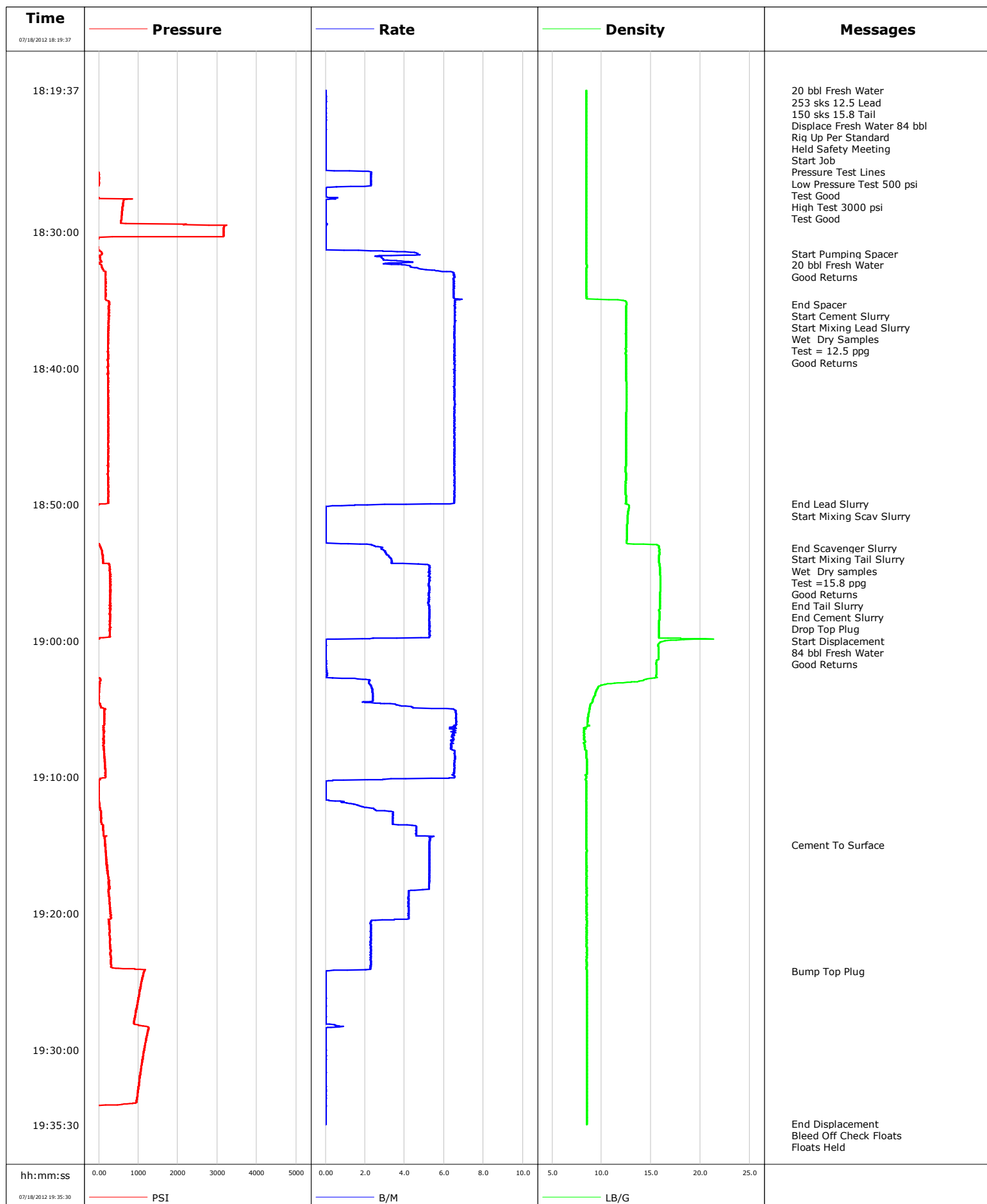


Well	MCU 16-13A	Client	Encana
Field	Mamm Creek	SIR No.	
Engineer	Jordan Moreland	Job Type	9 5/8 Surface
Country	United States	Job Date	07-18-2012

