544.5	1,022.1	0.59	-0.22	
2,439.0	46.00	32.30	2,059.5	920.7	578.3	1,087.2	1.67	0.55	
2,531.0	45.40	31.50	2,123.8	976.6	613.1	1,153.1	0.90	-0.65	
2,623.0	45.10	32.60	2,188.6	1,031.9	647.8	1,218.4	0.91	-0.33	
2,714.0	45.90	33.70	2,252.3	1,086.3	683.3	1,283.3	1.23	0.88	
2,806.0	44.80	33.40	2,317.0	1,140.8	719.5	1,348.7	1.22	-1.20	
2,897.0	45.60	34.70	2,381.1	1,194.3	755.6	1,413.3	1.34	0.88	
2,989.0	45.00	34.30	2,445.8	1,248.2	792.7	1,478.6	0.72	-0.65	
3,080.0	46.10	34.20	2,509.5	1,301.9	829.2	1,543.6	1.21	1.21	
3,172.0	45.40	34.20	2,573.7	1,356.4	866.3	1,609.4	0.76	-0.76	
3,264.0	46.30	33.50	2,637.8	1,411.2	903.0	1,675.4	1.12	0.98	
3,355.0	45.00	33.30	2,701.4	1,465.6	938.9	1,740.5	1.44	-1.43	
3,447.0	44.40	32.50	2,766.8	1,519.9	974.0	1,805.2	0.89	-0.65	
3,538.0	46.40	32.50	2,830.7	1,574.5	1,008.8	1,870.0	2.20	2.20	
3,630.0	45.50	32.10	2,894.7	1,630.4	1,044.2	1,936.1	1.03	-0.98	
3,721.0	46.50	31.60	2,957.9	1,686.0	1,078.7	2,001.6	1.17	1.10	
3,813.0	46.20	31.00	3,021.4	1,742.9	1,113.3	2,068.1	0.57	-0.33	
3,904.0	45.50	31.20	3,084.8	1,798.8	1,147.0	2,133.4	0.79	-0.77	
3,996.0	46.80	30.90	3,148.5	1,855.6	1,181.2	2,199.7	1.43	1.41	
4,088.0	47.00	32.20	3,211.4	1,912.9	1,216.4	2,266.9	1.05	0.22	
4,180.0	46.40	31.30	3,274.5	1,969.8	1,251.6	2,333.8	0.97	-0.65	
4,271.0	45.40	31.50	3,337.8	2,025.6	1,285.7	2,399.2	1.11	-1.10	

