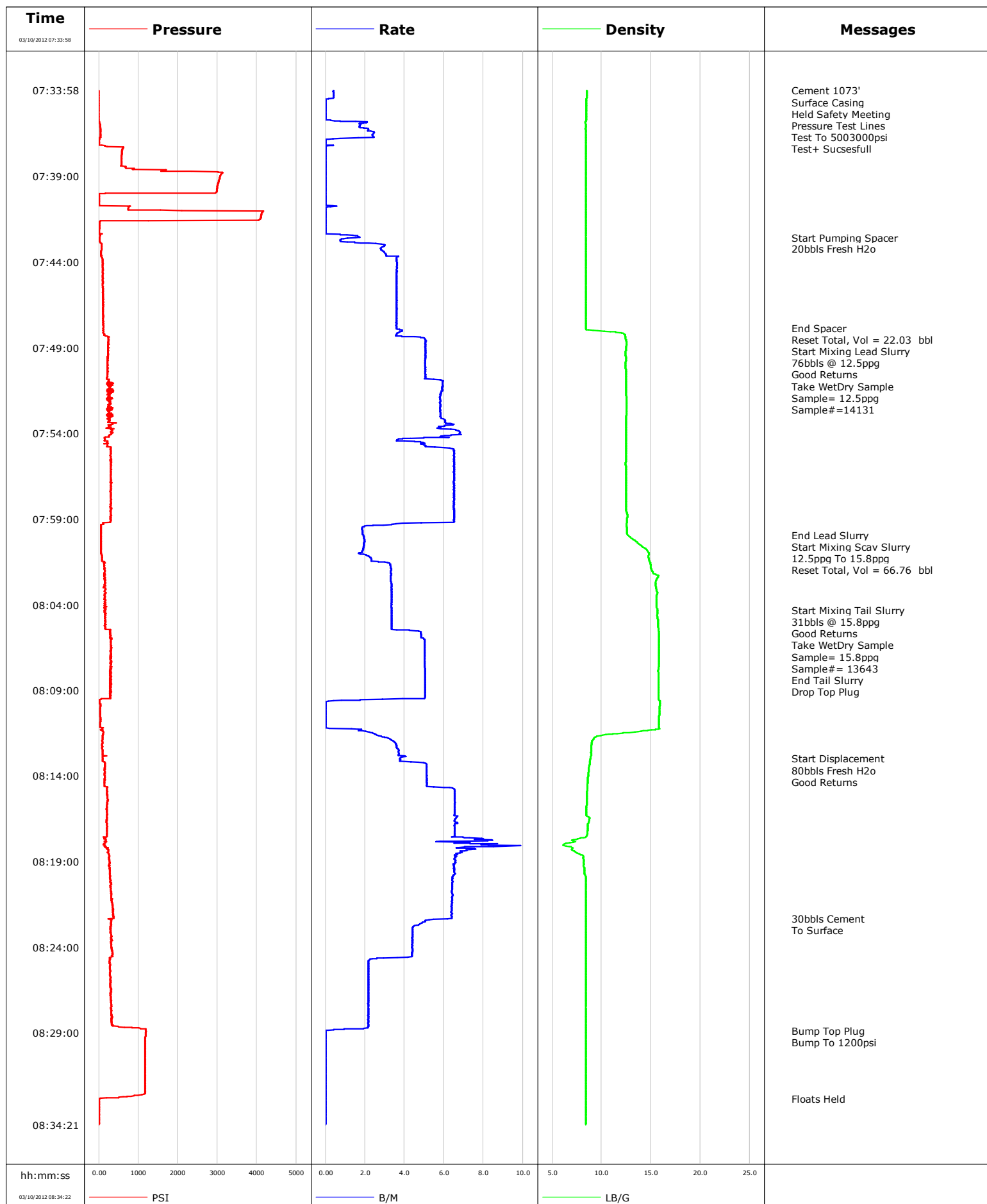


Well COOK CARPENTER 20-3A
Field BATTLEMENT MESA
Engineer
Country United States

Client ENCANA
