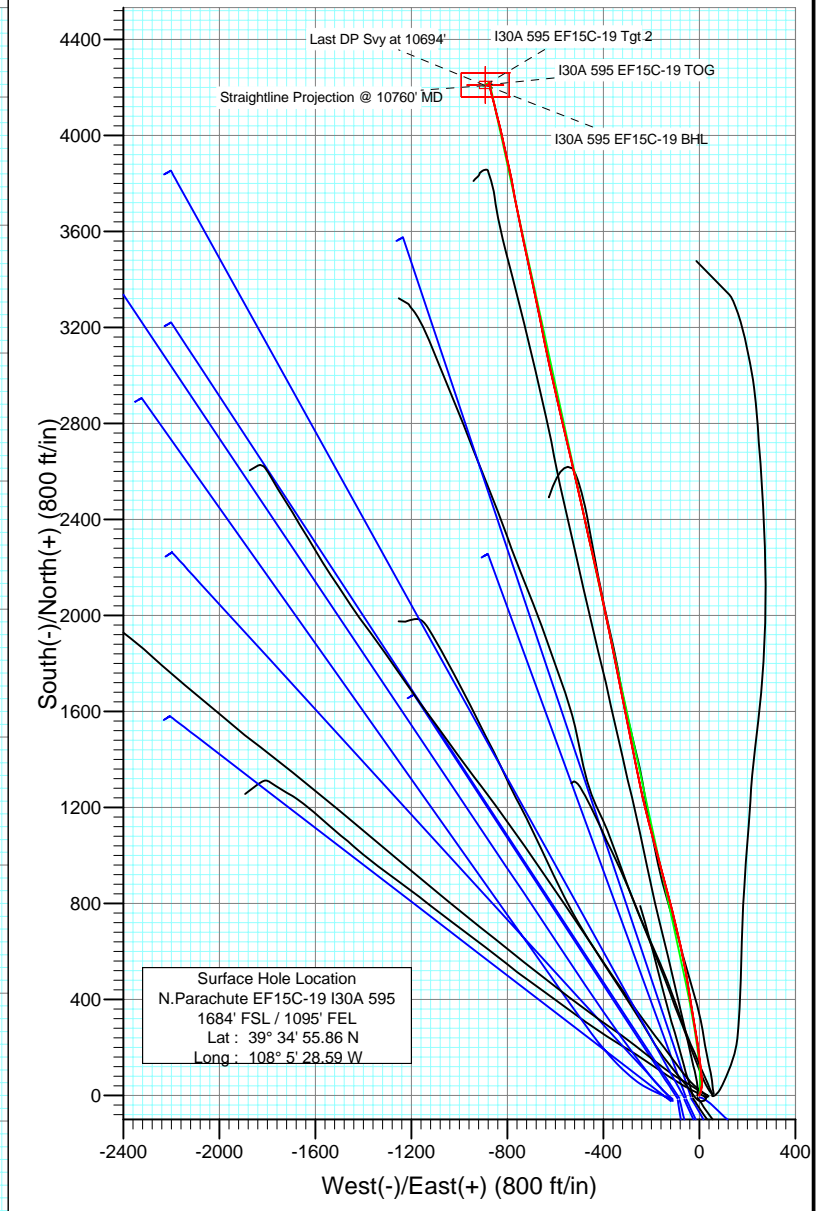