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well WF14B-24 H26 596 (was 4C-25)
Project:	North Piceance	TVD Reference:	WELL @ 6114.0ft (Original Well Elev)
Site:	H26 596	MD Reference:	WELL @ 6114.0ft (Original Well Elev)
Well:	WF14B-24 H26 596 (was 4C-25)	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	USA EDM 5000 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
4,363.0	43.60	31.20	3,403.4	2,080.7	1,319.2	2,463.6	1.97	-1.96	
4,454.0	45.00	32.00	3,468.6	2,134.8	1,352.5	2,527.2	1.66	1.54	
4,546.0	45.00	33.20	3,533.6	2,189.6	1,387.6	2,592.2	0.92	0.00	
4,637.0	45.70	34.50	3,597.6	2,243.4	1,423.6	2,656.9	1.27	0.77	
4,729.0	44.40	33.80	3,662.6	2,297.2	1,460.2	2,722.0	1.51	-1.41	
4,821.0	45.40	34.00	3,727.7	2,351.1	1,496.4	2,786.9	1.10	1.09	
4,912.0	44.40	33.90	3,792.2	2,404.4	1,532.3	2,851.2	1.10	-1.10	
5,004.0	42.30	33.40	3,859.1	2,457.0	1,567.3	2,914.3	2.31	-2.28	
5,095.0	39.00	31.80	3,928.1	2,506.9	1,599.2	2,973.6	3.80	-3.63	
5,187.0	37.50	31.50	4,000.4	2,555.4	1,629.1	3,030.5	1.64	-1.63	
5,278.0	36.50	31.20	4,073.0	2,602.2	1,657.6	3,085.3	1.12	-1.10	
5,370.0	35.70	32.60	4,147.4	2,648.2	1,686.2	3,139.5	1.25	-0.87	
5,461.0	35.80	33.40	4,221.2	2,692.8	1,715.2	3,192.6	0.53	0.11	
5,553.0	34.20	32.00	4,296.6	2,737.2	1,743.7	3,245.4	1.95	-1.74	
5,644.0	33.20	31.70	4,372.3	2,780.0	1,770.4	3,295.9	1.11	-1.10	
5,736.0	32.30	31.60	4,449.7	2,822.4	1,796.5	3,345.6	0.98	-0.98	
5,828.0	31.10	30.60	4,527.9	2,863.8	1,821.5	3,394.0	1.42	-1.30	
5,919.0	29.40	32.80	4,606.6	2,902.8	1,845.5	3,439.8	2.23	-1.87	
6,010.0	28.30	32.50	4,686.3	2,939.8	1,869.2	3,483.7	1.22	-1.21	
6,102.0	27.20	31.30	4,767.7	2,976.1	1,891.9	3,526.5	1.34	-1.20	
6,194.0	26.60	30.10	4,849.7	3,011.9	1,913.1	3,568.1	0.88	-0.65	
6,285.0	24.30	30.50	4,931.9	3,045.7	1,932.8	3,607.2	2.53	-2.53	
6,377.0	22.30	33.00	5,016.4	3,076.6	1,951.9	3,643.6	2.42	-2.17	
6,468.0	19.50	32.60	5,101.4	3,103.9	1,969.5	3,676.1	3.08	-3.08	
6,560.0	16.00	36.80	5,189.0	3,127.0	1,985.4	3,704.1	4.05	-3.80	
6,651.0	12.80	36.90	5,277.1	3,145.1	1,999.0	3,726.6	3.52	-3.52	
6,743.0	10.50	40.30	5,367.2	3,159.7	2,010.5	3,745.1	2.61	-2.50	
6,834.0	8.30	34.60	5,457.0	3,171.4	2,019.6	3,759.9	2.62	-2.42	
6,926.0	6.40	31.60	5,548.2	3,181.2	2,026.1	3,771.6	2.11	-2.07	
7,017.0	5.70	30.80	5,638.7	3,189.4	2,031.0	3,781.2	0.77	-0.77	
7,109.0	5.70	28.20	5,730.3	3,197.4	2,035.5	3,790.3	0.28	0.00	
7,200.0	4.80	24.60	5,820.9	3,204.8	2,039.3	3,798.6	1.05	-0.99	
7,292.0	3.40	46.10	5,912.7	3,210.2	2,042.8	3,805.1	2.23	-1.52	
7,383.0	3.00	43.40	6,003.5	3,213.8	2,046.4	3,810.0	0.47	-0.44	
7,475.0	2.20	31.70	6,095.4	3,217.1	2,049.0	3,814.2	1.04	-0.87	
7,567.0	0.70	87.40	6,187.4	3,218.6	2,050.5	3,816.3	2.06	-1.63	
7,658.0	0.10	237.50	6,278.4	3,218.6	2,051.0	3,816.5	0.87	-0.66	
7,750.0	0.80	230.30	6,370.4	3,218.1	2,050.4	3,815.8	0.76	0.76	
7,841.0	1.70	234.70	6,461.4	3,217.0	2,048.8	3,814.0	0.99	0.99	
7,933.0	1.10	248.70	6,553.3	3,215.8	2,046.9	3,812.0	0.75	-0.65	
8,024.0	1.60	242.90	6,644.3	3,214.9	2,044.9	3,810.2	0.57	0.55	
8,116.0	1.20	254.90	6,736.3	3,214.1	2,042.9	3,808.4	0.54	-0.43	
8,208.0	0.20	50.60	6,828.3	3,214.0	2,042.1	3,807.8	1.51	-1.09	
8,299.0	0.50	18.50	6,919.3	3,214.4	2,042.3	3,808.4	0.38	0.33	
8,394.0	0.60	332.40	7,014.3	3,215.3	2,042.2	3,809.0	0.46	0.11	
8,486.0	1.10	359.70	7,106.3	3,216.6	2,042.0	3,810.0	0.68	0.54	
8,578.0	1.50	21.70	7,198.2	3,218.6	2,042.4	3,811.9	0.69	0.43	
8,669.0	1.60	19.30	7,289.2	3,220.9	2,043.3	3,814.3	0.13	0.11	
8,761.0	1.80	103.80	7,381.2	3,221.8	2,045.1	3,816.0	2.49	0.22	
8,852.0	0.90	104.50	7,472.2	3,221.2	2,047.2	3,816.7	0.99	-0.99	
8,944.0	1.50	222.80	7,564.2	3,220.2	2,047.1	3,815.8	2.26	0.65	
9,035.0	1.30	242.70	7,655.1	3,218.8	2,045.3	3,813.7	0.57	-0.22	
9,127.0	1.10	224.20	7,747.1	3,217.7	2,043.8	3,811.9	0.47	-0.22	

