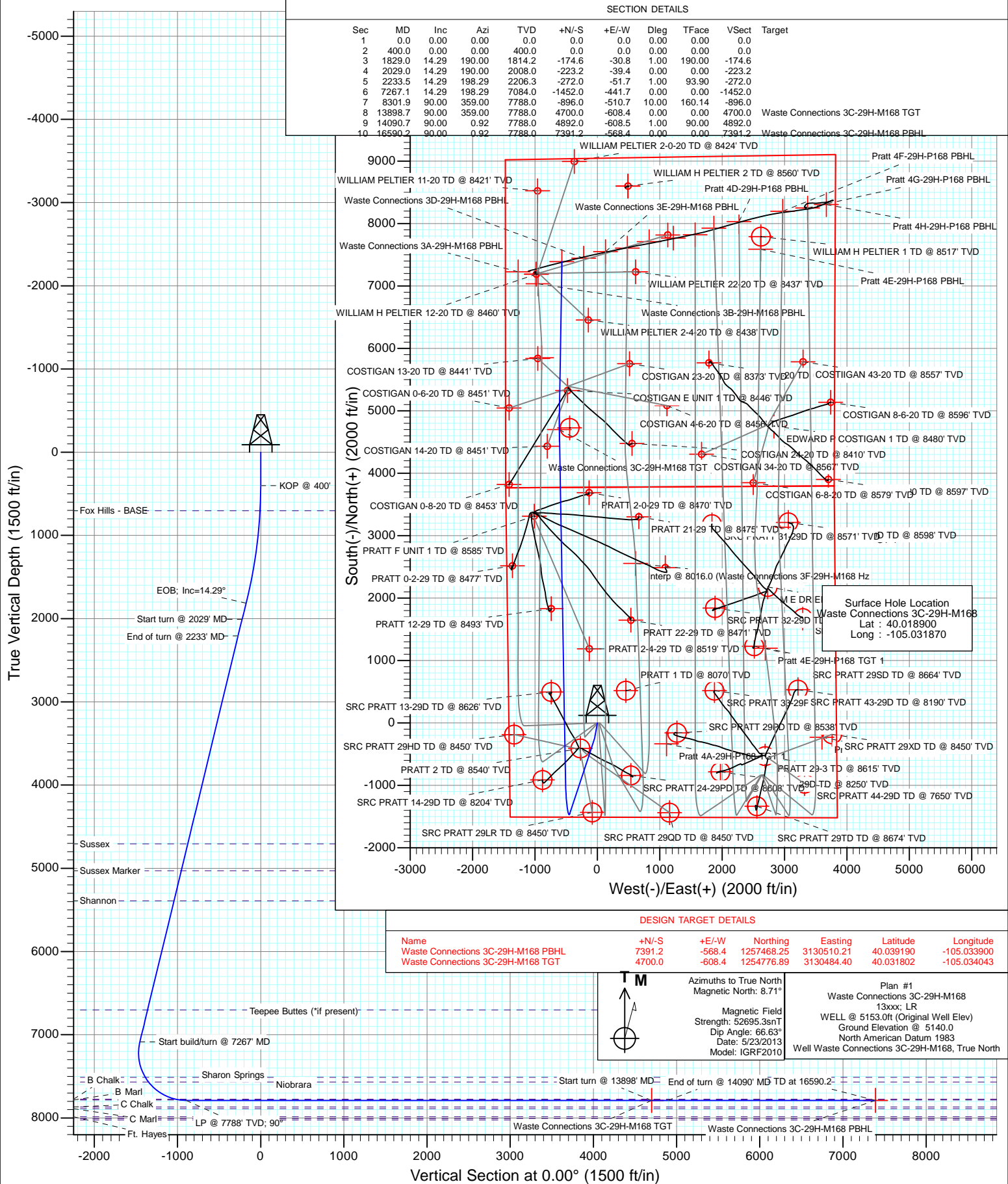




Project: DJ Wattenberg
Site: S29-T1N-R68W (Pratt/Waste Connections)
Well: Waste Connections 3C-29H-M168
Bore: Hz
Design: Plan #1



Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Waste Connections 3C-29H-M168
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5153.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site:	S29-T1N-R68W (Pratt/Waste Connections)	North Reference:	True
Well:	Waste Connections 3C-29H-M168	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Project	DJ Wattenberg		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Colorado Northern Zone		