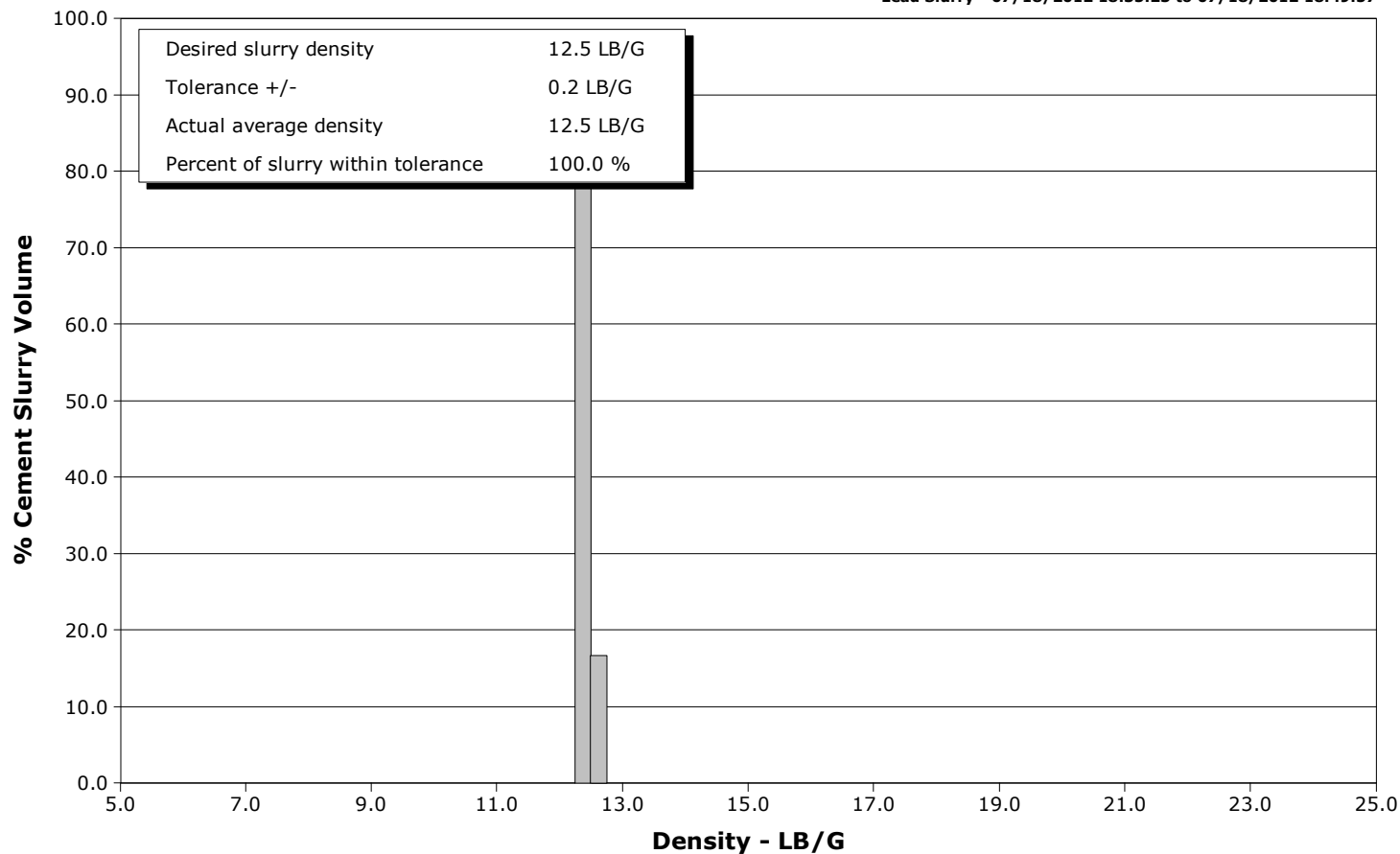


Schlumberger Cementing Qa/Qc Density Report