Cathedral Energy Services

Survey Report

Company:	EnCana Oil & Gas (USA) Inc	Local Co-ordinate Reference:	Well WF14B-24 H26 596 (was 4C-25)
Project:	North Piceance	TVD Reference:	WELL @ 6114.0ft (Original Well Elev)
Site:	H26 596	MD Reference:	WELL @ 6114.0ft (Original Well Elev)
Well:	WF14B-24 H26 596 (was 4C-25)	North Reference:	True
Wellbore:	DD	Survey Calculation Method:	Minimum Curvature
Design:	DD	Database:	USA EDM 5000 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
9,219.0	1.70	240.50	7,839.1	3,216.4	2,042.0	3,809.9	0.78	0.65	
9,310.0	0.90	308.20	7,930.1	3,216.2	2,040.3	3,808.7	1.75	-0.88	
9,402.0	1.10	253.60	8,022.0	3,216.4	2,038.8	3,808.2	1.02	0.22	
9,494.0	0.90	243.70	8,114.0	3,215.8	2,037.4	3,806.9	0.29	-0.22	
9,585.0	1.80	248.70	8,205.0	3,215.0	2,035.4	3,805.1	1.00	0.99	
9,677.0	0.50	204.10	8,297.0	3,214.1	2,033.9	3,803.5	1.62	-1.41	
9,768.0	1.20	231.30	8,388.0	3,213.1	2,033.0	3,802.3	0.87	0.77	
9,860.0	2.30	249.30	8,479.9	3,211.9	2,030.5	3,799.9	1.32	1.20	
9,952.0	1.00	250.40	8,571.9	3,211.0	2,028.0	3,797.8	1.41	-1.41	
10,043.0	1.10	280.40	8,662.9	3,210.8	2,026.4	3,796.8	0.61	0.11	
10,135.0	2.20	259.60	8,754.8	3,210.7	2,023.8	3,795.3	1.34	1.20	
10,226.0	1.50	212.60	8,845.8	3,209.4	2,021.4	3,792.9	1.77	-0.77	
10,318.0	1.20	232.10	8,937.8	3,207.8	2,020.0	3,790.8	0.59	-0.33	
10,409.0	1.60	236.10	9,028.7	3,206.5	2,018.2	3,788.7	0.45	0.44	
10,501.0	1.80	251.40	9,120.7	3,205.3	2,015.8	3,786.4	0.54	0.22	
10,555.0	1.90	243.70	9,174.7	3,204.6	2,014.2	3,785.0	0.50	0.19	Last Cathdral Survey @ 9,402' MD
10,605.0	1.90	243.70	9,224.6	3,203.9	2,012.7	3,783.6	0.00	0.00	Projection to Bit @ 10,605'

Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
H26 596 WF14B-24 TG ¹ - hit/miss target - Shape - actual wellpath misses target center by 43.3ft at 6966.6ft MD (5588.6 TVD, 3185.0 N, 2028.4 E) - Point	0.00	0.00	5,584.0	3,220.6	2,052.6	1,652,457.60	2,261,116.43	39° 35' 43.80 N	108° 7' 20.57 W
H26 596 WF14B-24 BHI - actual wellpath misses target center by 20.2ft at 10423.7ft MD (9043.4 TVD, 3206.2 N, 2017.9 E) - Rectangle (sides W30.0 H50.0 D0.0)	0.00	0.00	9,044.0	3,210.6	2,037.6	1,652,448.02	2,261,101.14	39° 35' 43.70 N	108° 7' 20.76 W
H26 596 WF14B-24 TG ¹ - actual wellpath misses target center by 5.5ft at 7463.8ft MD (6084.2 TVD, 3216.7 N, 2048.8 E) - Point	0.00	0.00	6,084.0	3,220.6	2,052.6	1,652,457.60	2,261,116.43	39° 35' 43.80 N	108° 7' 20.57 W

Design Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
10,555.0	9,174.7	3,204.6	2,014.2	Last Cathdral Survey @ 9,402' MD	
10,605.0	9,224.6	3,203.9	2,012.7	Projection to Bit @ 10,605'	

Checked By: _____ Approved By: _____ Date: _____