SIR No. COBA-00268
Job Type SURFACE
Job Date 03-10-2012

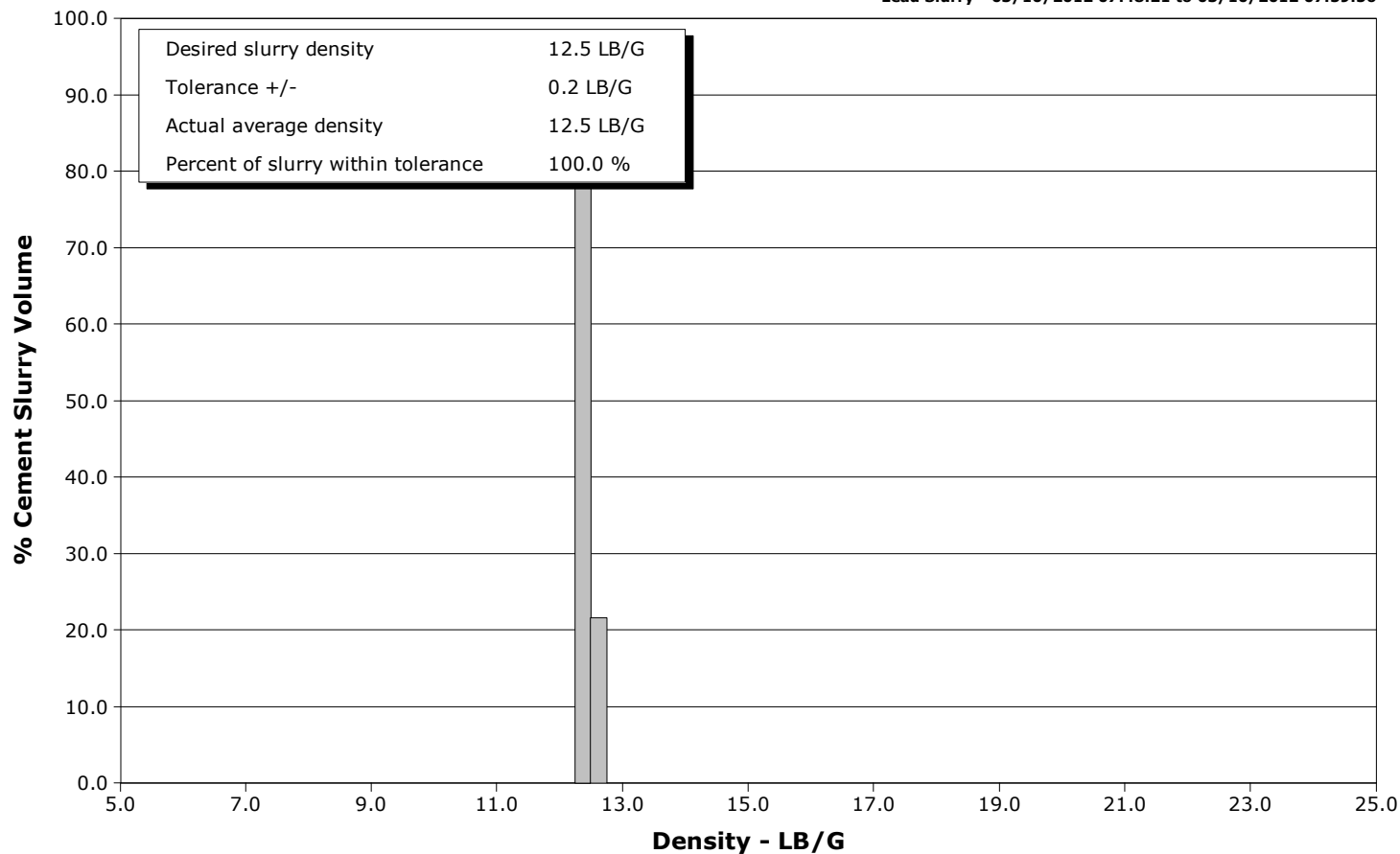


Schlumberger Cementing Qa/Qc Density Report