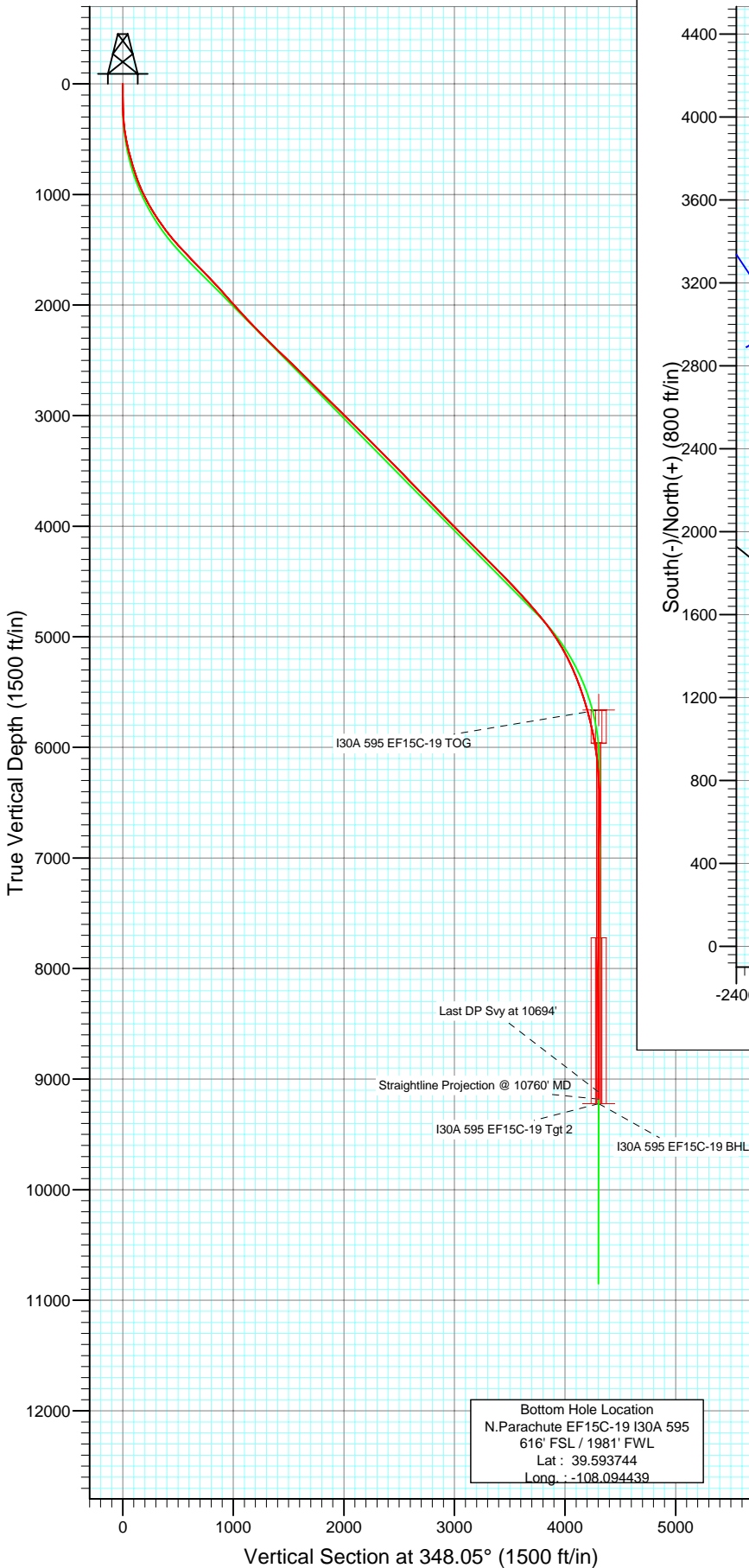




