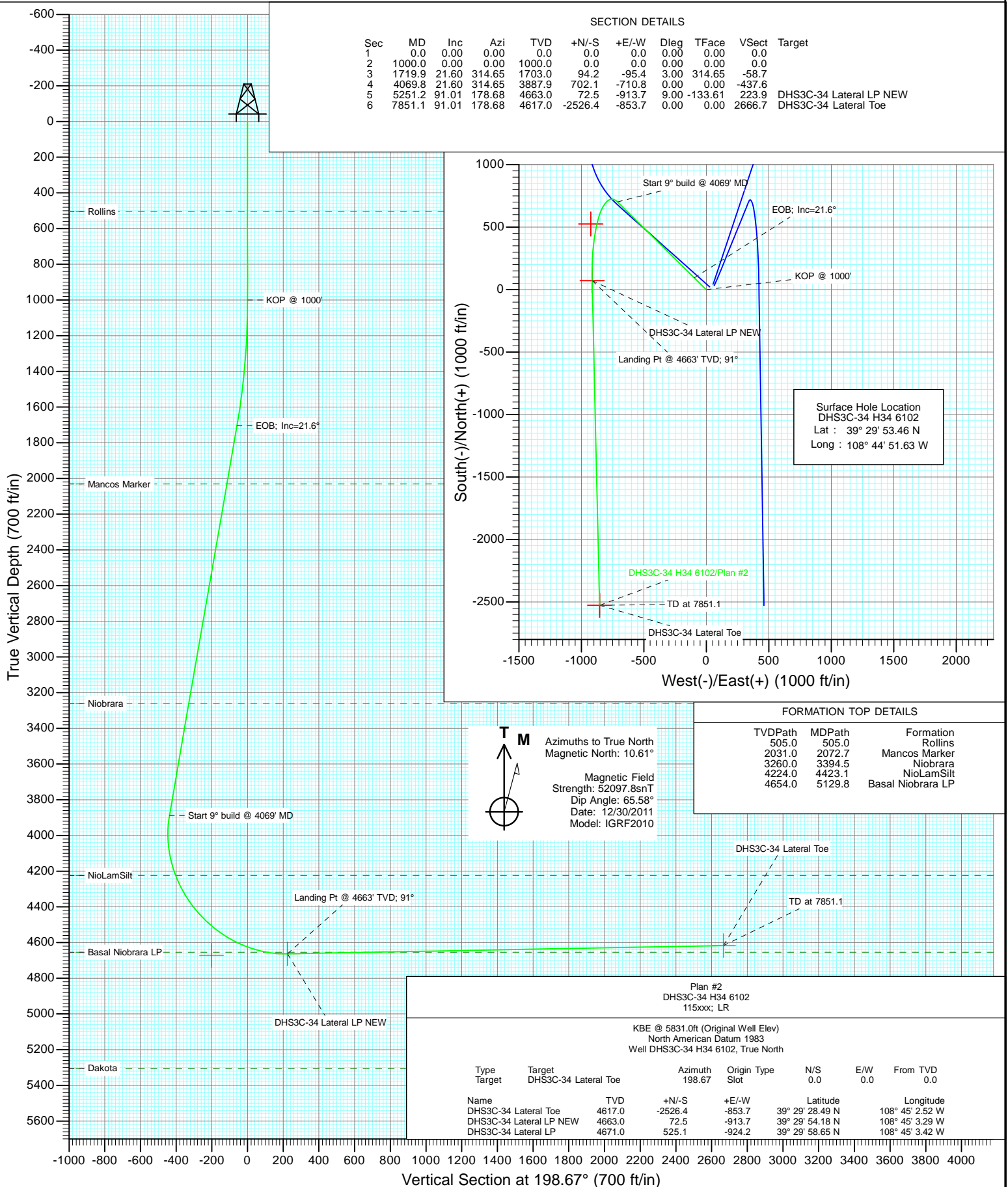


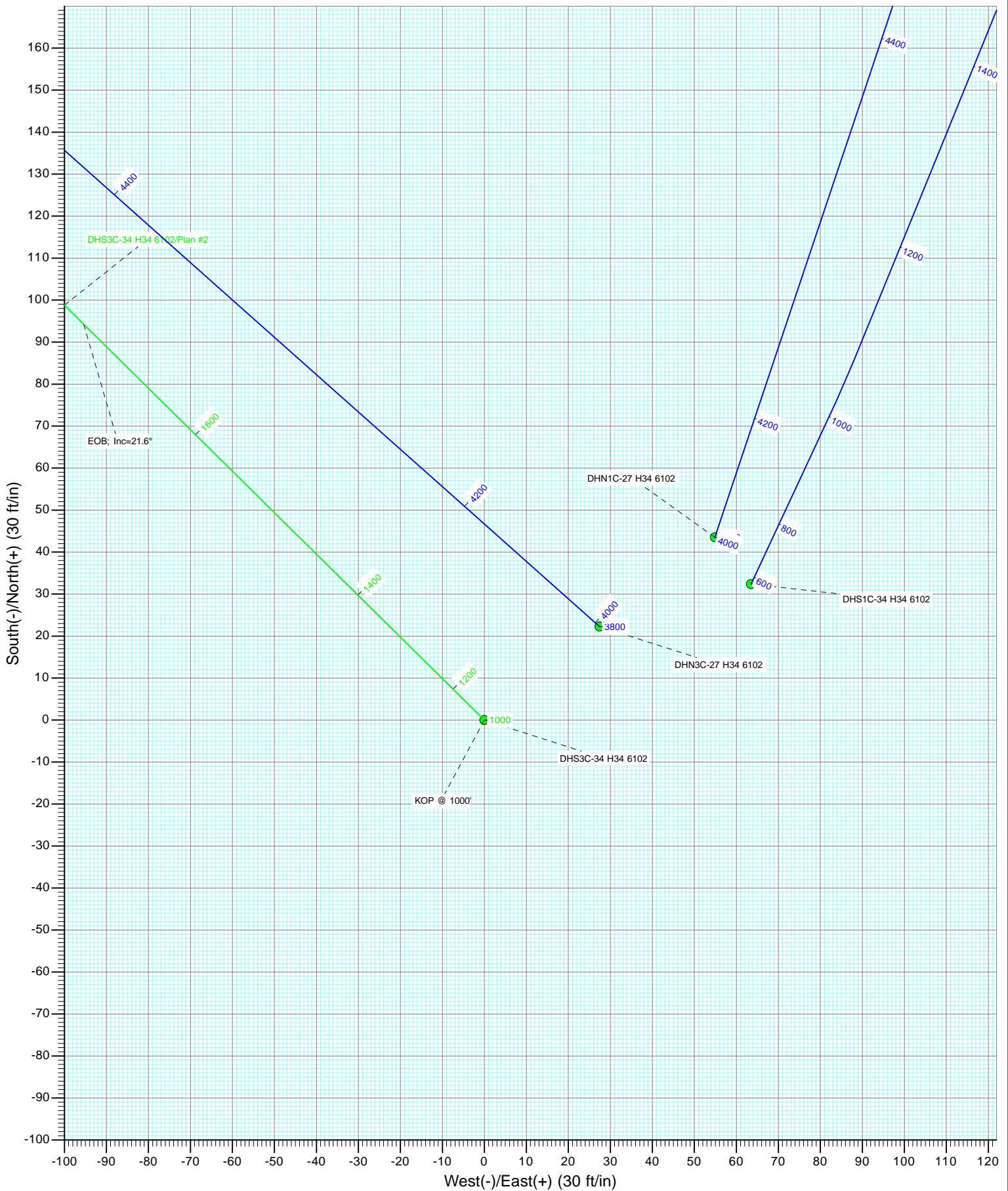


Project: North Piceance
Site: H34 6102 Pad
Well: DHS3C-34 H34 6102
Wellbore: HZ
Design: Plan #2





Project: North Piceance
Site: H34 6102 Pad
Well: DHS3C-34 H34 6102
Wellbore: HZ
Design: Plan #2



Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well DHS3C-34 H34 6102
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KBE @ 5831.0ft (Original Well Elev)
Project:	North Piceance	MD Reference:	KBE @ 5831.0ft (Original Well Elev)
Site:	H34 6102 Pad	North Reference:	True
Well:	DHS3C-34 H34 6102	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #2		

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		H34 6102 Pad			
Site Position:		Northing:	1,622,725.05 ft	Latitude:	39° 29' 53.46 N
From:	Lat/Long	Easting:	2,083,732.38 ft	Longitude:	108° 44' 51.63 W
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence:	-2.05 °