Site	S29-T1N-R68W (Pratt/Waste Connections)			
Site Position:		Northing:	1,249,256.24 ft	Latitude: 40.016600
From:	Lat/Long	Easting:	3,133,726.79 ft	Longitude: -105.022570
Position Uncertainty:	0.0 ft	Slot Radius:	13.200 in	Grid Convergence: 0.31 °

Well	Waste Connections 3C-29H-M168			
Well Position	+N/-S	0.0 ft	Northing:	1,250,080.17 ft
	+E/-W	0.0 ft	Easting:	3,131,117.61 ft
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft
			Ground Level:	5,140.0 ft

Wellbore	Hz				
Magnetics	Model Name	Sample Date	Declination	Dip Angle	Field Strength
			(°)	(°)	(nT)
	IGRF2010	5/23/2013	8.71	66.63	52,695

Design	Plan #1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction
	(ft)	(ft)	(ft)	(°)
	0.0	0.0	0.0	0.00

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	
400.0	0.00	0.00	400.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,829.0	14.29	190.00	1,814.2	-174.6	-30.8	1.00	1.00	0.00	190.00	
2,029.0	14.29	190.00	2,008.0	-223.2	-39.4	0.00	0.00	0.00	0.00	
2,233.5	14.29	198.29	2,206.3	-272.0	-51.7	1.00	0.00	4.05	93.90	
7,267.1	14.29	198.29	7,084.0	-1,452.0	-441.7	0.00	0.00	0.00	0.00	
8,301.9	90.00	359.00	7,788.0	-896.0	-510.7	10.00	7.32	15.53	160.14	
13,898.7	90.00	359.00	7,788.0	4,700.0	-608.4	0.00	0.00	0.00	0.00	Waste Connections 3C
14,090.7	90.00	0.92	7,788.0	4,892.0	-608.5	1.00	0.00	1.00	90.00	
16,590.2	90.00	0.92	7,788.0	7,391.2	-568.4	0.00	0.00	0.00	0.00	Waste Connections 3C

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Waste Connections 3C-29H-M168
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5153.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site:	S29-T1N-R68W (Pratt/Waste Connections)	North Reference:	True
Well:	Waste Connections 3C-29H-M168	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

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	KOP @ 400'
500.0	1.00	190.00	500.0	-0.9	-0.2	-0.9	1.00	1.00	
600.0	2.00	190.00	600.0	-3.4	-0.6	-3.4	1.00	1.00	
700.0	3.00	190.00	699.9	-7.7	-1.4	-7.7	1.00	1.00	
703.1	3.03	190.00	703.0	-7.9	-1.4	-7.9	1.00	1.00	Fox Hills - BASE
800.0	4.00	190.00	799.7	-13.7	-2.4	-13.7	1.00	1.00	
900.0	5.00	190.00	899.4	-21.5	-3.8	-21.5	1.00	1.00	
1,000.0	6.00	190.00	998.9	-30.9	-5.5	-30.9	1.00	1.00	
1,100.0	7.00	190.00	1,098.3	-42.1	-7.4	-42.1	1.00	1.00	
1,200.0	8.00	190.00	1,197.4	-54.9	-9.7	-54.9	1.00	1.00	
1,300.0	9.00	190.00	1,296.3	-69.5	-12.2	-69.5	1.00	1.00	
1,400.0	10.00	190.00	1,394.9	-85.7	-15.1	-85.7	1.00	1.00	
1,500.0	11.00	190.00	1,493.3	-103.7	-18.3	-103.7	1.00	1.00	
1,600.0	12.00	190.00	1,591.2	-123.3	-21.7	-123.3	1.00	1.00	
1,700.0	13.00	190.00	1,688.9	-144.6	-25.5	-144.6	1.00	1.00	
1,800.0	14.00	190.00	1,786.1	-167.6	-29.6	-167.6	1.00	1.00	
1,829.0	14.29	190.00	1,814.2	-174.6	-30.8	-174.6	1.00	1.00	EOB; Inc=14.29°
1,900.0	14.29	190.00	1,883.0	-191.8	-33.8	-191.8	0.00	0.00	
2,000.0	14.29	190.00	1,979.9	-216.2	-38.1	-216.2	0.00	0.00	
2,029.0	14.29	190.00	2,008.0	-223.2	-39.4	-223.2	0.00	0.00	Start turn @ 2029' MD
2,100.0	14.26	192.88	2,076.9	-240.4	-42.8	-240.4	1.00	-0.04	
2,200.0	14.27	196.94	2,173.8	-264.2	-49.2	-264.2	1.00	0.01	
2,233.5	14.29	198.29	2,206.3	-272.0	-51.7	-272.0	1.00	0.06	End of turn @ 2233' MD
2,300.0	14.29	198.29	2,270.7	-287.6	-56.8	-287.6	0.00	0.00	
2,400.0	14.29	198.29	2,367.6	-311.1	-64.6	-311.1	0.00	0.00	
2,500.0	14.29	198.29	2,464.5	-334.5	-72.3	-334.5	0.00	0.00	
2,600.0	14.29	198.29	2,561.4	-357.9	-80.1	-357.9	0.00	0.00	
2,700.0	14.29	198.29	2,658.3	-381.4	-87.8	-381.4	0.00	0.00	
2,800.0	14.29	198.29	2,755.2	-404.8	-95.6	-404.8	0.00	0.00	
2,900.0	14.29	198.29	2,852.1	-428.3	-103.3	-428.3	0.00	0.00	
3,000.0	14.29	198.29	2,949.0	-451.7	-111.1	-451.7	0.00	0.00	
3,100.0	14.29	198.29	3,045.9	-475.2	-118.8	-475.2	0.00	0.00	
3,200.0	14.29	198.29	3,142.8	-498.6	-126.6	-498.6	0.00	0.00	
3,300.0	14.29	198.29	3,239.7	-522.0	-134.3	-522.0	0.00	0.00	
3,400.0	14.29	198.29	3,336.6	-545.5	-142.1	-545.5	0.00	0.00	
3,500.0	14.29	198.29	3,433.5	-568.9	-149.8	-568.9	0.00	0.00	
3,600.0	14.29	198.29	3,530.4	-592.4	-157.6	-592.4	0.00	0.00	
3,700.0	14.29	198.29	3,627.3	-615.8	-165.3	-615.8	0.00	0.00	
3,800.0	14.29	198.29	3,724.2	-639.3	-173.1	-639.3	0.00	0.00	
3,900.0	14.29	198.29	3,821.1	-662.7	-180.8	-662.7	0.00	0.00	
4,000.0	14.29	198.29	3,918.0	-686.1	-188.6	-686.1	0.00	0.00	
4,100.0	14.29	198.29	4,014.9	-709.6	-196.3	-709.6	0.00	0.00	
4,200.0	14.29	198.29	4,111.9	-733.0	-204.1	-733.0	0.00	0.00	
4,300.0	14.29	198.29	4,208.8	-756.5	-211.8	-756.5	0.00	0.00	
4,400.0	14.29	198.29	4,305.7	-779.9	-219.6	-779.9	0.00	0.00	
4,500.0	14.29	198.29	4,402.6	-803.4	-227.3	-803.4	0.00	0.00	
4,600.0	14.29	198.29	4,499.5	-826.8	-235.1	-826.8	0.00	0.00	
4,700.0	14.29	198.29	4,596.4	-850.2	-242.8	-850.2	0.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Waste Connections 3C-29H-M168
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5153.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site:	S29-T1N-R68W (Pratt/Waste Connections)	North Reference:	True
Well:	Waste Connections 3C-29H-M168	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

