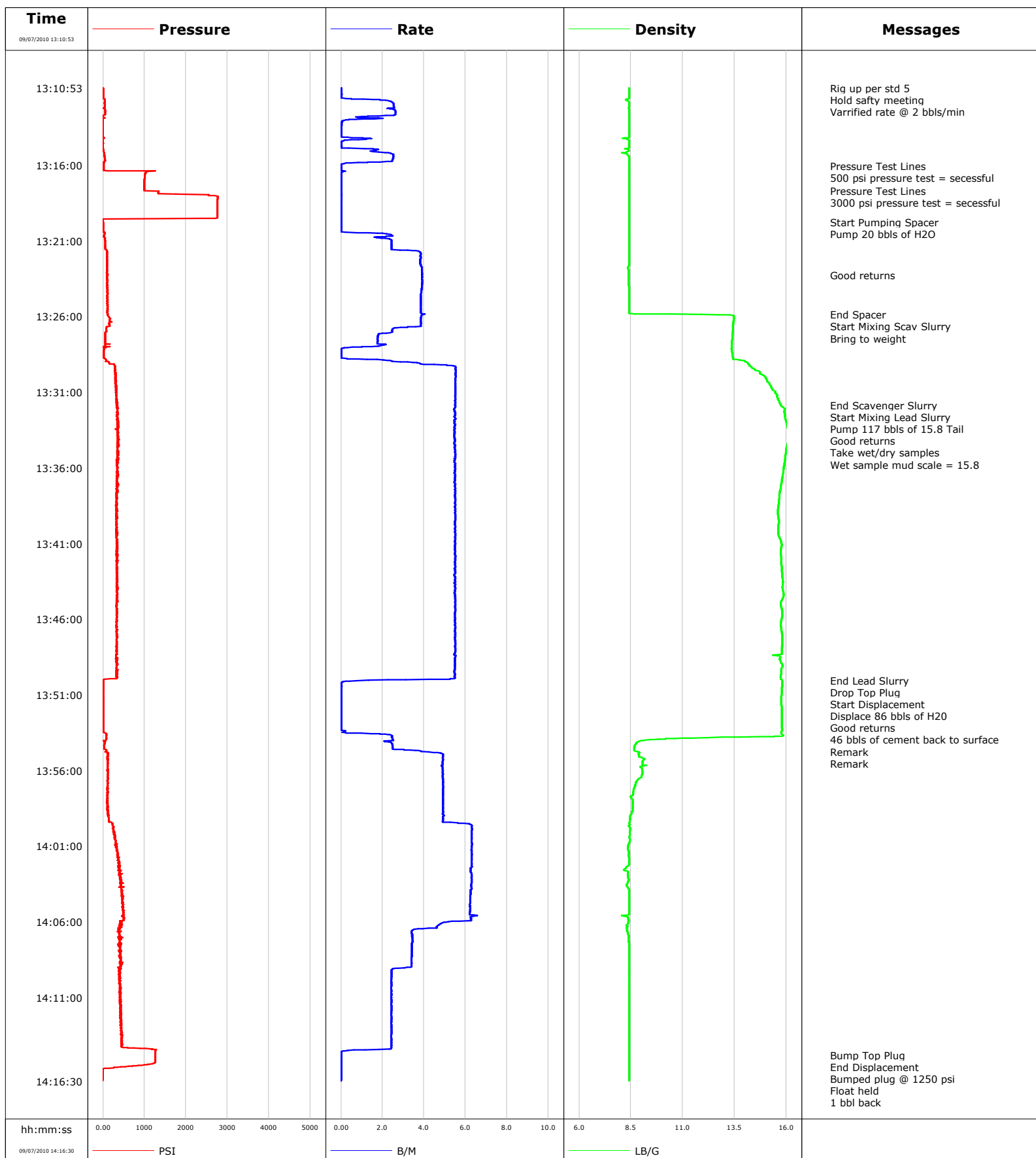


**Well** Twin Creek 1-10B1  
**Field** Mamm Creek  
**Engineer** Matt Fair  
**Country** United States

**Client** Encana  
**SIR No.**  
**Job Type** 9 5/8 Surface  
**Job Date** 09-07-2010



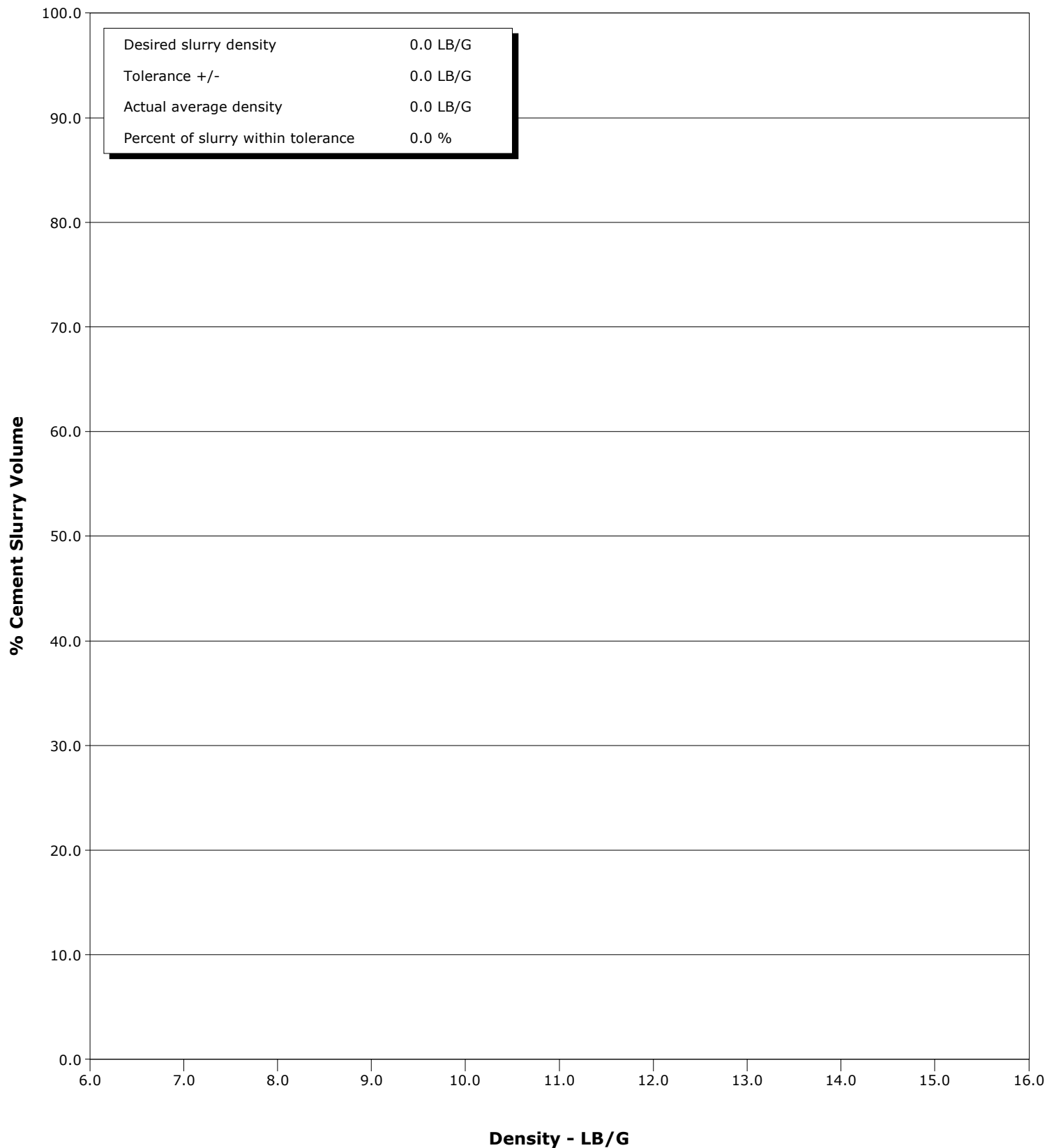
# Schlumberger

## Cementing Qa/Qc Density Report

**Well** Twin Creek 1-10B1  
**Field** Mamm Creek  
**Engineer** Matt Fair  
**Country** United States

**Client** Encana  
**SIR No.**  
**Job Type** 9 5/8 Surface  
**Job Date** 09-07-2010

- 11/06/1970 16:58:48 to 11/06/1970 17:03:52





# Cementing Service Report

				Customer Encana		Job Number B2IJ-00225	
Well Twin Creek 1-10B1		Location (legal)		Schlumberger Location		Job Start Sep/07/2010	
Field Mamm Creek		Formation Name/Type Shale		Deviation	Bit Size 12.3 in	Well MD 1160.0 ft	Well TVD 1160.0 ft
County Garfield		State/Province Colorado		BHP	BHST 94 degF	BHCT 81 degF	Pore Press. Gradient
Well Master 0631186422		API/UWI					
Rig Name Nabors M15	Drilled For Gas	Service Via Land	Casing/Liner				
			Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