Well	DHS3C-34 H34 6102					
Well Position	+N/-S	0.0 ft	Northing:	1,622,725.04 ft	Latitude:	39° 29' 53.46 N
	+E/-W	0.0 ft	Easting:	2,083,732.38 ft	Longitude:	108° 44' 51.63 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level:	5,808.0 ft

Wellbore	HZ				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	12/30/2011	10.61	65.58	52,098

Design	Plan #2			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.0	0.0	0.0	198.67

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,719.9	21.60	314.65	1,703.0	94.2	-95.4	3.00	3.00	0.00	314.65	
4,069.8	21.60	314.65	3,887.9	702.1	-710.8	0.00	0.00	0.00	0.00	
5,251.2	91.01	178.68	4,663.0	72.5	-913.7	9.00	5.88	-11.51	-133.61	Interp @ 4663.0 (DHS3C-34 H34 6102)
7,851.1	91.01	178.68	4,617.0	-2,526.4	-853.7	0.00	0.00	0.00	0.00	DHS3C-34 Lateral To

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well DHS3C-34 H34 6102
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KBE @ 5831.0ft (Original Well Elev)
Project:	North Piceance	MD Reference:	KBE @ 5831.0ft (Original Well Elev)
Site:	H34 6102 Pad	North Reference:	True
Well:	DHS3C-34 H34 6102	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #2		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	
505.0	0.00	0.00	505.0	0.0	0.0	0.0	0.00	0.00	Rollins
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	
700.0	0.00	0.00	700.0	0.0	0.0	0.0	0.00	0.00	
800.0	0.00	0.00	800.0	0.0	0.0	0.0	0.00	0.00	
900.0	0.00	0.00	900.0	0.0	0.0	0.0	0.00	0.00	
1,000.0	0.00	0.00	1,000.0	0.0	0.0	0.0	0.00	0.00	KOP @ 1000'
1,100.0	3.00	314.65	1,100.0	1.8	-1.9	-1.1	3.00	3.00	
1,200.0	6.00	314.65	1,199.6	7.4	-7.4	-4.6	3.00	3.00	
1,300.0	9.00	314.65	1,298.8	16.5	-16.7	-10.3	3.00	3.00	
1,400.0	12.00	314.65	1,397.1	29.3	-29.7	-18.3	3.00	3.00	
1,500.0	15.00	314.65	1,494.3	45.7	-46.3	-28.5	3.00	3.00	
1,600.0	18.00	314.65	1,590.2	65.7	-66.5	-40.9	3.00	3.00	
1,700.0	21.00	314.65	1,684.4	89.1	-90.2	-55.6	3.00	3.00	
1,719.9	21.60	314.65	1,703.0	94.2	-95.4	-58.7	3.00	3.00	EOB; Inc=21.6°
1,800.0	21.60	314.65	1,777.4	114.9	-116.4	-71.6	0.00	0.00	
1,900.0	21.60	314.65	1,870.4	140.8	-142.6	-87.8	0.00	0.00	
2,000.0	21.60	314.65	1,963.4	166.7	-168.7	-103.9	0.00	0.00	
2,072.7	21.60	314.65	2,031.0	185.5	-187.8	-115.6	0.00	0.00	Mancos Marker
2,100.0	21.60	314.65	2,056.4	192.5	-194.9	-120.0	0.00	0.00	
2,200.0	21.60	314.65	2,149.4	218.4	-221.1	-136.1	0.00	0.00	
2,300.0	21.60	314.65	2,242.3	244.3	-247.3	-152.3	0.00	0.00	
2,400.0	21.60	314.65	2,335.3	270.2	-273.5	-168.4	0.00	0.00	
2,500.0	21.60	314.65	2,428.3	296.0	-299.7	-184.5	0.00	0.00	
2,600.0	21.60	314.65	2,521.3	321.9	-325.9	-200.6	0.00	0.00	
2,700.0	21.60	314.65	2,614.3	347.8	-352.1	-216.7	0.00	0.00	
2,800.0	21.60	314.65	2,707.2	373.6	-378.2	-232.9	0.00	0.00	
2,900.0	21.60	314.65	2,800.2	399.5	-404.4	-249.0	0.00	0.00	
3,000.0	21.60	314.65	2,893.2	425.4	-430.6	-265.1	0.00	0.00	
3,100.0	21.60	314.65	2,986.2	451.2	-456.8	-281.2	0.00	0.00	
3,200.0	21.60	314.65	3,079.2	477.1	-483.0	-297.4	0.00	0.00	
3,300.0	21.60	314.65	3,172.1	503.0	-509.2	-313.5	0.00	0.00	
3,394.5	21.60	314.65	3,260.0	527.4	-533.9	-328.7	0.00	0.00	Niobrara
3,400.0	21.60	314.65	3,265.1	528.8	-535.4	-329.6	0.00	0.00	
3,500.0	21.60	314.65	3,358.1	554.7	-561.6	-345.7	0.00	0.00	
3,600.0	21.60	314.65	3,451.1	580.6	-587.7	-361.9	0.00	0.00	
3,700.0	21.60	314.65	3,544.0	606.4	-613.9	-378.0	0.00	0.00	
3,800.0	21.60	314.65	3,637.0	632.3	-640.1	-394.1	0.00	0.00	