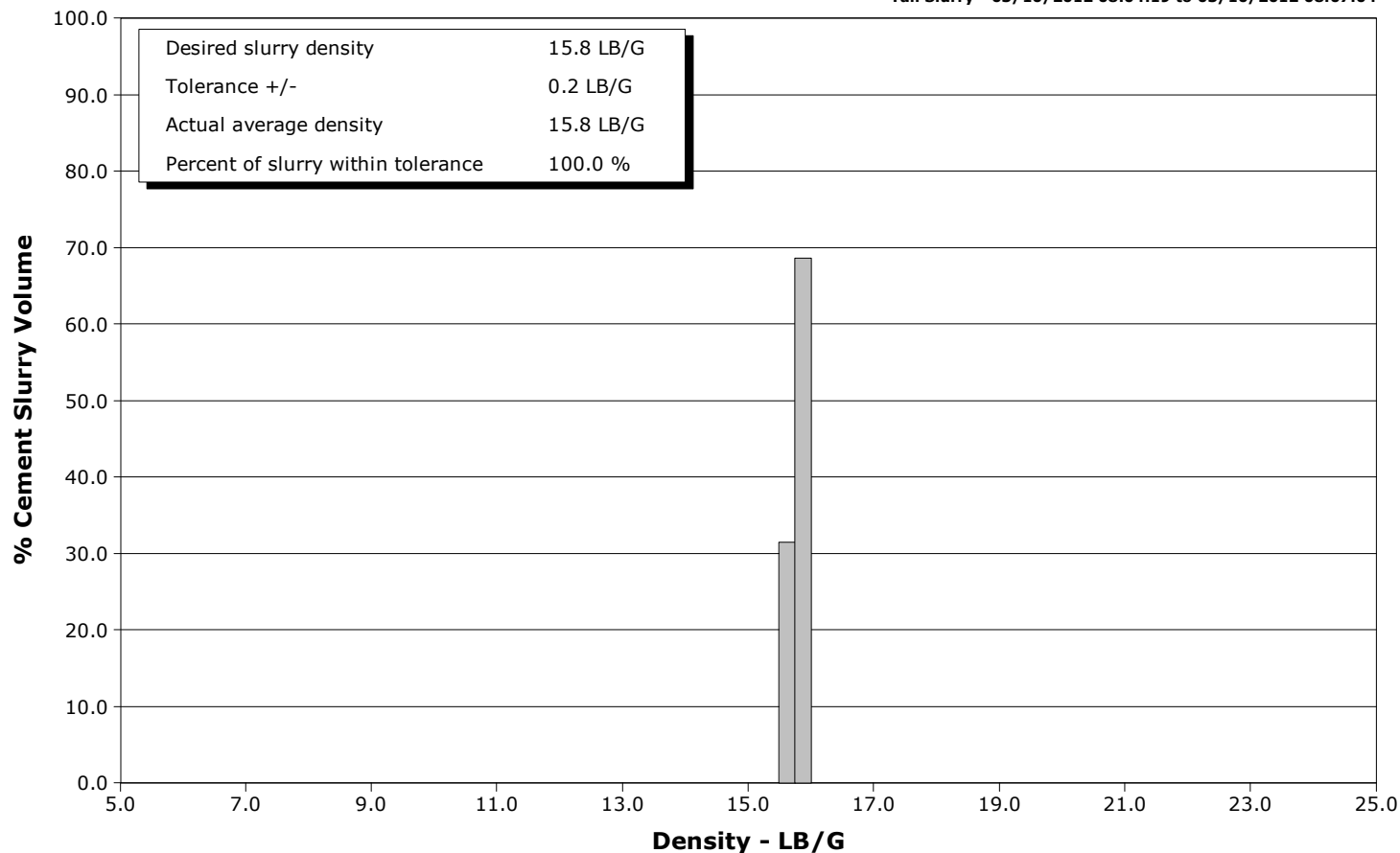
Well COOK CARPENTER 20-3A
Field BATTLEMENT MESA
Engineer
Country United States

