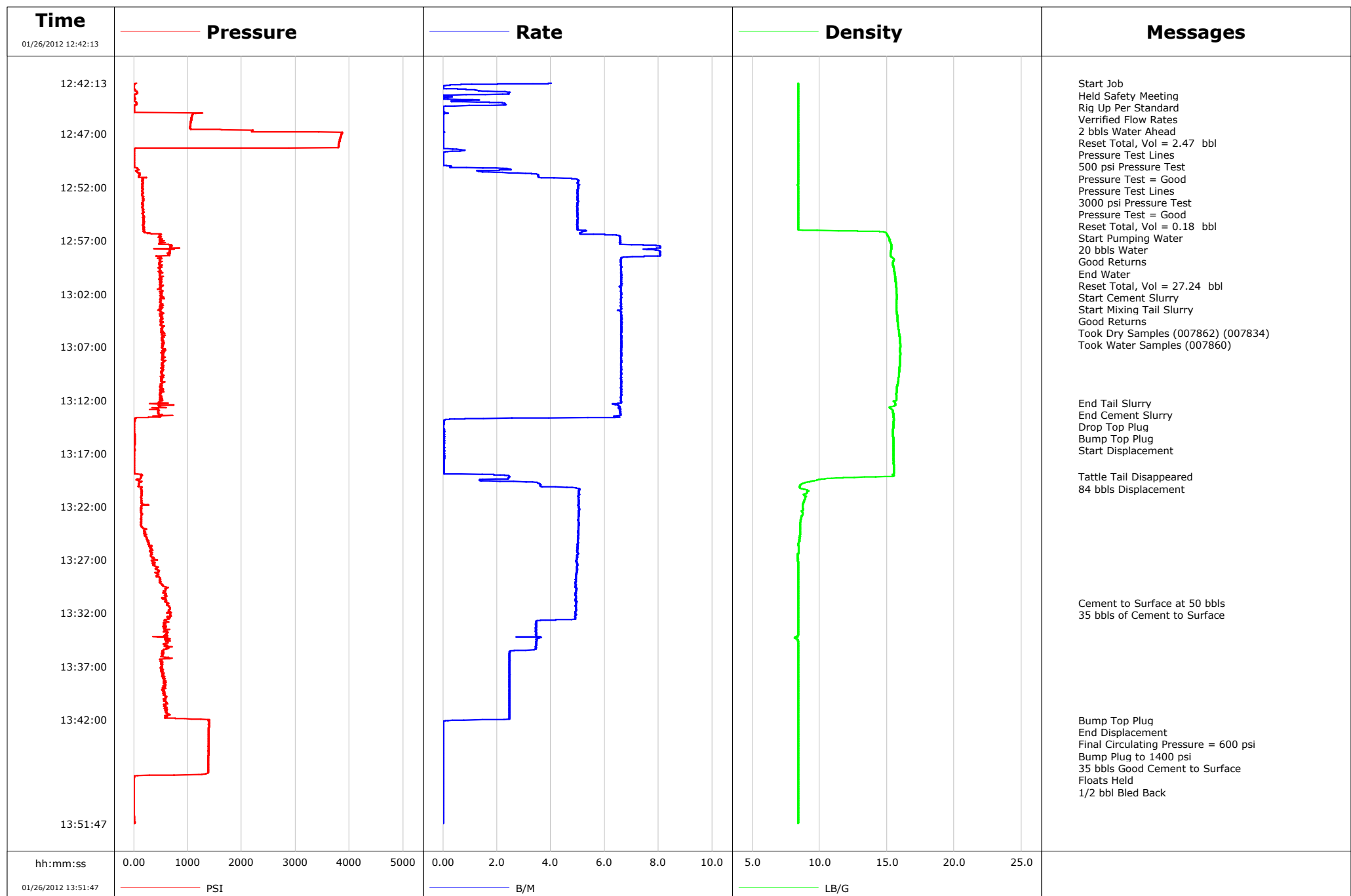


**Well** Twin Creek 12-4D1  
**Field** Mamm Creek  
**Engineer** Ryan Bowditch  
**Country** United