3,900.0	21.60	314.65	3,730.0	658.2	-666.3	-410.2	0.00	0.00	
4,000.0	21.60	314.65	3,823.0	684.0	-692.5	-426.3	0.00	0.00	
4,069.8	21.60	314.65	3,887.9	702.1	-710.8	-437.6	0.00	0.00	Start 9° build @ 4069' MD
4,100.0	19.82	308.84	3,916.1	709.2	-718.7	-441.8	9.00	-5.90	
4,200.0	15.85	282.08	4,011.5	722.7	-745.3	-446.1	9.00	-3.96	
4,300.0	16.37	249.28	4,107.7	720.6	-771.9	-435.5	9.00	0.52	
4,400.0	21.04	224.93	4,202.6	702.9	-797.8	-410.5	9.00	4.67	
4,423.1	22.48	220.90	4,224.0	696.6	-803.6	-402.7	9.00	6.25	NioLamSilt
4,500.0	27.84	210.53	4,293.6	670.0	-822.4	-371.4	9.00	6.97	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well DHS3C-34 H34 6102
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KBE @ 5831.0ft (Original Well Elev)
Project:	North Piceance	MD Reference:	KBE @ 5831.0ft (Original Well Elev)
Site:	H34 6102 Pad	North Reference:	True
Well:	DHS3C-34 H34 6102	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #2		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Comments / Formations
4,600.0	35.57	201.70	4,378.7	622.7	-845.1	-319.4	9.00	7.73	
4,700.0	43.74	195.75	4,455.6	562.3	-865.3	-255.7	9.00	8.17	
4,800.0	52.14	191.37	4,522.6	490.2	-882.5	-181.9	9.00	8.40	
4,859.3	57.18	189.23	4,556.9	442.6	-891.1	-134.1	9.00	8.51	DHS3C-34 Lateral LP
4,900.0	60.66	187.90	4,577.9	408.2	-896.3	-99.7	9.00	8.55	
5,000.0	69.26	184.97	4,620.2	318.2	-906.3	-11.3	9.00	8.60	
5,100.0	77.91	182.35	4,648.4	222.6	-912.4	81.2	9.00	8.64	
5,129.8	80.48	181.61	4,654.0	193.4	-913.4	109.2	9.00	8.66	Basal Niobrara LP
5,200.0	86.57	179.91	4,661.9	123.6	-914.3	175.6	9.00	8.67	
5,251.2	91.01	178.68	4,663.0	72.5	-913.7	223.9	9.00	8.67	Landing Pt @ 4663' TVD; 91° - Interp @ 4663.0
5,300.0	91.01	178.68	4,662.1	23.7	-912.6	269.7	0.00	0.00	
5,400.0	91.01	178.68	4,660.4	-76.3	-910.3	363.7	0.00	0.00	
5,500.0	91.01	178.68	4,658.6	-176.2	-908.0	457.6	0.00	0.00	
5,600.0	91.01	178.68	4,656.8	-276.2	-905.7	551.6	0.00	0.00	
5,700.0	91.01	178.68	4,655.1	-376.2	-903.4	645.6	0.00	0.00	
5,800.0	91.01	178.68	4,653.3	-476.1	-901.0	739.5	0.00	0.00	
5,900.0	91.01	178.68	4,651.5	-576.1	-898.7	833.5	0.00	0.00	
6,000.0	91.01	178.68	4,649.7	-676.0	-896.4	927.4	0.00	0.00	
6,100.0	91.01	178.68	4,648.0	-776.0	-894.1	1,021.4	0.00	0.00	
6,200.0	91.01	178.68	4,646.2	-876.0	-891.8	1,115.4	0.00	0.00	
6,300.0	91.01	178.68	4,644.4	-975.9	-889.5	1,209.3	0.00	0.00	
6,400.0	91.01	178.68	4,642.7	-1,075.9	-887.2	1,303.3	0.00	0.00	
6,500.0	91.01	178.68	4,640.9	-1,175.8	-884.9	1,397.2	0.00	0.00	
6,600.0	91.01	178.68	4,639.1	-1,275.8	-882.6	1,491.2	0.00	0.00	
6,700.0	91.01	178.68	4,637.4	-1,375.7	-880.3	1,585.1	0.00	0.00	
6,800.0	91.01	178.68	4,635.6	-1,475.7	-878.0	1,679.1	0.00	0.00	
6,900.0	91.01	178.68	4,633.8	-1,575.7	-875.7	1,773.1	0.00	0.00	
7,000.0	91.01	178.68	4,632.1	-1,675.6	-873.4	1,867.0	0.00	0.00	
7,100.0	91.01	178.68	4,630.3	-1,775.6	-871.0	1,961.0	0.00	0.00	
7,200.0	91.01	178.68	4,628.5	-1,875.5	-868.7	2,054.9	0.00	0.00	
7,300.0	91.01	178.68	4,626.7	-1,975.5	-866.4	2,148.9	0.00	0.00	
7,400.0	91.01	178.68	4,625.0	-2,075.4	-864.1	2,242.9	0.00	0.00	
7,500.0	91.01	178.68	4,623.2	-2,175.4	-861.8	2,336.8	0.00	0.00	
7,600.0	91.01	178.68	4,621.4	-2,275.4	-859.5	2,430.8	0.00	0.00	
7,700.0	91.01	178.68	4,619.7	-2,375.3	-857.2	2,524.7	0.00	0.00	
7,800.0	91.01	178.68	4,617.9	-2,475.3	-854.9	2,618.7	0.00	0.00	
7,851.1	91.01	178.68	4,617.0	-2,526.4	-853.7	2,666.7	0.00	0.00	TD at 7851.1 - DHS3C-34 Lateral Toe

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well DHS3C-34 H34 6102
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	KBE @ 5831.0ft (Original Well Elev)
Project:	North Piceance	MD Reference:	KBE @ 5831.0ft (Original Well Elev)
Site:	H34 6102 Pad	North Reference:	True
Well:	DHS3C-34 H34 6102	Survey Calculation Method:	Minimum Curvature
Wellbore:	HZ		
Design:	Plan #2		

Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(ft)		
- Shape									
DHS3C-34 Lateral Toe - plan hits target center - Point	0.00	0.00	4,617.0	-2,526.4	-853.7	1,620,230.78	2,082,788.91	39° 29' 28.49 N	108° 45' 2.52 W
Interp @ 4663.0 (DHS3C) - plan hits target center - Point	0.00	0.00	4,663.0	72.5	-913.7	1,622,830.13	2,082,821.84	39° 29' 54.18 N	108° 45' 3.29 W
DHS3C-34 Lateral LP - plan misses target center by 144.6ft at 4859.3ft MD (4556.9 TVD, 442.6 N, -891.1 E) - Point	0.00	0.00	4,671.0	525.1	-924.2	1,623,282.87	2,082,827.58	39° 29' 58.65 N	108° 45' 3.42 W

Formations						
Measured Depth	Vertical Depth	Name	Lithology	Dip	Dip Direction	
(ft)	(ft)			(°)	(°)	
505.0	505.0	Rollins				
2,072.7	2,031.0	Mancos Marker				
3,394.5	3,260.0	Niobrara				
4,423.1	4,224.0	NioLamSilt				
5,129.8	4,654.0	Basal Niobrara LP				

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates			
(ft)	(ft)	+N/-S	+E/-W	Comment	
(ft)	(ft)	(ft)	(ft)		
1,000.0	1,000.0	0.0	0.0	KOP @ 1000'	
1,719.9	1,703.0	94.2	-95.4	EOB; Inc=21.6°	
4,069.8	3,887.9	702.1	-710.8	Start 9° build @ 4069' MD	
5,251.2	4,663.0	72.5	-913.7	Landing Pt @ 4663' TVD; 91°	
7,851.1	4,617.0	-2,526.4	-853.7	TD at 7851.1	