Offshore Zone	Well Class New	Well Type Development	40.0	16.000	65.0	K55	8RD
			1160.0	9.630	36.0	K55	8RD
Drilling Fluid Type Bentonite		Max. Density 9.20 lb/gal	Plastic Viscosity	Tubing/Drill Pipe			
				Depth,	Size,	Weight,	Grade
Service Line Cementing	Job Type 9 5/8 Surface						
Max. Allowed Tub. Press 3520 psi	Max. Allowed Ann. Press 2030 psi	WH Connection 9 5/8	Perforations/Open Hole				
			Top,	Bottom,		No. of Shots	Total Interval
							Diameter
Service Instructions Cement 9 5/8" Casing @ 1160ft 16" Conductor @ 40' 12 1/4 Open hole with 80 % O.H. Excess 20 bbl water 561 sks 15.8.0 ppg Tail (TOT 0 ft) Displace water				Treat Down Casing	Displacement 86.0 bbl	Packer Type	Packer Depth
				Tubing Vol.	Casing Vol. 90.0 bbl	Annular Vol. 68.0 bbl	Openhole Vol. 161.0 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 574 psi				Shoe Type Float		Squeeze Type	
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>		Shoe Depth 1160.0 ft		Tool Type	
No. Centralizers 13		Top Plugs 1	Bottom Plugs 0	Stage Tool Type		Tool Depth	
Cement Head Type Single				Stage Tool Depth		Tail Pipe Size	