Client ENCANA
SIR No. COBA-00268
Job Type SURFACE
Job Date 03-10-2012

Lead Slurry - 03/10/2012 07:48:21 to 03/10/2012 07:59:56



Tail Slurry - 03/10/2012 08:04:19 to 03/10/2012 08:07:04





Cementing Service Report

				Customer ENCANA			Job Number COBA-00268								
Well COOK CARPENTER 20-3A			Location (legal)			Schlumberger Location GCO			Job Start Mar/10/2012						
Field BATTLEMENT MESA		Formation Name/Type			Deviation		Bit Size		Well MD		Well TVD				
County GARFIELD		State/Province Colorado			BHP		BHST		BHCT		Pore Press. Gradient				
Well Master COBA-00268		API/UWI													
Rig Name NABORS M-13		Drilled For Gas		Service Via Land		Casing/Liner									
						Depth,		Size,		Weight,		Grade		Thread	
Offshore Zone		Well Class New		Well Type Development											
Drilling Fluid Type		Max. Density		Plastic Viscosity		Tubing/Drill Pipe									
						Depth,		Size,		Weight,		Grade		Thread	
Service Line Cementing		Job Type SURFACE													
Max. Allowed Tub. Press		Max. Allowed Ann. Press		WH Connection		Perforations/Open Hole									
						Top,		Bottom,				No. of Shots		Total Interval	
Service Instructions 201SKS 12.5 LEAD 149SKS 15.8 TAIL WATER TEST= GOOD														Diameter	
Treat Down Casing						Displacement 80.0 bbl				Packer Type				Packer Depth	
Tubing Vol.						Casing Vol. 83.0 bbl				Annular Vol. 60.0 bbl				Openhole Vol. 143.0 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 531 psi						Shoe Type Guide				Squeeze Type					
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>				Shoe Depth 1073.0 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 Mar/10/2012		Arrived on Location Mar/10/2012		Leave Location Mar/10/2012		Collar Type Diff-Fill				Tail Pipe Depth					
						Collar Depth 1029.0 ft				Sqz. Total Vol.					
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message									
03/10/2012	07:01:14					Started Acquisition									
03/10/2012	07:33:58	-3	0.4	8.50	0.0										
03/10/2012	07:33:59					Cement 1073'									
03/10/2012	07:33:59					Surface Casing									
03/10/2012	07:33:59	-3	0.4	8.50	0.0										
03/10/2012	07:34:00					Held Safety Meeting									
03/10/2012	07:34:00	-2	0.4	8.50	0.0										
03/10/2012	07:34:02					Pressure Test Lines									
03/10/2012	07:34:02	-2	0.4	8.50	0.0										
03/10/2012	07:34:03					Test To 5003000psi									
03/10/2012	07:34:03	-3	0.4	8.50	0.0										
03/10/2012	07:34:04					Test+ Succesfull									
03/10/2012	07:34:04	-3	0.4	8.50	0.0										
03/10/2012	07:35:14	-3	0.0	8.44	0.2										
03/10/2012	07:37:14	157	0.0	8.41	2.4										
03/10/2012	07:39:14	3040	0.0	8.41	2.4										
03/10/2012	07:41:14	4112	0.0	8.41	2.4										
03/10/2012	07:42:33					Start Pumping Spacer									
03/10/2012	07:42:33	30	1.7	8.41	2.6										
03/10/2012	07:42:34					20bbbls Fresh H2o									
03/10/2012	07:42:34	11	1.7	8.41	2.7										

Well			Field		Job Start		Customer		Job Number	
COOK CARPENTER 20-3A			BATTLEMENT MESA		Mar/10/2012		ENCANA		COBA-00268	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message				
03/10/2012	07:45:14	105	3.6	8.41	10.9					
03/10/2012	07:47:14	118	3.6	8.41	18.1					
03/10/2012	07:47:50					End Spacer				
03/10/2012	07:47:50	112	3.6	8.40	20.2					
03/10/2012	07:48:19					Reset Total, Vol = 22.03 bbl				
03/10/2012	07:48:19	168	3.6	12.40	22.0					
03/10/2012	07:48:21					Start Mixing Lead Slurry				
03/10/2012	07:48:21					76bbls @ 12.5ppg				
03/10/2012	07:48:21	248	3.9	12.40	22.2					
03/10/2012	07:48:22					Good Returns				
03/10/2012	07:48:22					Take WetDry Sample				
03/10/2012	07:48:22					Sample= 12.5ppg				
03/10/2012	07:48:22					Sample#=14131				
03/10/2012	07:48:22	248	4.5	12.41	22.2					
03/10/2012	07:49:14	232	5.1	12.44	26.6					
03/10/2012	07:51:14	328	5.9	12.47	37.0					
03/10/2012	07:53:14	285	6.1	12.49	48.7					
03/10/2012	07:55:14	296	6.5	12.45	60.4					
03/10/2012	07:57:14	307	6.5	12.47	73.4					
03/10/2012	07:59:14	109	4.8	12.55	86.3					
03/10/2012	07:59:56					End Lead Slurry				
03/10/2012	07:59:56	50	1.9	12.67	87.9					
03/10/2012	08:00:02					Start Mixing Scav Slurry				
03/10/2012	08:00:02	52	1.9	12.86	88.1					
03/10/2012	08:00:03					12.5ppg To 15.8ppg				
03/10/2012	08:00:03	52	1.9	12.86	88.1					
03/10/2012	08:00:24					Reset Total, Vol = 66.76 bbl				
03/10/2012	08:00:24	57	2.0	13.67	88.8					
03/10/2012	08:01:14	81	2.3	14.72	90.4					
03/10/2012	08:03:14	146	3.3	15.60	96.8					
03/10/2012	08:04:19					Start Mixing Tail Slurry				
03/10/2012	08:04:19	140	3.3	15.67	100.4					
03/10/2012	08:04:20					31bbls @ 15.8ppg				
03/10/2012	08:04:20					Good Returns				
03/10/2012	08:04:20					Take WetDry Sample				
03/10/2012	08:04:20	136	3.3	15.67	100.4					
03/10/2012	08:04:21					Sample= 15.8ppg				
03/10/2012	08:04:21					Sample#= 13643				
03/10/2012	08:04:21	136	3.3	15.67	100.5					
03/10/2012	08:05:14	144	3.3	15.71	103.4					
03/10/2012	08:07:04					End Tail Slurry				
03/10/2012	08:07:04	319	5.0	15.80	112.1					
03/10/2012	08:07:05					Drop Top Plug				
03/10/2012	08:07:05	319	5.0	15.80	112.2					
03/10/2012	08:07:14	290	5.0	15.80	113.0					
03/10/2012	08:09:14	279	5.0	15.76	123.0					
03/10/2012	08:11:14	82	1.3	15.87	124.6					
03/10/2012	08:12:58					Start Displacement				
03/10/2012	08:12:58	96	3.8	8.90	130.1					
03/10/2012	08:12:59					80bbls Fresh H2o				
03/10/2012	08:12:59	94	3.8	8.88	130.2					
03/10/2012	08:13:00					Good Returns				
03/10/2012	08:13:00	99	3.8	8.86	130.3					
03/10/2012	08:13:14	148	5.0	8.79	131.2					

Well			Field		Job Start	Customer		Job Number
COOK CARPENTER 20-3A			BATTLEMENT MESA		Mar/10/2012	ENCANA		COBA-00268
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message		
03/10/2012	08:17:14	203	6.5	8.58	155.4			
03/10/2012	08:19:14	286	6.5	8.19	169.3			
03/10/2012	08:21:14	337	6.4	8.40	182.2			
03/10/2012	08:22:18					30bbls Cement		
03/10/2012	08:22:18					To Surface		
03/10/2012	08:22:18	382	6.4	8.40	189.0			
03/10/2012	08:23:14	314	4.4	8.40	193.4			
03/10/2012	08:25:14	276	2.2	8.41	200.8			
03/10/2012	08:27:14	315	2.2	8.41	205.2			
03/10/2012	08:28:53					Bump Top Plug		
03/10/2012	08:28:53	1193	0.0	8.41	208.5			
03/10/2012	08:28:55					Bump To 1200psi		
03/10/2012	08:28:55	1189	0.0	8.41	208.5			
03/10/2012	08:29:14	1177	0.0	8.41	208.5			
03/10/2012	08:31:14	1169	0.0	8.41	208.5			
03/10/2012	08:32:51					Floats Held		
03/10/2012	08:32:51	13	0.0	8.41	208.5			

Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl			
Slurry 4.5	N2	Mud 0.0	Maximum Rate 9.9	Total Slurry 208.5	Mud 0.0	Spacer 17.6	N2	
Treating Pressure Summary, psi					Breakdown Fluid			
Maximum 4166	Final 11	Average 385	Bump Plug to 1200	Breakdown	Type	Volume	Density	
Avg. N2 Percent		Designed Slurry Volume 107.0 bbl	Displacement 96.3 bbl	Mix Water Temp 64 degF	Cement Circulated to Surface? <input checked="" type="checkbox"/>		Volume 30.0 bbl	
					Washed Thru Perfs <input type="checkbox"/>		To	
Customer or Authorized Representative VLAD KOCHETOV			Schlumberger Supervisor JASON CRICK			Circulation Lost <input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>	
					-		-	