States

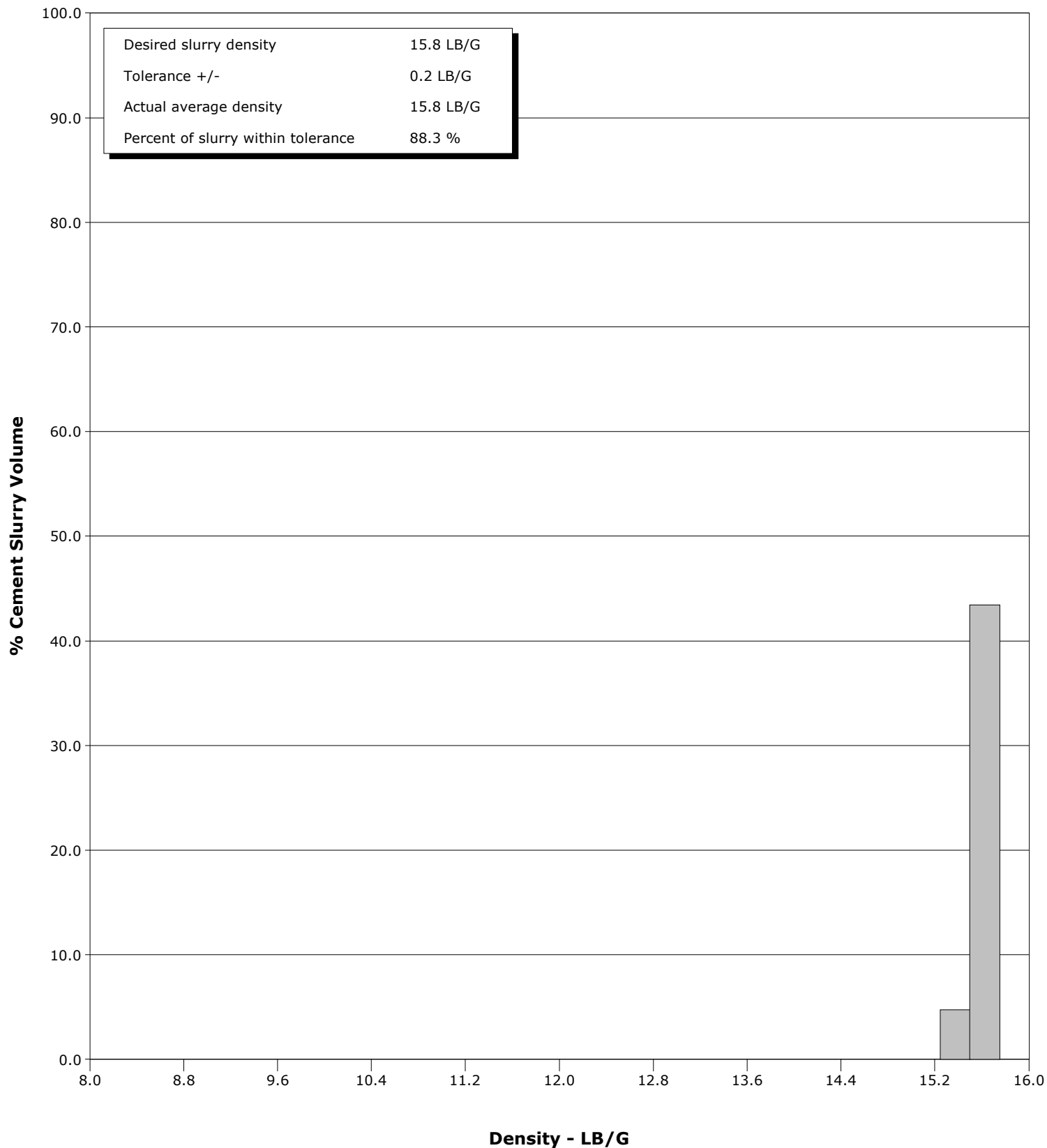
**Client** EnCana  
**SIR No.** COBA-00074  
**Job Type** 9 5/8" Casing  
**Job Date** 01-26-2012