Job Scheduled For Sep/07/2010 10:00		Arrived on Location Sep/07/2010 10:00	Leave Location Sep/07/2010 14:00	Collar Type Guide		Tail Pipe Depth	
				Collar Depth 1115.0 ft		Sqz. Total Vol.	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
09/07/2010	13:10:46					Started Acquisition	
09/07/2010	13:10:52					Start Job	
09/07/2010	13:10:53					Rig up per std 5	
09/07/2010	13:10:53					Hold safty meeting	
09/07/2010	13:10:53	3	0.0	8.41	0.0		
09/07/2010	13:10:54					Varrified rate @ 2 bbls/min	
09/07/2010	13:10:54	2	0.0	8.41	0.0		
09/07/2010	13:12:26	52	2.6	8.41	1.9		
09/07/2010	13:14:06	-1	0.0	8.41	3.1		
09/07/2010	13:15:46	25	2.5	8.41	5.2		
09/07/2010	13:16:03					Pressure Test Lines	
09/07/2010	13:16:03	20	0.0	8.41	5.3		
09/07/2010	13:16:05					500 psi pressure test = secessful	
09/07/2010	13:16:05	21	0.0	8.41	5.3		
09/07/2010	13:17:26	991	0.0	8.41	5.3		
09/07/2010	13:17:42					Pressure Test Lines	
09/07/2010	13:17:42	992	0.0	8.41	5.3		
09/07/2010	13:17:44					3000 psi pressure test = secessful	
09/07/2010	13:17:44	1337	0.0	8.41	5.3		
09/07/2010	13:19:06	2758	0.0	8.41	5.3		
09/07/2010	13:19:46					Start Pumping Spacer	

