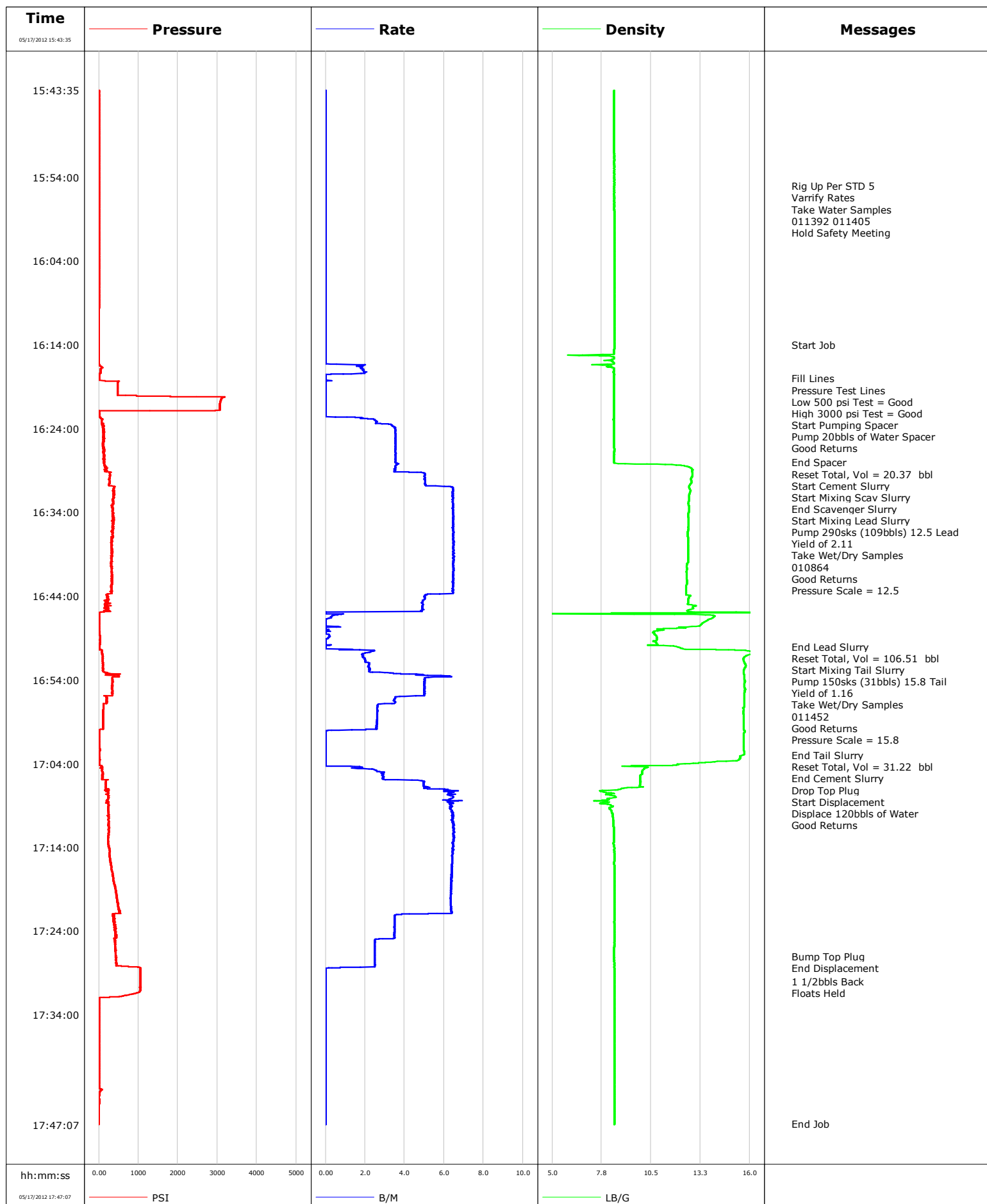


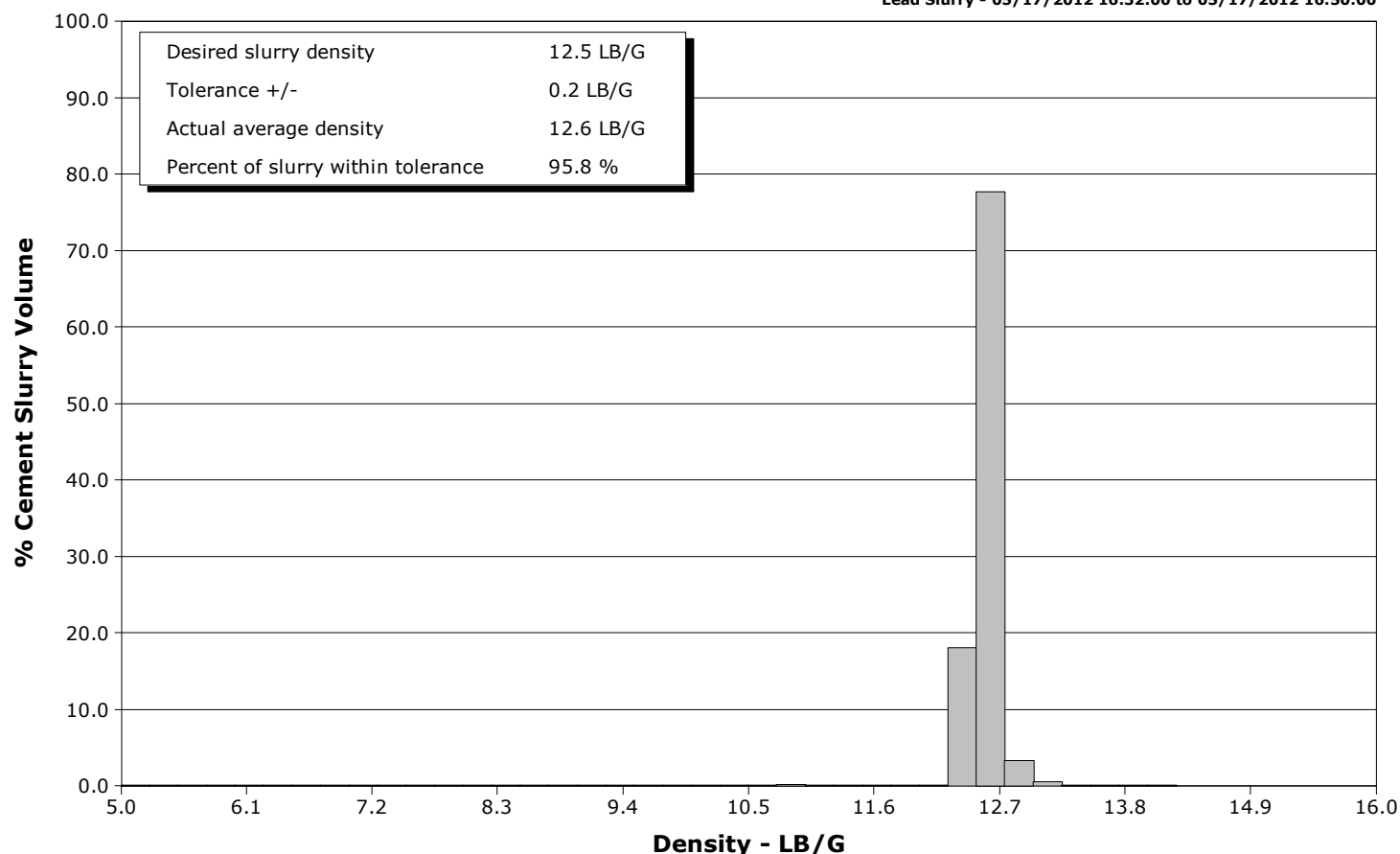
Well	MCU 22-13A	Client	ENCANA
Field	MAMM CREEK	SIR No.	777468
Engineer	Dant Ryan	Job Type	Cem Surface Casing
Country	United States	Job Date	05-17-2012