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
4,800.0	14.29	198.29	4,693.3	-873.7	-250.6	-873.7	0.00	0.00	
4,813.1	14.29	198.29	4,706.0	-876.8	-251.6	-876.8	0.00	0.00	Sussex
4,900.0	14.29	198.29	4,790.2	-897.1	-258.3	-897.1	0.00	0.00	
5,000.0	14.29	198.29	4,887.1	-920.6	-266.1	-920.6	0.00	0.00	
5,100.0	14.29	198.29	4,984.0	-944.0	-273.8	-944.0	0.00	0.00	
5,145.4	14.29	198.29	5,028.0	-954.7	-277.3	-954.7	0.00	0.00	Sussex Marker
5,200.0	14.29	198.29	5,080.9	-967.5	-281.6	-967.5	0.00	0.00	
5,300.0	14.29	198.29	5,177.8	-990.9	-289.3	-990.9	0.00	0.00	
5,400.0	14.29	198.29	5,274.7	-1,014.3	-297.1	-1,014.3	0.00	0.00	
5,500.0	14.29	198.29	5,371.6	-1,037.8	-304.8	-1,037.8	0.00	0.00	
5,520.0	14.29	198.29	5,391.0	-1,042.5	-306.4	-1,042.5	0.00	0.00	Shannon
5,600.0	14.29	198.29	5,468.5	-1,061.2	-312.6	-1,061.2	0.00	0.00	
5,700.0	14.29	198.29	5,565.4	-1,084.7	-320.3	-1,084.7	0.00	0.00	
5,800.0	14.29	198.29	5,662.3	-1,108.1	-328.1	-1,108.1	0.00	0.00	
5,900.0	14.29	198.29	5,759.2	-1,131.6	-335.8	-1,131.6	0.00	0.00	
6,000.0	14.29	198.29	5,856.1	-1,155.0	-343.5	-1,155.0	0.00	0.00	
6,100.0	14.29	198.29	5,953.0	-1,178.4	-351.3	-1,178.4	0.00	0.00	
6,200.0	14.29	198.29	6,049.9	-1,201.9	-359.0	-1,201.9	0.00	0.00	
6,300.0	14.29	198.29	6,146.8	-1,225.3	-366.8	-1,225.3	0.00	0.00	
6,400.0	14.29	198.29	6,243.7	-1,248.8	-374.5	-1,248.8	0.00	0.00	
6,500.0	14.29	198.29	6,340.6	-1,272.2	-382.3	-1,272.2	0.00	0.00	
6,600.0	14.29	198.29	6,437.5	-1,295.7	-390.0	-1,295.7	0.00	0.00	
6,700.0	14.29	198.29	6,534.5	-1,319.1	-397.8	-1,319.1	0.00	0.00	
6,800.0	14.29	198.29	6,631.4	-1,342.5	-405.5	-1,342.5	0.00	0.00	
6,870.8	14.29	198.29	6,700.0	-1,359.1	-411.0	-1,359.1	0.00	0.00	Teepee Buttes (*if present)
6,900.0	14.29	198.29	6,728.3	-1,366.0	-413.3	-1,366.0	0.00	0.00	