Well			Field		Job Start		Customer		Job Number	
Twin Creek 1-10B1			Mamm Creek		Sep/07/2010		Encana		B2IJ-00225	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message				
09/07/2010	13:19:47					Pump 20 bbls of H2O				
09/07/2010	13:19:47	1	0.0	8.41	5.3					
09/07/2010	13:20:46	30	1.6	8.41	6.0					
09/07/2010	13:22:26	99	3.8	8.41	11.1					
09/07/2010	13:23:18					Good returns				
09/07/2010	13:23:18	110	3.9	8.40	14.5					
09/07/2010	13:24:06	110	3.9	8.41	17.6					
09/07/2010	13:25:46	106	3.9	8.41	24.0					
09/07/2010	13:25:52					End Spacer				
09/07/2010	13:25:52	112	4.0	11.88	24.4					
09/07/2010	13:25:54					Start Mixing Scav Slurry				
09/07/2010	13:25:54	110	3.9	12.75	24.5					
09/07/2010	13:25:56					Bring to weight				
09/07/2010	13:25:56	114	3.9	13.42	24.7					
09/07/2010	13:27:26	57	1.8	13.39	29.2					
09/07/2010	13:29:06	163	3.8	14.15	31.1					
09/07/2010	13:30:46	311	5.5	15.31	40.1					
09/07/2010	13:31:51					End Scavenger Slurry				
09/07/2010	13:31:51	330	5.5	15.72	46.1					
09/07/2010	13:31:52					Start Mixing Lead Slurry				
09/07/2010	13:31:52	336	5.5	15.72	46.2					
09/07/2010	13:31:54					Pump 117 bbls of 15.8 Tail				
09/07/2010	13:31:54	330	5.5	15.74	46.3					
09/07/2010	13:31:55					Good returns				
09/07/2010	13:31:55					Take wet/dry samples				
09/07/2010	13:31:55	368	5.5	15.75	46.4					
09/07/2010	13:32:26	357	5.5	15.93	49.3					
09/07/2010	13:33:14					Wet sample mud scale = 15.8				
09/07/2010	13:33:14	385	5.5	16.04	53.7					
09/07/2010	13:34:06	350	5.5	16.09	58.4					
09/07/2010	13:35:46	353	5.5	15.89	67.6					
09/07/2010	13:37:26	336	5.5	15.71	76.7					
09/07/2010	13:39:06	317	5.5	15.59	85.9					
09/07/2010	13:40:46	328	5.5	15.72	95.0					
09/07/2010	13:42:26	331	5.5	15.76	104.2					
09/07/2010	13:44:06	335	5.5	15.83	113.4					
09/07/2010	13:45:46	343	5.5	15.79	122.5					
09/07/2010	13:47:26	324	5.5	15.80	131.7					
09/07/2010	13:49:06	336	5.5	15.82	140.9					
09/07/2010	13:50:02					End Lead Slurry				
09/07/2010	13:50:02	0	1.3	15.80	145.8					
09/07/2010	13:50:09					Drop Top Plug				
09/07/2010	13:50:09	5	0.1	15.80	145.9					
09/07/2010	13:50:12					Start Displacement				
09/07/2010	13:50:12	5	0.0	15.80	145.9					
09/07/2010	13:50:46	3	0.0	15.77	145.9					
09/07/2010	13:51:45					Displace 86 bbls of H2O				
09/07/2010	13:51:45	4	0.0	15.76	145.9					
09/07/2010	13:51:47					Good returns				
09/07/2010	13:51:47					46 bbls of cement back to surface				
09/07/2010	13:51:47					Remark				
09/07/2010	13:51:47	4	0.0	15.76	145.9					
09/07/2010	13:51:48					Remark				
09/07/2010	13:51:48	4	0.0	15.76	145.9					

Well			Field		Job Start	Customer	Job Number
Twin Creek 1-10B1			Mamm Creek		Sep/07/2010	Encana	B2IJ-00225
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
09/07/2010	13:54:06	51	2.2	8.87	147.3		
09/07/2010	13:55:46	110	4.9	8.97	153.9		
09/07/2010	13:57:26	105	4.9	8.61	162.1		
09/07/2010	13:59:06	133	4.9	8.45	170.3		
09/07/2010	14:00:46	304	6.3	8.43	180.3		
09/07/2010	14:02:26	384	6.3	8.25	190.8		
09/07/2010	14:04:06	456	6.3	8.41	201.3		
09/07/2010	14:05:46	497	6.3	8.38	211.7		
09/07/2010	14:07:26	442	3.4	8.41	218.6		
09/07/2010	14:09:06	379	2.5	8.41	224.2		
09/07/2010	14:10:46	396	2.4	8.41	228.3		
09/07/2010	14:12:26	440	2.4	8.41	232.3		
09/07/2010	14:14:06	441	2.4	8.41	236.4		
09/07/2010	14:14:47					Bump Top Plug	
09/07/2010	14:14:47	1259	0.0	8.41	237.2		
09/07/2010	14:14:48					End Displacement	
09/07/2010	14:14:48	1259	0.0	8.41	237.2		
09/07/2010	14:14:54					Bumped plug @ 1250 psi	
09/07/2010	14:14:54					Float held	
09/07/2010	14:14:54					1 bbl back	
09/07/2010	14:14:54	1258	0.0	8.41	237.2		
09/07/2010	14:15:46	-5	0.0	8.41	237.2		
09/07/2010	14:16:27					End Job	
09/07/2010	14:16:27	-2	0.0	8.41	237.2		

Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl					
Slurry 4.3	N2	Mud 0.0	Maximum Rate 6.6		Total Slurry 117.0	Mud 0.0	Spacer 21.0	N2		
Treating Pressure Summary, psi					Breakdown Fluid					
Maximum 2774	Final -2	Average 354	Bump Plug to 1100	Breakdown	Type		Volume		Density	
Avg. N2 Percent		Designed Slurry Volume 117.0 bbl		Displacement 86.1 bbl		Mix Water Temp 72 degF		Cement Circulated to Surface? <input checked="" type="checkbox"/>		Volume 46.0 bbl
								Washed Thru Perfs <input type="checkbox"/>		To
Customer or Authorized Representative Tim Phillips				Schlumberger Supervisor Matt Fair				Circulation Lost <input type="checkbox"/>		Job Completed <input checked="" type="checkbox"/>
								-		-



<b>Service Order #:</b>	
<b>Date:</b>	Sep/07/2010
<b>Operating Time:</b>	0.0
<b>Client Rep:</b>	Encana
<b>Schlumberger Engineer:</b>	Matt Fair
<b>Schlumberger FSM:</b>	

**To be completed by Company Rep. Please answer Y (Yes) or N (No) and add any comments below.**

4	Evaluation				
4a	Main job objective achieved with no consequential non-productive time	10	yes <input checked="" type="checkbox"/>	no <input type="checkbox"/>	10
Sub-total					100%

**Comments:** (Please include a brief explanation for a "NO" response and summarize any innovations attempted on this well.)

<b>Client:</b>	<b>Schlumberger:</b>
<b>Client Signature:</b>	<b>Schlumberger Signature:</b>