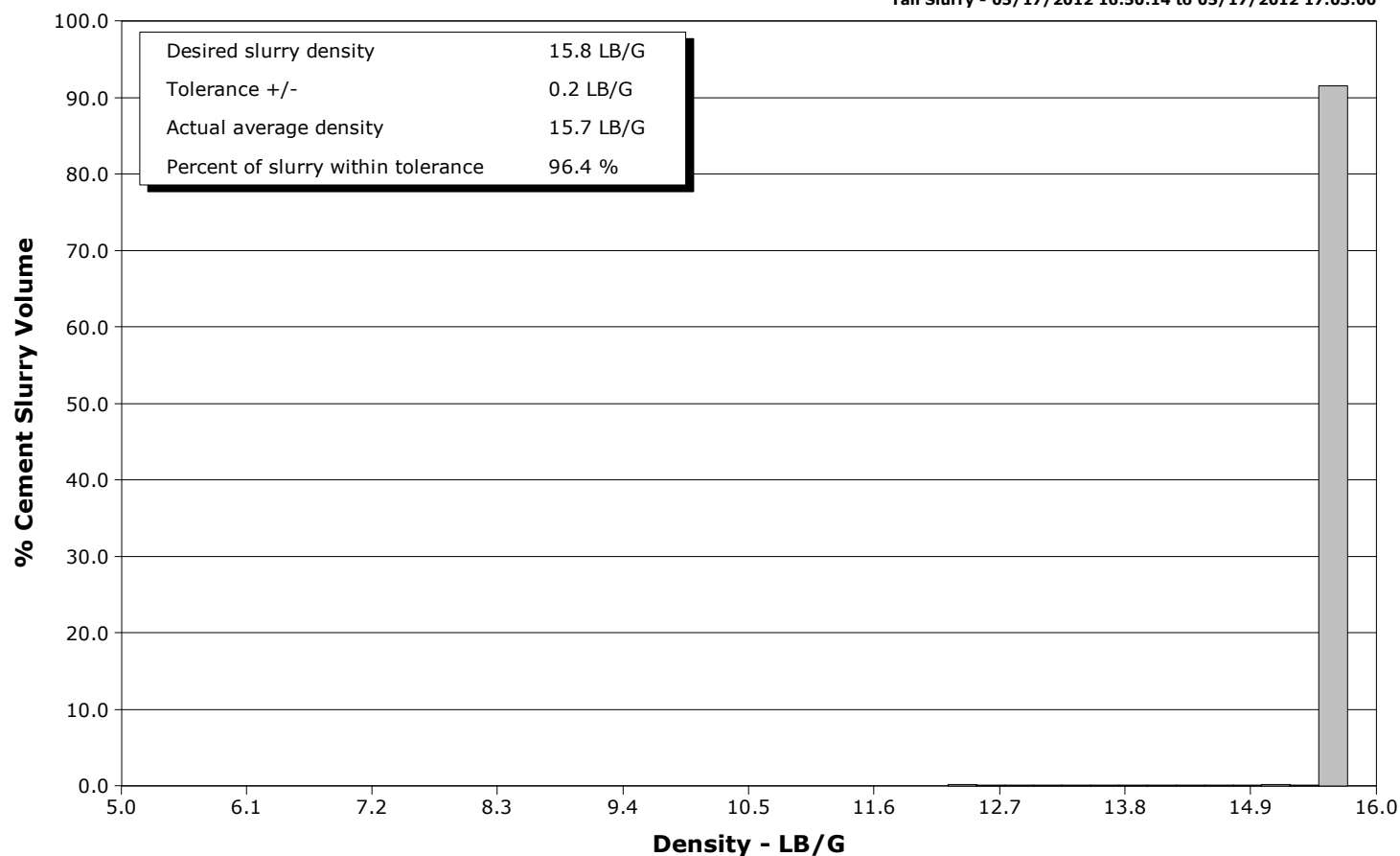
Well MCU 22-13A
Field MAMM CREEK
Engineer Dant Ryan
Country United States