**Well** Twin Creek 12-4D1  
**Field** Mamm Creek  
**Engineer** Ryan Bowditch  
**Country** United States

**Client** EnCana  
**SIR No.** C0BA-00074  
**Job Type** 9 5/8" Casing  
**Job Date** 01-26-2012

**Cement Slurry - 01/26/2012 12:59:00 to 01/26/2012 13:12:17**



# Cementing Service Report

					Customer EnCana			Job Number COBA-00074			
Well Twin Creek 12-4D1			Location (legal)			Schlumberger Location Grand Junction, CO			Job Start Jan/26/2012		
Field Mamm Creek		Formation Name/Type Shale		Deviation 10 deg		Bit Size 12.3 in		Well MD 1153.0 ft		Well TVD ft	
County Garfield		State/Province Colorado		BHP psi		BHST 100 degF		BHCT 81 degF		Pore Press. Gradient lb/gal	
Well Master		API/UWI									
Rig Name Nabors M15		Drilled For Gas		Service Via Land		Casing/Liner					
						Depth, ft		Size, in		Weight, lb/ft	
Offshore Zone		Well Class New		Well Type Development		40.0		16.0		65.0	
						1153.0		9.6		36.0	
Drilling Fluid Type		Max. Density lb/gal		Plastic Viscosity cP		Tubing/Drill Pipe					
						T/D		Depth, ft		Size, in	
Service Line Cementing		Job Type 9 5/8" Casing									
Max. Allowed Tub. Press 3000 psi		Max. Allowed Ann. Press 1500 psi		WH Connection Single Cement head		Perforations/Open Hole					
						Top, ft		Bottom, ft		shot/ft	
						ft		ft			
						ft		ft			
						ft		ft			
						Treat Down Casing		Displacement 85.4 bbl		Packer Type	
										Packer Depth ft	
						Tubing Vol. bbl		Casing Vol. 89.1 bbl		Annular Vol. 67.0 bbl	
										Openhole Vol. 160.0 bbl	
Casing/Tubing Secured <input checked="" type="checkbox"/>		1 Hole Vol. Circulated prior to Cement <input checked="" type="checkbox"/>		Casing Tools				Squeeze Job			
Lift Pressure 600 psi				Shoe Type Float				Squeeze Type			
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>		Shoe Depth 1153.0 ft				Tool Type			
No. Centralizers		Top Plugs 1		Bottom Plugs		Stage Tool Type				Tool Depth ft	
Cement Head Type Single				Stage Tool Depth ft				Tail Pipe Size in			
Job Scheduled For Jan/26/2012		Arrived on Location Jan/26/2012		Leave Location Jan/26/2012		Collar Type Float				Tail Pipe Depth ft	
						Collar Depth 1105.0 ft				Sqz. Total Vol. bbl	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Solid Fraction NULL	Message				
01/26/2012	12:42:13	41	4.0	8.42	0.7	0	Started Acquisition				
01/26/2012	12:42:15	41	3.9	8.41	0.9	0	Start Job				
01/26/2012	12:42:16	17	3.9	8.41	0.9	0	Held Safety Meeting				
01/26/2012	12:43:53	8	0.6	8.41	2.4	0					
01/26/2012	12:44:31	5	0.0	8.41	3.2	0	Reset Total, Vol = 2.47 bbl				
01/26/2012	12:45:33	1065	0.0	8.41	3.2	0					
01/26/2012	12:45:37	1065	0.0	8.41	3.2	0	Pressure Test Lines				
01/26/2012	12:45:38	1065	0.0	8.41	3.2	0	500 psi Pressure Test				
01/26/2012	12:47:00	3855	0.0	8.41	3.2	0	Pressure Test Lines				
01/26/2012	12:47:01	3854	0.0	8.41	3.2	0	3000 psi Pressure Test				
01/26/2012	12:47:02	3853	0.0	8.41	3.2	0	Pressure Test = Good				
01/26/2012	12:47:13	3838	0.0	8.41	3.2	0					
01/26/2012	12:48:44	1	0.0	8.41	3.4	0	Reset Total, Vol = 0.18 bbl				
01/26/2012	12:48:48	2	0.0	8.41	3.4	0	Start Pumping Water				
01/26/2012	12:48:49	2	0.0	8.41	3.4	0	20 bbls Water				
01/26/2012	12:48:53	1	0.0	8.41	3.4	0					
01/26/2012	12:50:33	66	1.5	8.41	4.2	0					
01/26/2012	12:52:08	161	5.0	8.41	10.9	0	Good Returns				
01/26/2012	12:52:13	171	5.0	8.41	11.3	0					
01/26/2012	12:53:53	153	5.0	8.40	19.7	0					
01/26/2012	12:55:33	168	5.0	8.40	28.0	0					

Well			Field		Job Start	Customer		Job Number
Twin Creek 12-4D1			Mamm Creek		Jan/26/2012	EnCana		C0BA-00074
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Solid Fraction NULL	Message	
01/26/2012	12:56:04	178	5.3	9.82	30.6	41	Reset Total, Vol = 27.24 bbl	
01/26/2012	12:57:13	574	6.6	15.26	37.5	44		
01/26/2012	12:58:53	486	6.6	15.49	50.1	35		
01/26/2012	12:59:00	524	6.6	15.47	50.8	34	Start Cement Slurry	
01/26/2012	12:59:25	505	6.6	15.46	53.6	31	Start Mixing Tail Slurry	
01/26/2012	12:59:53	503	6.6	15.53	56.7	30	Good Returns	
01/26/2012	13:00:13	483	6.6	15.58	58.9	32	Took Dry Samples (007862) (007834)	
01/26/2012	13:00:14	492	6.6	15.59	59.0	32	Took Water Samples (007860)	
01/26/2012	13:00:33	488	6.6	15.63	61.1	33		
01/26/2012	13:02:13	494	6.6	15.72	72.1	40		
01/26/2012	13:03:53	542	6.6	15.74	83.1	43		
01/26/2012	13:05:33	526	6.6	15.88	94.1	46		
01/26/2012	13:07:13	537	6.6	15.97	105.2	47		
01/26/2012	13:08:53	525	6.6	15.94	116.2	47		
01/26/2012	13:10:33	512	6.6	15.78	127.2	47		
01/26/2012	13:12:13	456	6.6	15.59	138.2	0		
01/26/2012	13:12:15	476	6.6	15.59	138.4	0	End Tail Slurry	
01/26/2012	13:12:17	627	6.6	15.59	138.7	0	End Cement Slurry	
01/26/2012	13:13:34	468	6.4	15.48	147.1	4	Drop Top Plug	
01/26/2012	13:13:44	25	1.5	15.51	148.0	28	Start Displacement	
01/26/2012	13:13:53	11	0.1	15.50	148.0	0		
01/26/2012	13:15:33	12	0.0	15.46	148.1	0		
01/26/2012	13:17:13	3	0.0	15.49	148.2	0		
01/26/2012	13:18:53	1	0.0	15.51	148.2	0		
01/26/2012	13:19:10	147	2.5	15.43	148.6	29	Tattle Tail Disappeared	
01/26/2012	13:19:11	130	2.5	15.43	148.6	29	84 bbls Displacement	
01/26/2012	13:20:33	138	5.0	9.20	153.2	28		
01/26/2012	13:22:13	140	5.0	8.76	161.6	9		
01/26/2012	13:23:53	141	5.0	8.56	170.0	8		
01/26/2012	13:25:33	260	5.0	8.41	178.3	4		
01/26/2012	13:27:13	358	5.0	8.39	186.6	6		
01/26/2012	13:28:53	494	4.9	8.41	194.9	5		
01/26/2012	13:30:33	593	4.9	8.41	203.1	5		
01/26/2012	13:31:02	611	4.9	8.40	205.5	3	Cement to Surface at 50 bbls	
01/26/2012	13:31:40	667	4.9	8.40	208.6	3	35 bbls of Cement to Surface	
01/26/2012	13:32:13	673	4.9	8.40	211.3	7		
01/26/2012	13:33:53	614	3.4	8.40	217.7	26		
01/26/2012	13:35:33	532	2.7	8.40	223.5	0		
01/26/2012	13:37:13	523	2.5	8.40	227.6	0		
01/26/2012	13:38:53	575	2.5	8.40	231.7	0		
01/26/2012	13:40:33	629	2.5	8.40	235.8	0		
01/26/2012	13:42:04	1378	0.8	8.40	239.5	0	Bump Top Plug	
01/26/2012	13:42:05	1378	0.8	8.40	239.5	0	End Displacement	
01/26/2012	13:42:07	1393	0.2	8.40	239.6	0	Final Circulating Pressure = 600 psi	
01/26/2012	13:42:13	1393	0.0	8.40	239.6	0		
01/26/2012	13:43:53	1384	0.0	8.40	239.6	0		
01/26/2012	13:45:33	1381	0.0	8.40	239.6	0		
01/26/2012	13:47:13	1210	0.0	8.40	239.6	0		
01/26/2012	13:47:42	-1	0.0	8.41	239.6	0	Floats Held	
01/26/2012	13:47:43	-1	0.0	8.41	239.6	0	1/2 bbl Bled Back	
01/26/2012	13:48:53	-3	0.0	8.41	239.6	0		

<b>Well</b> Twin Creek 12-4D1	<b>Field</b> Mamm Creek	<b>Job Start</b> Jan/26/2012	<b>Customer</b> EnCana	<b>Job Number</b> C0BA-00074
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Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl			
Slurry 4.3	N2	Mud	Maximum Rate 8.1	Total Slurry 113.0	Mud 0.0	Spacer 20.0	N2	
Treating Pressure Summary, psi					Breakdown Fluid			
Maximum 3874	Final 10	Average 533	Bump Plug to 1400	Breakdown	Type	Volume bbl	Density lb/gal	
Avg. N2 Percent %	Designed Slurry Volume 113.0 bbl	Displacement 84.0 bbl	Mix Water Temp 62 degF	Cement Circulated to Surface? <input checked="" type="checkbox"/>	Volume 35.0 bbl			
				Washed Thru Perfs <input type="checkbox"/>	To ft			
Customer or Authorized Representative Robert Tate			Schlumberger Supervisor Ryan Bowditch		Circulation Lost <input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>		
					-	-		