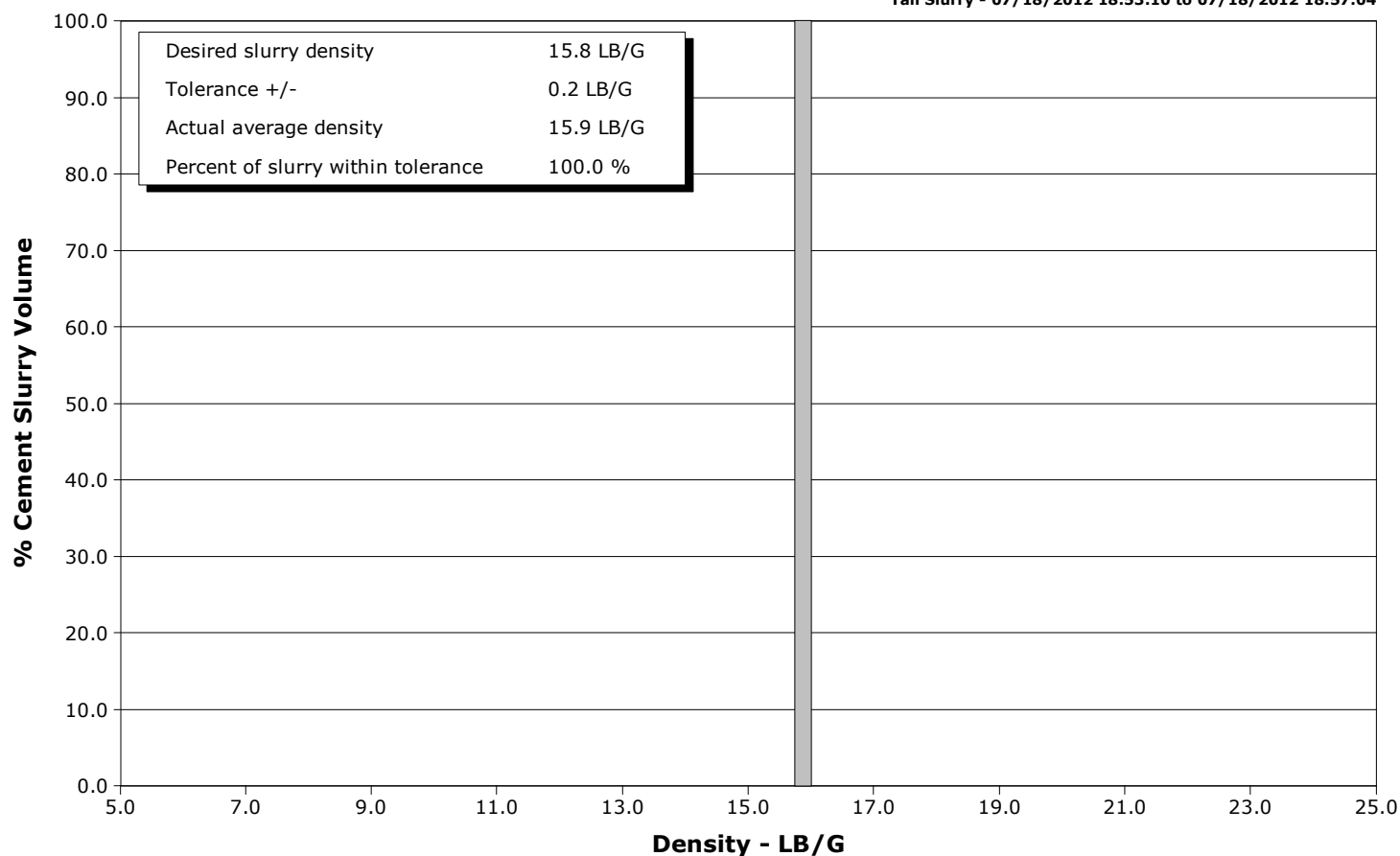
Well MCU 16-13A
Field Mamm Creek
Engineer Jordan Moreland
Country United States