Client ENCANA
SIR No. 777468
Job Type Cem Surface Casing
Job Date 05-17-2012

Lead Slurry - 05/17/2012 16:32:00 to 05/17/2012 16:50:00



Tail Slurry - 05/17/2012 16:50:14 to 05/17/2012 17:03:00



				Customer ENCANA				Job Number 777468										
Well MCU 22-13A 22-13A				Location (legal) N22W				Schlumberger Location Grand Junction				Job Start May/17/2012						
Field MAMM CREEK			Formation Name/Type Shale			Deviation deg		Bit Size 12.3 in		Well MD 1600.0 ft		Well TVD 1600.0 ft						
County GARFIELD			State/Province COLORADO			BHP psi		BHST 95 degF		BHCT 82 degF		Pore Press. Gradient lb/gal						
Well Master 0631347819			API/UWI															
Rig Name NABORS M-15		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		60.0		16.0		65.0		N/A		N/A				
						1600.0		9.6		36.0		K55		8RD				
Drilling Fluid Type Bentonite			Max. Density lb/gal		Plastic Viscosity cP		Tubing/Drill Pipe											
							T/D		Depth, ft		Size, in		Weight, lb/ft		Grade		Thread	
Service Line Cementing		Job Type Cem Surface Casing																
Max. Allowed Tub. Press psi		Max. Allowed Ann. Press psi			WH Connection Single Cement head			Perforations/Open Hole										
								Top, ft		Bottom, ft		shot/ft		No. of Shots		Total Interval ft		
								ft		ft						Diameter in		
								ft		ft								
								Treat Down Casing		Displacement 120.0 bbl		Packer Type		Packer Depth ft				
								Tubing Vol. bbl		Casing Vol. 124.0 bbl		Annular Vol. 94.0 bbl		Openhole Vol. 223.0 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 792 psi				Shoe Type Float				Squeeze Type										
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>			Shoe Depth 1600.0 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 May/17/2012 11:00		Arrived on Location May/17/2012 11:00			Leave Location May/17/2012 19:00			Collar Type Float				Tail Pipe Depth ft						
								Collar Depth 1555.0 ft				Sqz. Total Vol. bbl						
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message												
05/17/2012	15:43:35	0	0.0	8.45	0.0	Started Acquisition												
05/17/2012	15:45:15	1	0.0	8.45	0.0													
05/17/2012	15:46:55	1	0.0	8.45	0.0													
05/17/2012	15:48:35	0	0.0	8.45	0.0													
05/17/2012	15:50:15	0	0.0	8.45	0.0													
05/17/2012	15:51:55	1	0.0	8.45	0.0													
05/17/2012	15:53:35	1	0.0	8.45	0.0													
05/17/2012	15:55:00	1	0.0	8.45	0.0	Rig Up Per STD 5												
05/17/2012	15:55:15	1	0.0	8.45	0.0													
05/17/2012	15:56:00	0	0.0	8.45	0.0	011392 011405												
05/17/2012	15:56:55	1	0.0	8.45	0.0													
05/17/2012	15:58:35	1	0.0	8.45	0.0													
05/17/2012	16:00:00	1	0.0	8.45	0.0	Hold Safety Meeting												
05/17/2012	16:00:15	1	0.0	8.45	0.0													
05/17/2012	16:01:55	0	0.0	8.45	0.0													
05/17/2012	16:03:35	0	0.0	8.45	0.0													
05/17/2012	16:05:15	0	0.0	8.45	0.0													
05/17/2012	16:06:55	0	0.0	8.45	0.0													
05/17/2012	16:08:35	1	0.0	8.45	0.0													
05/17/2012	16:10:15	-1	0.0	8.45	0.0													
05/17/2012	16:11:55	-2	0.0	8.45	0.0													

Well			Field		Job Start		Customer		Job Number	
MCU 22-13A 22-13A			MAMM CREEK		May/17/2012		ENCANA		777468	
Date	Time 24-hr clock	Treating Pressure PSI		Flow Rate B/M	Density LB/G		Volume BBL		Message	
05/17/2012	16:14:00	-2		0.0	8.45		0.0		Start Job	
05/17/2012	16:15:15	-2		0.0	6.50		0.0			
05/17/2012	16:16:55	53		1.9	8.43		0.0			
05/17/2012	16:18:00	10		0.0	8.45		0.0		Fill Lines	
05/17/2012	16:18:35	473		0.0	8.45		0.0			
05/17/2012	16:19:00	469		0.0	8.45		0.0		Pressure Test Lines	
05/17/2012	16:20:15	3155		0.0	8.45		0.0			
05/17/2012	16:21:55	4		0.0	8.45		0.0			
05/17/2012	16:22:00	11		0.0	8.45		0.0		Start Pumping Spacer	
05/17/2012	16:23:00	66		2.5	8.43		0.0		Good Returns	
05/17/2012	16:23:35	127		3.4	8.44		0.0			
05/17/2012	16:25:15	120		3.5	8.45		0.0			
05/17/2012	16:26:55	109		3.5	8.45		0.0			
05/17/2012	16:28:00	143		3.5	8.45		0.0		End Spacer	
05/17/2012	16:28:04	118		3.5	8.45		0.0		Reset Total, Vol = 20.37 bbl	
05/17/2012	16:28:05	128		3.5	8.45		0.0		Start Mixing Scav Slurry	
05/17/2012	16:28:35	175		3.5	12.60		0.0			
05/17/2012	16:30:15	290		5.0	12.75		0.0			
05/17/2012	16:31:55	394		6.4	12.62		0.0		End Scavenger Slurry	
05/17/2012	16:32:00	382		6.4	12.61		0.0		Start Mixing Lead Slurry	
05/17/2012	16:33:00	350		6.5	12.58		0.0		Take Wet/Dry Samples	
05/17/2012	16:33:35	354		6.5	12.61		0.0			
05/17/2012	16:35:15	357		6.4	12.60		0.0			
05/17/2012	16:36:55	362		6.5	12.55		0.0			
05/17/2012	16:38:35	335		6.5	12.56		0.0			
05/17/2012	16:40:15	314		6.5	12.50		0.0			
05/17/2012	16:41:55	317		6.5	12.49		0.0			
05/17/2012	16:43:35	322		6.5	12.45		0.0			
05/17/2012	16:45:15	222		4.9	12.89		0.0			
05/17/2012	16:46:55	10		0.0	13.64		0.0			
05/17/2012	16:48:35	25		0.2	10.69		0.0			
05/17/2012	16:50:00	19		0.0	11.89		0.0		End Lead Slurry	
05/17/2012	16:50:14	14		0.0	12.19		0.0		Reset Total, Vol = 106.51 bbl	
05/17/2012	16:50:15	11		0.0	12.23		0.0			
05/17/2012	16:51:55	99		2.0	15.70		0.0			
05/17/2012	16:53:35	502		6.3	15.69		0.0			
05/17/2012	16:55:15	347		5.0	15.73		0.0			
05/17/2012	16:56:55	114		2.7	15.68		0.0			
05/17/2012	16:58:35	107		2.6	15.66		0.0			
05/17/2012	17:00:15	11		0.0	15.71		0.0			
05/17/2012	17:01:55	10		0.0	15.67		0.0			
05/17/2012	17:03:00	9		0.0	15.63		0.0		End Tail Slurry	
05/17/2012	17:03:20	16		0.0	15.46		0.0		Reset Total, Vol = 31.22 bbl	
05/17/2012	17:03:35	19		0.0	15.38		0.0			
05/17/2012	17:04:00	9		0.0	12.68		0.0		Drop Top Plug	
05/17/2012	17:04:01	9		0.0	12.40		0.0		Start Displacement	
05/17/2012	17:05:00	88		2.8	10.01		0.0		Displace 120bbls of Water	
05/17/2012	17:05:15	100		2.9	10.00		0.0			
05/17/2012	17:06:55	171		5.0	9.10		0.0			
05/17/2012	17:08:35	247		6.3	8.18		0.0			
05/17/2012	17:10:00	245		6.4	8.35		0.0		Good Returns	
05/17/2012	17:10:15	226		6.5	8.37		0.0			
05/17/2012	17:11:55	244		6.5	8.44		0.0			
05/17/2012	17:13:35	231		6.5	8.41		0.0			

Well			Field		Job Start		Customer		Job Number	
MCU 22-13A 22-13A			MAMM CREEK		May/17/2012		ENCANA		777468	
Date	Time 24-hr clock	Treating Pressure PSI		Flow Rate B/M	Density LB/G		Volume BBL		Message	
05/17/2012	17:16:55	333		6.4	8.45		0.0			
05/17/2012	17:18:35	402		6.4	8.45		0.0			
05/17/2012	17:20:15	459		6.3	8.45		0.0			
05/17/2012	17:21:55	420		5.7	8.45		0.0			
05/17/2012	17:23:35	384		3.5	8.45		0.0			
05/17/2012	17:25:15	397		2.5	8.45		0.0			
05/17/2012	17:26:55	429		2.5	8.45		0.0			
05/17/2012	17:26:59	440		2.5	8.45		0.0		Bump Top Plug	
05/17/2012	17:27:00	425		2.5	8.45		0.0		End Displacement	
05/17/2012	17:28:35	1045		0.0	8.45		0.0			
05/17/2012	17:30:00	1046		0.0	8.45		0.0		1 1/2bbls Back	
05/17/2012	17:30:15	1046		0.0	8.45		0.0			
05/17/2012	17:31:55	126		0.0	8.45		0.0			
05/17/2012	17:33:35	4		0.0	8.45		0.0			
05/17/2012	17:35:15	3		0.0	8.45		0.0			
05/17/2012	17:36:55	3		0.0	8.45		0.0			
05/17/2012	17:38:35	3		0.0	8.45		0.0			
05/17/2012	17:40:15	3		0.0	8.45		0.0			
05/17/2012	17:41:55	2		0.0	8.45		0.0			
05/17/2012	17:43:35	21		0.0	8.45		0.0			
05/17/2012	17:45:15	-1		0.0	8.45		0.0			
05/17/2012	17:46:55	-1		0.0	8.45		0.0			

Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl					
Slurry 5.0	N2	Mud	Maximum Rate 8.0		Total Slurry 138.0	Mud	Spacer 20.0	N2		
Treating Pressure Summary, psi					Breakdown Fluid					
Maximum 3000	Final 1100	Average 350	Bump Plug to 900	Breakdown	Type	Volume bbl	Density lb/gal			
Avg. N2 Percent %		Designed Slurry Volume 140.0 bbl		Displacement 120.0 bbl	Mix Water Temp 69 degF	Cement Circulated to Surface? <input checked="" type="checkbox"/>	Volume 40.0 bbl			
						Washed Thru Perfs <input type="checkbox"/>	To ft			
Customer or Authorized Representative TERRY DUNN			Schlumberger Supervisor Dant Ryan			Circulation Lost <input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>			
						-	-			