Project: North Piceance  
 Site: I30A 595 Pad (NESE Sec30-T5S-R95W)  
 Well: N.Parachute EF15C-19 I30A 595  
 Wellbore: DD  
 Design: Final Survey



Azimuths to True North  
 Magnetic North: 10.84°

Magnetic Field  
 Strength: 52658.9snT  
 Dip Angle: 65.89°  
 Date: 12/15/2007  
 Model: IGRF200510

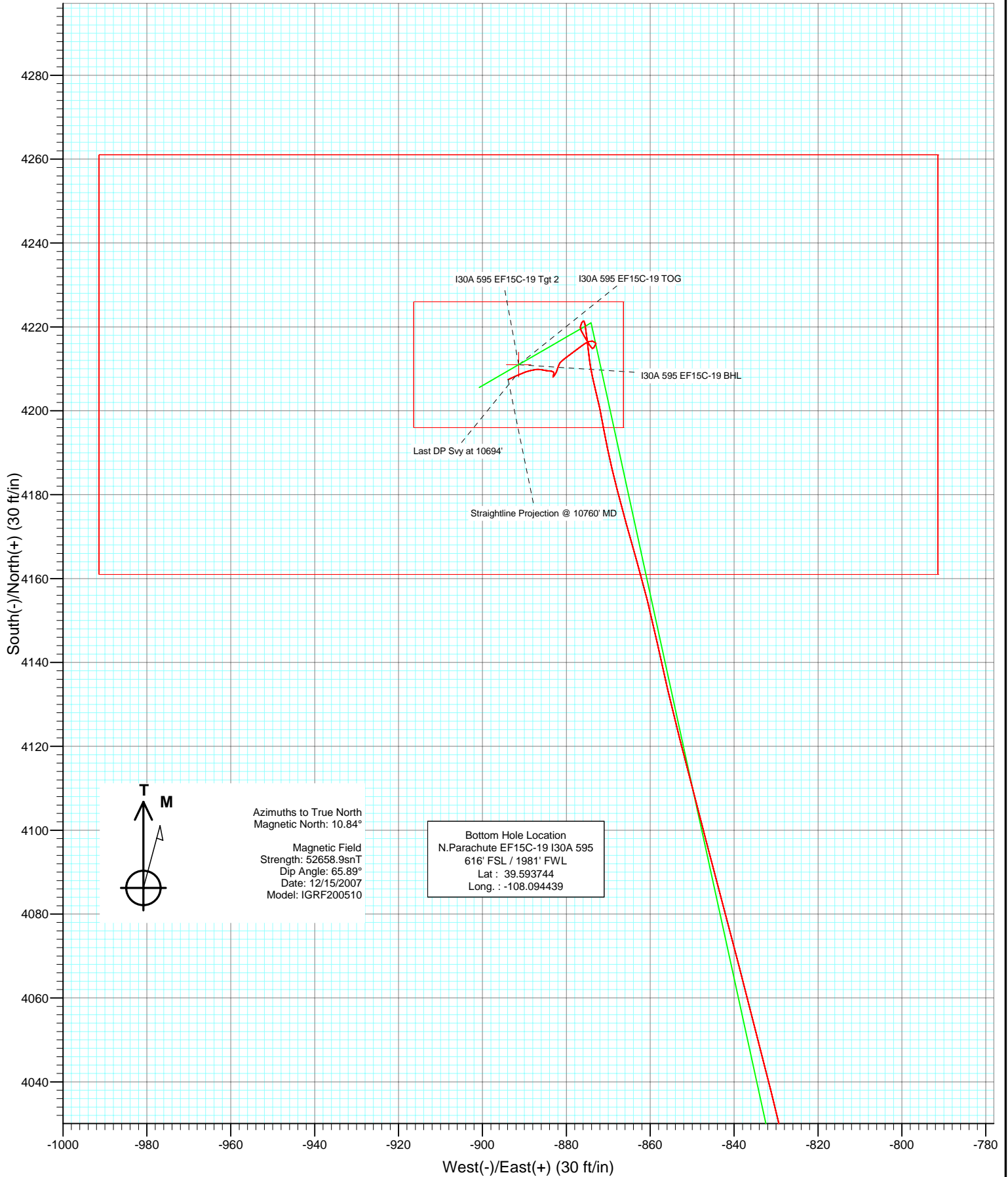
DESIGN DETAILS: DD

Job#:75534;DS  
 KBE @ 5957.0ft (Patterson 177)

Target	Azimuth	Origin	N/S	E/W	From TVD
I30A 595 EF15C-19 BHL	348.05	Slot	0.0	0.0	0.0



Project: North Piceance  
Site: I30A 595 Pad (NESE Sec30-T5S-R95W)  
Well: N.Parachute EF15C-19 I30A 595  
Wellbore: DD  
Design: Final Zoom



# Cathedral Energy Services

## Survey Report

<b>Company:</b> EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b> Well N.Parachute EF15C-19 I30A 595
<b>Project:</b> North Piceance	<b>TVD Reference:</b> KBE @ 5957.0ft (Patterson 177)
<b>Site:</b> I30A 595 Pad (NESE Sec30-T5S-R95W)	<b>MD Reference:</b> KBE @ 5957.0ft (Patterson 177)
<b>Well:</b> N.Parachute EF15C-19 I30A 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 2003.16 US Multi User 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> I30A 595 Pad (NESE Sec30-T5S-R95W)					
<b>Site Position:</b>	<b>Northing:</b>	1,647,351.67 ft	<b>Latitude:</b>	39° 34' 55.85 N	
<b>From:</b> Lat/Long	<b>Easting:</b>	2,269,797.10 ft	<b>Longitude:</b>	108° 5' 27.80 W	
<b>Position Uncertainty:</b> 0.0 ft	<b>Slot Radius:</b> "		<b>Grid Convergence:</b>	-1.63 °	