Client Encana
SIR No.
Job Type 9 5/8 Surface
Job Date 07-18-2012

Lead Slurry - 07/18/2012 18:35:23 to 07/18/2012 18:49:57



Tail Slurry - 07/18/2012 18:53:10 to 07/18/2012 18:57:04





Cementing Service Report

				Customer Encana		Job Number C459-00072		
Well MCU 16-13A			Location (legal) M16W		Schlumberger Location GCO		Job Start Jul/18/2012	
Field Mamm Creek		Formation Name/Type		Deviation	Bit Size 12.3 in	Well MD		Well TVD
County Garfield		State/Province Colorado		BHP	BHST 94 degF	BHCT 81 degF	Pore Press. Gradient	
Well Master 0631269274		API/UWI						
Rig Name Patterson 308	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	
			1130.0	9.630	36.0	K55	8RD	
Drilling Fluid Type		Max. Density	Plastic Viscosity	Tubing/Drill Pipe				
				Depth,	Size,	Weight,	Grade	Thread
Service Line Cementing	Job Type 9 5/8 Surface							
Max. Allowed Tub. Press 3000 psi		Max. Allowed Ann. Press	WH Connection Single Cement head	Perforations/Open Hole				
				Top,	Bottom,		No. of Shots	Total Interval
								Diameter
				Treat Down Casing	Displacement 84.0 bbl	Packer Type	Packer Depth	
				Tubing Vol.	Casing Vol. 85.0 bbl	Annular Vol. 66.0 bbl	Openhole Vol. 157.0 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 559 psi				Shoe Type Guide		Squeeze Type		
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>		Shoe Depth 1130.0 ft		Tool Type		
No. Centralizers		Top Plugs 1	Bottom Plugs	Stage Tool Type		Tool Depth		
Cement Head Type Single				Stage Tool Depth		Tail Pipe Size		
Job Scheduled For Jul/18/2012		Arrived on Location Jul/18/2012	Leave Location Jul/18/2012	Collar Type Float		Tail Pipe Depth		
				Collar Depth 1084.0 ft		Sqz. Total Vol.		
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message		
07/18/2012	17:44:10					Started Acquisition		
07/18/2012	18:19:37					20 bbl Fresh Water		
07/18/2012	18:19:37	-30	0.0	8.47	0.0			
07/18/2012	18:19:38					253 sks 12.5 Lead		
07/18/2012	18:19:38					150 sks 15.8 Tail		
07/18/2012	18:19:38					Displace Fresh Water 84 bbl		
07/18/2012	18:19:38					Rig Up Per Standard		
07/18/2012	18:19:38					Held Safety Meeting		
07/18/2012	18:19:38	-30	0.0	8.47	0.0			
07/18/2012	18:19:40					Start Job		
07/18/2012	18:19:40	-30	0.0	8.47	0.0			
07/18/2012	18:19:42					Pressure Test Lines		
07/18/2012	18:19:42	-30	0.0	8.47	0.0			
07/18/2012	18:19:43					Low Pressure Test 500 psi		
07/18/2012	18:19:43					Test Good		
07/18/2012	18:19:43					High Test 3000 psi		
07/18/2012	18:19:43					Test Good		
07/18/2012	18:19:43	-31	0.0	8.47	0.0			
07/18/2012	18:20:10	-31	0.0	8.47	0.0			
07/18/2012	18:22:10	-31	0.0	8.47	0.1			
07/18/2012	18:24:10	-29	0.0	8.47	0.1			

Well			Field		Job Start		Customer		Job Number	
MCU 16-13A			Mamm Creek		Jul/18/2012		Encana		C459-00072	
Date	Time 24-hr clock	Treating Pressure PSI		Flow Rate B/M	Density LB/G		Volume BBL	Message		
07/18/2012	18:28:10	601		0.0	8.48		2.8			
07/18/2012	18:30:10	3155		0.0	8.48		2.9			
07/18/2012	18:31:35							Start Pumping Spacer		
07/18/2012	18:31:35	77		4.6	8.48		3.7			
07/18/2012	18:31:36							20 bbl Fresh Water		
07/18/2012	18:31:36	75		4.7	8.48		3.7			
07/18/2012	18:31:37							Good Returns		
07/18/2012	18:31:37	74		4.7	8.48		3.8			
07/18/2012	18:32:10	61		3.8	8.48		5.6			
07/18/2012	18:34:10	167		6.5	8.48		17.0			
07/18/2012	18:35:18							End Spacer		
07/18/2012	18:35:18	266		6.5	12.52		24.4			
07/18/2012	18:35:22							Start Cement Slurry		
07/18/2012	18:35:22	260		6.6	12.51		24.9			
07/18/2012	18:35:23							Start Mixing Lead Slurry		
07/18/2012	18:35:23	249		6.6	12.51		25.0			
07/18/2012	18:35:24							Wet Dry Samples		
07/18/2012	18:35:24							Test = 12.5 ppg		
07/18/2012	18:35:24							Good Returns		
07/18/2012	18:35:24	265		6.5	12.50		25.1			
07/18/2012	18:36:10	261		6.5	12.48		30.1			
07/18/2012	18:38:10	235		6.5	12.46		43.2			
07/18/2012	18:40:10	229		6.5	12.47		56.2			
07/18/2012	18:42:10	239		6.5	12.53		69.2			
07/18/2012	18:44:10	243		6.5	12.49		82.3			
07/18/2012	18:46:10	226		6.5	12.47		95.3			
07/18/2012	18:48:10	234		6.5	12.46		108.4			
07/18/2012	18:49:57							End Lead Slurry		
07/18/2012	18:49:57	167		6.3	12.44		120.0			
07/18/2012	18:49:58							Start Mixing Scav Slurry		
07/18/2012	18:49:58	88		5.3	12.46		120.1			
07/18/2012	18:50:10	-24		0.0	12.79		120.5			
07/18/2012	18:52:10	-22		0.0	12.57		120.5			
07/18/2012	18:53:09							End Scavenger Slurry		
07/18/2012	18:53:09	39		2.9	15.80		121.1			
07/18/2012	18:53:10							Start Mixing Tail Slurry		
07/18/2012	18:53:10	44		2.9	15.79		121.2			
07/18/2012	18:53:12							Wet Dry samples		
07/18/2012	18:53:12							Test =15.8 ppg		
07/18/2012	18:53:12							Good Returns		
07/18/2012	18:53:12	51		2.9	15.79		121.3			
07/18/2012	18:54:10	102		3.4	15.81		124.3			
07/18/2012	18:56:10	288		5.3	15.95		134.4			
07/18/2012	18:57:04							End Tail Slurry		
07/18/2012	18:57:04	290		5.2	15.92		139.1			
07/18/2012	18:57:06							End Cement Slurry		
07/18/2012	18:57:06	288		5.2	15.92		139.3			
07/18/2012	18:57:09							Drop Top Plug		
07/18/2012	18:57:09	289		5.2	15.92		139.6			
07/18/2012	18:57:10							Start Displacement		
07/18/2012	18:57:10	273		5.2	15.92		139.6			
07/18/2012	18:57:12							84 bbl Fresh Water		
07/18/2012	18:57:12							Good Returns		
07/18/2012	18:57:12	290		5.2	15.92		139.8			