7,000.0	14.29	198.29	6,825.2	-1,389.4	-421.0	-1,389.4	0.00	0.00	
7,100.0	14.29	198.29	6,922.1	-1,412.9	-428.8	-1,412.9	0.00	0.00	
7,200.0	14.29	198.29	7,019.0	-1,436.3	-436.5	-1,436.3	0.00	0.00	
7,267.1	14.29	198.29	7,084.0	-1,452.0	-441.7	-1,452.0	0.00	0.00	Start build/turn @ 7267' MD
7,300.0	11.26	204.02	7,116.1	-1,458.8	-444.3	-1,458.8	10.00	-9.24	
7,400.0	4.82	266.77	7,215.2	-1,468.0	-452.5	-1,468.0	10.00	-6.44	
7,500.0	10.92	333.13	7,314.4	-1,459.8	-461.0	-1,459.8	10.00	6.10	
7,600.0	20.37	345.89	7,410.6	-1,434.4	-469.5	-1,434.4	10.00	9.45	
7,700.0	30.16	350.67	7,500.9	-1,392.6	-477.9	-1,392.6	10.00	9.80	
7,710.6	31.21	351.01	7,510.0	-1,387.3	-478.7	-1,387.3	10.00	9.86	Sharon Springs
7,781.2	38.19	352.86	7,568.0	-1,347.5	-484.3	-1,347.5	10.00	9.89	Niobrara
7,800.0	40.05	353.25	7,582.6	-1,335.7	-485.8	-1,335.7	10.00	9.91	
7,900.0	49.98	354.95	7,653.2	-1,265.4	-492.9	-1,265.4	10.00	9.93	
8,000.0	59.93	356.21	7,710.6	-1,183.9	-499.2	-1,183.9	10.00	9.95	
8,100.0	69.89	357.23	7,752.9	-1,093.6	-504.3	-1,093.6	10.00	9.96	
8,170.2	76.88	357.88	7,773.0	-1,026.4	-507.2	-1,026.4	10.00	9.96	B Chalk
8,200.0	79.85	358.14	7,779.0	-997.3	-508.2	-997.3	10.00	9.96	
8,234.0	83.24	358.43	7,784.0	-963.7	-509.2	-963.7	10.00	9.96	B Marl
8,300.0	89.81	358.98	7,788.0	-897.9	-510.7	-897.9	10.00	9.96	
8,301.9	90.00	359.00	7,788.0	-896.0	-510.7	-896.0	10.00	9.96	LP @ 7788' TVD; 90°
8,400.0	90.00	359.00	7,788.0	-797.9	-512.4	-797.9	0.00	0.00	
8,500.0	90.00	359.00	7,788.0	-697.9	-514.2	-697.9	0.00	0.00	
8,600.0	90.00	359.00	7,788.0	-597.9	-515.9	-597.9	0.00	0.00	
8,700.0	90.00	359.00	7,788.0	-497.9	-517.7	-497.9	0.00	0.00	
8,800.0	90.00	359.00	7,788.0	-397.9	-519.4	-397.9	0.00	0.00	
8,900.0	90.00	359.00	7,788.0	-297.9	-521.2	-297.9	0.00	0.00	

Planning Report

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Project:	DJ Wattenberg	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site:	S29-T1N-R68W (Pratt/Waste Connections)	North Reference:	True
Well:	Waste Connections 3C-29H-M168	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

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
9,000.0	90.00	359.00	7,788.0	-198.0	-522.9	-198.0	0.00	0.00	
9,100.0	90.00	359.00	7,788.0	-98.0	-524.7	-98.0	0.00	0.00	
9,200.0	90.00	359.00	7,788.0	2.0	-526.4	2.0	0.00	0.00	
9,300.0	90.00	359.00	7,788.0	102.0	-528.1	102.0	0.00	0.00	
9,400.0	90.00	359.00	7,788.0	202.0	-529.9	202.0	0.00	0.00	
9,500.0	90.00	359.00	7,788.0	302.0	-531.6	302.0	0.00	0.00	
9,600.0	90.00	359.00	7,788.0	402.0	-533.4	402.0	0.00	0.00	
9,700.0	90.00	359.00	7,788.0	501.9	-535.1	501.9	0.00	0.00	
9,800.0	90.00	359.00	7,788.0	601.9	-536.9	601.9	0.00	0.00	
9,900.0	90.00	359.00	7,788.0	701.9	-538.6	701.9	0.00	0.00	
10,000.0	90.00	359.00	7,788.0	801.9	-540.4	801.9	0.00	0.00	
10,100.0	90.00	359.00	7,788.0	901.9	-542.1	901.9	0.00	0.00	
10,200.0	90.00	359.00	7,788.0	1,001.9	-543.8	1,001.9	0.00	0.00	
10,300.0	90.00	359.00	7,788.0	1,101.8	-545.6	1,101.8	0.00	0.00	
10,400.0	90.00	359.00	7,788.0	1,201.8	-547.3	1,201.8	0.00	0.00	
10,500.0	90.00	359.00	7,788.0	1,301.8	-549.1	1,301.8	0.00	0.00	
10,600.0	90.00	359.00	7,788.0	1,401.8	-550.8	1,401.8	0.00	0.00	
10,700.0	90.00	359.00	7,788.0	1,501.8	-552.6	1,501.8	0.00	0.00	
10,800.0	90.00	359.00	7,788.0	1,601.8	-554.3	1,601.8	0.00	0.00	
10,900.0	90.00	359.00	7,788.0	1,701.8	-556.1	1,701.8	0.00	0.00	
11,000.0	90.00	359.00	7,788.0	1,801.7	-557.8	1,801.7	0.00	0.00	
11,100.0	90.00	359.00	7,788.0	1,901.7	-559.6	1,901.7	0.00	0.00	
11,200.0	90.00	359.00	7,788.0	2,001.7	-561.3	2,001.7	0.00	0.00	
11,300.0	90.00	359.00	7,788.0	2,101.7	-563.0	2,101.7	0.00	0.00	
11,400.0	90.00	359.00	7,788.0	2,201.7	-564.8	2,201.7	0.00	0.00	
11,500.0	90.00	359.00	7,788.0	2,301.7	-566.5	2,301.7	0.00	0.00	
11,600.0	90.00	359.00	7,788.0	2,401.6	-568.3	2,401.6	0.00	0.00	
11,700.0	90.00	359.00	7,788.0	2,501.6	-570.0	2,501.6	0.00	0.00	
11,800.0	90.00	359.00	7,788.0	2,601.6	-571.8	2,601.6	0.00	0.00	
11,900.0	90.00	359.00	7,788.0	2,701.6	-573.5	2,701.6	0.00	0.00	
12,000.0	90.00	359.00	7,788.0	2,801.6	-575.3	2,801.6	0.00	0.00	
12,100.0	90.00	359.00	7,788.0	2,901.6	-577.0	2,901.6	0.00	0.00	
12,200.0	90.00	359.00	7,788.0	3,001.6	-578.8	3,001.6	0.00	0.00	
12,300.0	90.00	359.00	7,788.0	3,101.5	-580.5	3,101.5	0.00	0.00	
12,400.0	90.00	359.00	7,788.0	3,201.5	-582.2	3,201.5	0.00	0.00	
12,500.0	90.00	359.00	7,788.0	3,301.5	-584.0	3,301.5	0.00	0.00	
12,600.0	90.00	359.00	7,788.0	3,401.5	-585.7	3,401.5	0.00	0.00	
12,700.0	90.00	359.00	7,788.0	3,501.5	-587.5	3,501.5	0.00	0.00	
12,800.0	90.00	359.00	7,788.0	3,601.5	-589.2	3,601.5	0.00	0.00	
12,900.0	90.00	359.00	7,788.0	3,701.4	-591.0	3,701.4	0.00	0.00	
13,000.0	90.00	359.00	7,788.0	3,801.4	-592.7	3,801.4	0.00	0.00	
13,100.0	90.00	359.00	7,788.0	3,901.4	-594.5	3,901.4	0.00	0.00	
13,200.0	90.00	359.00	7,788.0	4,001.4	-596.2	4,001.4	0.00	0.00	
13,300.0	90.00	359.00	7,788.0	4,101.4	-598.0	4,101.4	0.00	0.00	
13,400.0	90.00	359.00	7,788.0	4,201.4	-599.7	4,201.4	0.00	0.00	
13,500.0	90.00	359.00	7,788.0	4,301.4	-601.4	4,301.4	0.00	0.00	
13,600.0	90.00	359.00	7,788.0	4,401.3	-603.2	4,401.3	0.00	0.00	
13,700.0	90.00	359.00	7,788.0	4,501.3	-604.9	4,501.3	0.00	0.00	
13,800.0	90.00	359.00	7,788.0	4,601.3	-606.7	4,601.3	0.00	0.00	
13,898.7	90.00	359.00	7,788.0	4,700.0	-608.4	4,700.0	0.00	0.00	Start turn @ 13898' MD - Waste Connections 3C
13,900.0	90.00	359.01	7,788.0	4,701.3	-608.4	4,701.3	1.00	0.00	
14,000.0	90.00	0.01	7,788.0	4,801.3	-609.3	4,801.3	1.00	0.00	

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Waste Connections 3C-29H-M168
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5153.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site:	S29-T1N-R68W (Pratt/Waste Connections)	North Reference:	True
Well:	Waste Connections 3C-29H-M168	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

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
14,090.7	90.00	0.92	7,788.0	4,892.0	-608.5	4,892.0	1.00	0.00	End of turn @ 14090' MD
14,100.0	90.00	0.92	7,788.0	4,901.3	-608.4	4,901.3	0.00	0.00	
14,200.0	90.00	0.92	7,788.0	5,001.3	-606.8	5,001.3	0.00	0.00	
14,300.0	90.00	0.92	7,788.0	5,101.3	-605.2	5,101.3	0.00	0.00	
14,400.0	90.00	0.92	7,788.0	5,201.2	-603.6	5,201.2	0.00	0.00	
14,500.0	90.00	0.92	7,788.0	5,301.2	-602.0	5,301.2	0.00	0.00	
14,600.0	90.00	0.92	7,788.0	5,401.2	-600.4	5,401.2	0.00	0.00	
14,700.0	90.00	0.92	7,788.0	5,501.2	-598.7	5,501.2	0.00	0.00	
14,800.0	90.00	0.92	7,788.0	5,601.2	-597.1	5,601.2	0.00	0.00	
14,900.0	90.00	0.92	7,788.0	5,701.2	-595.5	5,701.2	0.00	0.00	
15,000.0	90.00	0.92	7,788.0	5,801.2	-593.9	5,801.2	0.00	0.00	
15,100.0	90.00	0.92	7,788.0	5,901.2	-592.3	5,901.2	0.00	0.00	
15,200.0	90.00	0.92	7,788.0	6,001.1	-590.7	6,001.1	0.00	0.00	
15,300.0	90.00	0.92	7,788.0	6,101.1	-589.1	6,101.1	0.00	0.00	
15,400.0	90.00	0.92	7,788.0	6,201.1	-587.5	6,201.1	0.00	0.00	
15,500.0	90.00	0.92	7,788.0	6,301.1	-585.9	6,301.1	0.00	0.00	
15,600.0	90.00	0.92	7,788.0	6,401.1	-584.3	6,401.1	0.00	0.00	
15,700.0	90.00	0.92	7,788.0	6,501.1	-582.7	6,501.1	0.00	0.00	
15,800.0	90.00	0.92	7,788.0	6,601.1	-581.1	6,601.1	0.00	0.00	
15,900.0	90.00	0.92	7,788.0	6,701.1	-579.5	6,701.1	0.00	0.00	
16,000.0	90.00	0.92	7,788.0	6,801.0	-577.9	6,801.0	0.00	0.00	
16,100.0	90.00	0.92	7,788.0	6,901.0	-576.3	6,901.0	0.00	0.00	
16,200.0	90.00	0.92	7,788.0	7,001.0	-574.7	7,001.0	0.00	0.00	
16,300.0	90.00	0.92	7,788.0	7,101.0	-573.0	7,101.0	0.00	0.00	
16,400.0	90.00	0.92	7,788.0	7,201.0	-571.4	7,201.0	0.00	0.00	
16,500.0	90.00	0.92	7,788.0	7,301.0	-569.8	7,301.0	0.00	0.00	
16,590.2	90.00	0.92	7,788.0	7,391.2	-568.4	7,391.2	0.00	0.00	TD at 16590.2 - Waste Connections 3C-29H-M

Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
- hit/miss target									
- Shape									
Waste Connections 3C-29H-M168	0.00	0.00	7,788.0	4,700.0	-608.4	1,254,776.89	3,130,484.40	40.031802	-105.034043
- plan hits target center									
- Point									
Waste Connections 3C-29H-M168	0.00	0.00	7,788.0	7,391.2	-568.4	1,257,468.25	3,130,510.21	40.039190	-105.033900
- plan hits target center									
- Point									

Planning Report

Database:	USA EDM 5000 Multi Users DB	Local Co-ordinate Reference:	Well Waste Connections 3C-29H-M168
Company:	EnCana Oil & Gas (USA) Inc	TVD Reference:	WELL @ 5153.0ft (Original Well Elev)
Project:	DJ Wattenberg	MD Reference:	WELL @ 5153.0ft (Original Well Elev)
Site:	S29-T1N-R68W (Pratt/Waste Connections)	North Reference:	True
Well:	Waste Connections 3C-29H-M168	Survey Calculation Method:	Minimum Curvature
Wellbore:	Hz		
Design:	Plan #1		

Formations						
Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)	
703.1	703.0	Fox Hills - BASE				
4,813.1	4,706.0	Sussex				
5,145.4	5,028.0	Sussex Marker				
5,520.0	5,391.0	Shannon				
6,870.8	6,700.0	Teepee Buttes (*if present)				
7,710.6	7,510.0	Sharon Springs				
7,781.2	7,568.0	Niobrara				
8,170.2	7,773.0	B Chalk				
8,234.0	7,784.0	B Marl				

Plan Annotations					
Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates			
		+N/-S (ft)	+E/-W (ft)	Comment	
400.0	400.0	0.0	0.0	KOP @ 400'	
1,829.0	1,814.2	-174.6	-30.8	EOB; Inc=14.29°	
2,029.0	2,008.0	-223.2	-39.4	Start turn @ 2029' MD	
2,233.5	2,206.3	-272.0	-51.7	End of turn @ 2233' MD	
7,267.1	7,084.0	-1,452.0	-441.7	Start build/turn @ 7267' MD	
8,301.9	7,788.0	-896.0	-510.7	LP @ 7788' TVD; 90°	
13,898.7	7,788.0	4,700.0	-608.4	Start turn @ 13898' MD	
14,090.7	7,788.0	4,892.0	-608.5	End of turn @ 14090' MD	
16,590.2	7,788.0	7,391.2	-568.4	TD at 16590.2	