<b>Well</b> N.Parachute EF15C-19 I30A 595					
<b>Well Position</b>	<b>+N/-S</b>	0.0 ft	<b>Northing:</b>	1,647,354.49 ft	<b>Latitude:</b> 39° 34' 55.86 N
	<b>+E/-W</b>	0.0 ft	<b>Easting:</b>	2,269,735.14 ft	<b>Longitude:</b> 108° 5' 28.59 W
<b>Position Uncertainty</b>		0.0 ft	<b>Wellhead Elevation:</b>	ft	<b>Ground Level:</b> 5,935.0 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>
	IGRF200510	12/15/2007	10.84	65.89	52,659

<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	348.05	

<b>Survey Program</b> Date 2/1/2008					
<b>From (ft)</b>	<b>To (ft)</b>	<b>Survey (Wellbore)</b>	<b>Tool Name</b>	<b>Description</b>	
201.0	10,760.0	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	
201.0	1.00	347.40	201.0	1.7	-0.4	1.8	0.50	0.50	
265.0	3.00	36.40	265.0	3.6	0.5	3.4	3.85	3.12	
326.0	5.70	20.40	325.8	7.7	2.5	7.0	4.81	4.43	
388.0	7.60	18.50	387.4	14.5	4.9	13.2	3.08	3.06	
480.0	10.90	12.90	478.1	28.8	8.7	26.3	3.71	3.59	
575.0	13.10	0.20	571.1	48.3	10.8	45.0	3.60	2.32	
670.0	15.60	354.80	663.1	71.8	9.7	68.2	2.98	2.63	
765.0	17.30	354.80	754.2	98.6	7.2	94.9	1.79	1.79	
860.0	19.00	353.60	844.5	128.0	4.2	124.4	1.83	1.79	
955.0	23.20	352.30	933.1	161.9	0.0	158.4	4.45	4.42	
1,050.0	26.80	351.80	1,019.2	201.7	-5.6	198.5	3.80	3.79	
1,145.0	29.60	351.50	1,102.9	246.1	-12.1	243.3	2.95	2.95	

# Cathedral Energy Services

## Survey Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well N.Parachute EF15C-19 I30A 595
<b>Project:</b>	North Piceance	<b>TVD Reference:</b>	KBE @ 5957.0ft (Patterson 177)
<b>Site:</b>	I30A 595 Pad (NESE Sec30-T5S-R95W)	<b>MVD Reference:</b>	KBE @ 5957.0ft (Patterson 177)
<b>Well:</b>	N.Parachute EF15C-19 I30A 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 2003.16 US Multi User 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
1,241.0	32.00	350.50	1,185.4	294.6	-19.8	292.4	2.56	2.50	
1,336.0	35.30	350.60	1,264.4	346.6	-28.4	344.9	3.47	3.47	
1,431.0	38.30	350.40	1,340.5	402.7	-37.8	401.8	3.16	3.16	
1,526.0	40.40	350.70	1,413.9	462.1	-47.7	462.0	2.22	2.21	
1,621.0	42.20	349.30	1,485.3	523.8	-58.6	524.6	2.13	1.89	
1,716.0	44.50	349.40	1,554.4	587.9	-70.7	589.8	2.42	2.42	
1,811.0	44.60	346.70	1,622.1	653.1	-84.5	656.4	2.00	0.11	
1,906.0	43.80	346.10	1,690.2	717.5	-100.0	722.6	0.95	-0.84	
2,001.0	43.30	345.30	1,759.1	780.9	-116.2	788.0	0.78	-0.53	
2,096.0	42.90	345.60	1,828.4	843.7	-132.5	852.9	0.47	-0.42	
2,191.0	42.10	345.50	1,898.5	905.9	-148.5	917.0	0.85	-0.84	
2,286.0	42.00	345.10	1,969.0	967.4	-164.7	980.6	0.30	-0.11	
2,335.0	41.60	345.20	2,005.5	999.0	-173.0	1,013.2	0.83	-0.82	
2,414.0	41.70	344.80	2,064.6	1,049.7	-186.6	1,065.6	0.36	0.13	
2,509.0	43.40	344.50	2,134.6	1,111.7	-203.6	1,129.7	1.80	1.79	
2,604.0	43.80	346.20	2,203.3	1,175.0	-220.2	1,195.2	1.30	0.42	
2,699.0	45.30	347.20	2,271.0	1,239.9	-235.5	1,261.8	1.74	1.58	
2,794.0	45.60	348.50	2,337.7	1,306.1	-249.8	1,329.5	1.03	0.32	
2,889.0	46.30	348.90	2,403.7	1,373.0	-263.2	1,397.8	0.80	0.74	
2,984.0	45.20	348.70	2,470.0	1,439.8	-276.4	1,465.8	1.17	-1.16	
3,079.0	46.80	348.70	2,536.0	1,506.8	-289.8	1,534.1	1.68	1.68	
3,174.0	45.70	348.40	2,601.7	1,574.1	-303.4	1,602.8	1.18	-1.16	
3,269.0	44.70	348.90	2,668.7	1,640.1	-316.7	1,670.2	1.12	-1.05	
3,364.0	45.10	348.30	2,736.0	1,705.9	-329.9	1,737.2	0.61	0.42	
3,459.0	45.60	348.60	2,802.7	1,772.1	-343.4	1,804.8	0.57	0.53	
3,554.0	46.10	349.00	2,868.9	1,839.0	-356.7	1,873.0	0.61	0.53	
3,649.0	44.80	348.50	2,935.5	1,905.4	-369.9	1,940.7	1.42	-1.37	
3,744.0	46.10	348.60	3,002.2	1,971.7	-383.3	2,008.3	1.37	1.37	
3,840.0	44.60	348.60	3,069.6	2,038.7	-396.8	2,076.6	1.56	-1.56	
3,935.0	45.40	347.90	3,136.8	2,104.4	-410.5	2,143.8	0.99	0.84	
4,029.0	45.00	347.10	3,203.0	2,169.5	-424.9	2,210.5	0.74	-0.43	
4,125.0	45.00	347.70	3,270.9	2,235.8	-439.7	2,278.4	0.44	0.00	
4,220.0	45.60	346.40	3,337.8	2,301.6	-454.9	2,345.9	1.16	0.63	
4,315.0	44.60	347.40	3,404.8	2,367.1	-470.1	2,413.2	1.29	-1.05	
4,410.0	44.30	347.10	3,472.6	2,432.0	-484.8	2,479.7	0.39	-0.32	
4,505.0	44.30	347.40	3,540.6	2,496.7	-499.5	2,546.0	0.22	0.00	
4,600.0	44.30	347.70	3,608.6	2,561.5	-513.8	2,612.4	0.22	0.00	
4,695.0	43.40	347.50	3,677.1	2,625.8	-527.9	2,678.2	0.96	-0.95	
4,790.0	44.00	346.00	3,745.8	2,689.7	-542.9	2,743.8	1.26	0.63	
4,886.0	44.10	346.60	3,814.8	2,754.5	-558.7	2,810.5	0.45	0.10	
4,981.0	45.50	347.20	3,882.2	2,819.7	-573.9	2,877.4	1.54	1.47	
5,076.0	44.70	346.60	3,949.3	2,885.3	-589.2	2,944.7	0.95	-0.84	
5,171.0	45.00	346.80	4,016.6	2,950.5	-604.6	3,011.7	0.35	0.32	
5,266.0	43.90	349.00	4,084.4	3,015.5	-618.5	3,078.2	1.99	-1.16	
5,362.0	44.50	347.20	4,153.3	3,081.0	-632.3	3,145.1	1.45	0.62	
5,457.0	44.90	348.60	4,220.8	3,146.3	-646.3	3,212.0	1.12	0.42	
5,552.0	45.20	348.80	4,287.9	3,212.2	-659.5	3,279.2	0.35	0.32	
5,647.0	45.30	349.30	4,354.8	3,278.5	-672.3	3,346.6	0.39	0.11	
5,742.0	44.80	347.80	4,421.9	3,344.4	-685.7	3,413.9	1.24	-0.53	
5,837.0	43.70	347.50	4,490.0	3,409.1	-699.9	3,480.2	1.18	-1.16	
5,933.0	43.00	348.00	4,559.8	3,473.5	-713.8	3,546.1	0.81	-0.73	
6,028.0	42.50	347.90	4,629.5	3,536.6	-727.3	3,610.5	0.53	-0.53	
6,123.0	41.60	348.10	4,700.1	3,598.8	-740.5	3,674.2	0.96	-0.95	

# Cathedral Energy Services

## Survey Report

<b>Company:</b>	EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b>	Well N.Parachute EF15C-19 I30A 595
<b>Project:</b>	North Piceance	<b>TVD Reference:</b>	KBE @ 5957.0ft (Patterson 177)
<b>Site:</b>	I30A 595 Pad (NESE Sec30-T5S-R95W)	<b>MD Reference:</b>	KBE @ 5957.0ft (Patterson 177)
<b>Well:</b>	N.Parachute EF15C-19 I30A 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 2003.16 US Multi User 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
6,218.0	40.80	348.10	4,771.5	3,660.1	-753.4	3,736.8	0.84	-0.84	
6,314.0	38.80	350.20	4,845.3	3,720.4	-765.0	3,798.2	2.51	-2.08	
6,409.0	36.30	350.10	4,920.6	3,777.4	-774.9	3,856.0	2.63	-2.63	
6,504.0	32.50	347.60	4,999.0	3,830.1	-785.2	3,909.7	4.27	-4.00	
6,599.0	31.80	348.30	5,079.4	3,879.5	-795.8	3,960.2	0.83	-0.74	
6,694.0	27.70	346.70	5,161.9	3,925.5	-806.0	4,007.4	4.40	-4.32	
6,789.0	24.60	348.00	5,247.2	3,966.4	-815.1	4,049.2	3.32	-3.26	
6,884.0	22.70	347.50	5,334.2	4,003.6	-823.2	4,087.3	2.01	-2.00	
6,979.0	20.30	346.10	5,422.6	4,037.5	-831.2	4,122.1	2.58	-2.53	
7,074.0	18.30	345.20	5,512.2	4,067.9	-838.9	4,153.5	2.13	-2.11	
7,169.0	17.60	345.30	5,602.6	4,096.3	-846.4	4,182.7	0.74	-0.74	
7,264.0	15.00	345.80	5,693.8	4,122.1	-853.0	4,209.4	2.74	-2.74	
7,359.0	13.20	347.90	5,785.9	4,144.6	-858.3	4,232.5	1.97	-1.89	
7,454.0	11.50	343.80	5,878.7	4,164.3	-863.2	4,252.8	2.01	-1.79	
7,548.0	9.90	345.60	5,971.1	4,181.1	-867.9	4,270.2	1.74	-1.70	
7,643.0	7.30	349.80	6,065.0	4,195.0	-871.0	4,284.4	2.81	-2.74	
7,738.0	5.50	346.10	6,159.4	4,205.3	-873.1	4,295.0	1.94	-1.89	
7,833.0	3.00	353.70	6,254.1	4,212.2	-874.5	4,302.0	2.69	-2.63	
7,928.0	2.50	352.50	6,349.0	4,216.8	-875.0	4,306.6	0.53	-0.53	
8,033.0	1.70	352.10	6,453.9	4,220.6	-875.6	4,310.4	0.76	-0.76	
8,128.0	1.50	209.10	6,548.9	4,220.9	-876.4	4,310.9	3.20	-0.21	
8,223.0	1.10	145.90	6,643.9	4,219.0	-876.5	4,309.1	1.48	-0.42	
8,318.0	1.20	153.90	6,738.9	4,217.4	-875.5	4,307.3	0.20	0.11	
8,413.0	1.50	146.50	6,833.9	4,215.5	-874.4	4,305.2	0.36	0.32	
8,508.0	0.70	23.30	6,928.8	4,215.0	-873.5	4,304.5	2.08	-0.84	
8,603.0	0.30	37.10	7,023.8	4,215.7	-873.1	4,305.1	0.44	-0.42	
8,698.0	0.10	357.30	7,118.8	4,216.0	-872.9	4,305.4	0.24	-0.21	
8,793.0	0.40	306.30	7,213.8	4,216.2	-873.2	4,305.7	0.36	0.32	
8,888.0	0.40	290.60	7,308.8	4,216.6	-873.8	4,306.1	0.12	0.00	
8,983.0	0.70	249.50	7,403.8	4,216.5	-874.6	4,306.2	0.50	0.32	
9,078.0	0.70	231.90	7,498.8	4,215.9	-875.6	4,305.9	0.23	0.00	
9,173.0	1.20	235.80	7,593.8	4,215.0	-876.9	4,305.2	0.53	0.53	
9,268.0	1.20	230.70	7,688.8	4,213.8	-878.5	4,304.4	0.11	0.00	
9,364.0	1.80	234.50	7,784.8	4,212.3	-880.5	4,303.3	0.63	0.62	
9,459.0	0.90	187.80	7,879.7	4,210.7	-881.8	4,302.0	1.42	-0.95	
9,554.0	1.20	209.60	7,974.7	4,209.1	-882.4	4,300.6	0.52	0.32	
9,649.0	0.20	230.90	8,069.7	4,208.1	-883.0	4,299.8	1.07	-1.05	
9,744.0	0.04	140.70	8,164.7	4,208.0	-883.2	4,299.7	0.21	-0.17	
9,839.0	0.60	9.50	8,259.7	4,208.5	-883.0	4,300.1	0.66	0.59	
9,934.0	0.10	337.40	8,354.7	4,209.0	-883.0	4,300.6	0.55	-0.53	
10,029.0	0.10	337.90	8,449.7	4,209.2	-883.1	4,300.8	0.00	0.00	
10,124.0	0.50	287.50	8,544.7	4,209.4	-883.5	4,301.1	0.47	0.42	
10,219.0	0.70	269.10	8,639.7	4,209.5	-884.5	4,301.4	0.29	0.21	
10,313.0	0.70	289.10	8,733.7	4,209.7	-885.6	4,301.8	0.26	0.00	
10,408.0	0.50	268.10	8,828.7	4,209.8	-886.5	4,302.2	0.31	-0.21	
10,503.0	1.00	261.00	8,923.7	4,209.7	-887.8	4,302.3	0.53	0.53	
10,598.0	1.40	251.00	9,018.7	4,209.2	-889.7	4,302.2	0.47	0.42	
10,694.0	1.70	245.00	9,114.6	4,208.2	-892.1	4,301.7	0.35	0.31	Last DP Svy at 10694'
10,760.0	1.70	245.00	9,180.6	4,207.4	-893.9	4,301.3	0.00	0.00	Straightline Projection @ 10760' MD

# Cathedral Energy Services

## Survey Report

<b>Company:</b> EnCana Oil & Gas (USA) Inc	<b>Local Co-ordinate Reference:</b> Well N.Parachute EF15C-19 I30A 595
<b>Project:</b> North Piceance	<b>TVD Reference:</b> KBE @ 5957.0ft (Patterson 177)
<b>Site:</b> I30A 595 Pad (NESE Sec30-T5S-R95W)	<b>MD Reference:</b> KBE @ 5957.0ft (Patterson 177)
<b>Well:</b> N.Parachute EF15C-19 I30A 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 2003.16 US Multi User Db

Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target - Shape	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
I30A 595 EF15C-19 Tgt - survey misses by 41.6ft at 10760.0ft MD (9180.6 TVD, 4207.4 N, -893.9 E) - Rectangle (sides W100.0 H200.0 D0.0)	0.00	0.00	9,222.0	4,210.9	-891.4	1,651,589.15	2,268,964.24	39° 35' 37.48 N	108° 5' 39.98 W
I30A 595 EF15C-19 TOC - survey misses by 101.7ft at 7260.3ft MD (5690.2 TVD, 4121.2 N, -852.8 E) - Rectangle (sides W100.0 H200.0 D300.0)	0.00	0.00	5,662.0	4,210.9	-891.4	1,651,589.15	2,268,964.24	39° 35' 37.48 N	108° 5' 39.98 W
I30A 595 EF15C-19 BHI - survey misses by 41.6ft at 10760.0ft MD (9180.6 TVD, 4207.4 N, -893.9 E) - Rectangle (sides W30.0 H50.0 D0.0)	0.00	0.00	9,222.0	4,210.9	-891.4	1,651,589.15	2,268,964.24	39° 35' 37.48 N	108° 5' 39.98 W

Survey Annotations				
Measured Depth	Vertical Depth	Local Coordinates		Comment
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)	
10,694.0	9,114.6	4,208.2	-892.1	Last DP Svy at 10694'
10,760.0	9,180.6	4,207.4	-893.9	Straightline Projection @ 10760' MD

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