Well			Field		Job Start	Customer		Job Number
MCU 16-13A			Mamm Creek		Jul/18/2012	Encana		C459-00072
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message		
07/18/2012	19:00:10	-14	0.0	15.89	153.6			
07/18/2012	19:02:10	-18	0.1	15.56	153.7			
07/18/2012	19:04:10	-0	2.4	9.18	156.9			
07/18/2012	19:06:10	132	6.6	8.56	167.3			
07/18/2012	19:08:10	129	6.5	8.47	180.2			
07/18/2012	19:10:10	28	2.9	8.38	193.0			
07/18/2012	19:12:10	21	1.9	8.47	193.7			
07/18/2012	19:14:10	115	4.6	8.48	201.0			
07/18/2012	19:14:58					Cement To Surface		
07/18/2012	19:14:58	158	5.3	8.48	205.1			
07/18/2012	19:16:10	206	5.3	8.48	211.4			
07/18/2012	19:18:10	264	5.2	8.48	221.9			
07/18/2012	19:20:10	299	4.2	8.48	230.4			
07/18/2012	19:22:10	279	2.3	8.48	235.6			
07/18/2012	19:24:10	1155	1.1	8.48	240.1			
07/18/2012	19:24:14					Bump Top Plug		
07/18/2012	19:24:14	1146	0.1	8.48	240.1			
07/18/2012	19:26:10	1004	0.0	8.48	240.2			
07/18/2012	19:28:10	957	0.5	8.48	240.2			
07/18/2012	19:30:10	1135	0.0	8.48	240.4			
07/18/2012	19:32:10	1028	0.0	8.48	240.4			
07/18/2012	19:34:10	-19	0.0	8.48	240.5			
07/18/2012	19:35:24					End Displacement		
07/18/2012	19:35:24	-19	0.0	8.48	240.5			
07/18/2012	19:35:25					Bleed Off Check Floats		
07/18/2012	19:35:25					Floats Held		
07/18/2012	19:35:25					1/2 bbl Back		
07/18/2012	19:35:25					45 bbl Cement To Surface		
07/18/2012	19:35:25					Rig Down		
07/18/2012	19:35:25	-19	0.0	8.48	240.5			
07/18/2012	19:35:27					End Job		
07/18/2012	19:35:27	-19	0.0	8.49	240.5			

Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl			
Slurry 3.4	N2	Mud 0.0	Maximum Rate 6.9		Total Slurry 240.5	Mud 0.0	Spacer 24.4	N2
Treating Pressure Summary, psi					Breakdown Fluid			
Maximum 3242	Final -19	Average 403	Bump Plug to 1300	Breakdown	Type		Volume	Density
Avg. N2 Percent		Designed Slurry Volume		Displacement 100.6 bbl	Mix Water Temp 73 degF	Cement Circulated to Surface? <input checked="" type="checkbox"/>		Volume
						Washed Thru Perfs <input type="checkbox"/>		To
Customer or Authorized Representative				Schlumberger Supervisor			Circulation Lost <input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>
Marco Silva				Jordan Moreland			-	-



Service Order #:	
Date:	Jul/18/2012
Operating Time:	0.0
Client Rep:	Encana
Schlumberger Engineer:	Jordan Moreland
Schlumberger FSM:	

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.)

Client:	Schlumberger:
Client Signature:	Schlumberger Signature: