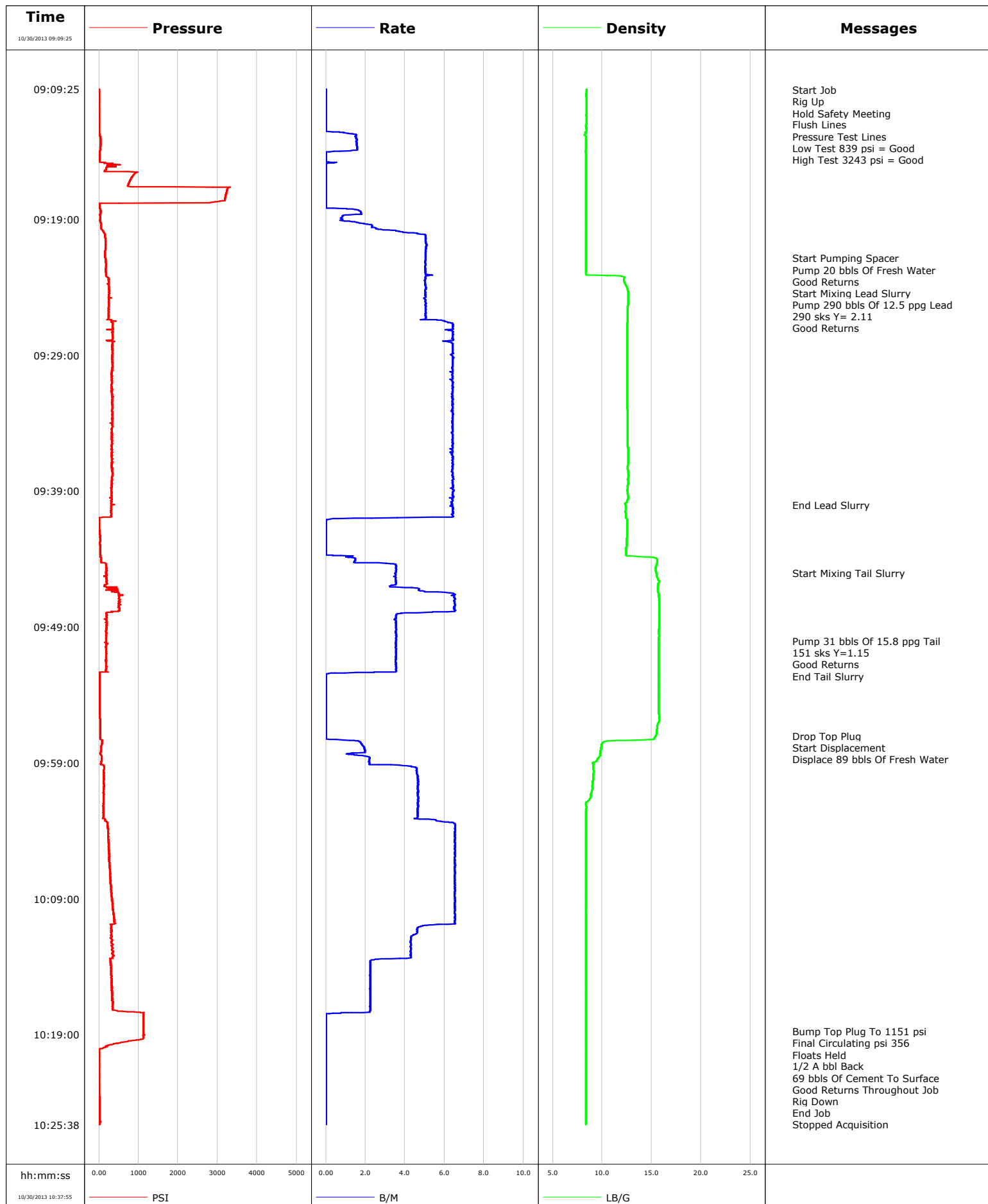


Well Rose 22-2C
Field Mamm Creek
Engineer Justin Zika
Country United States

Client Encana
SIR No.
Job Type Surface
Job Date 10/30/2013

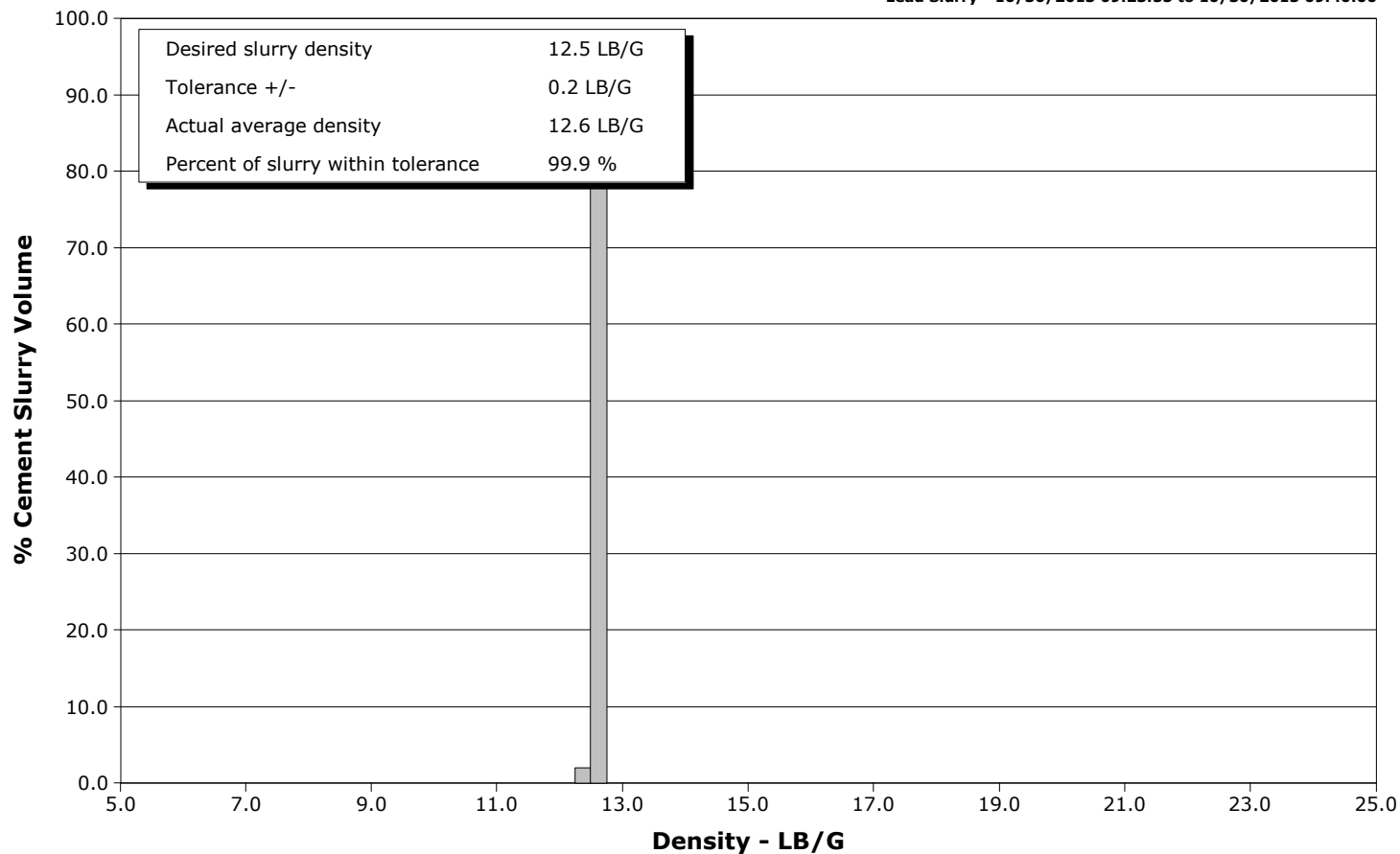


Schlumberger Cementing Qa/Qc Density Report

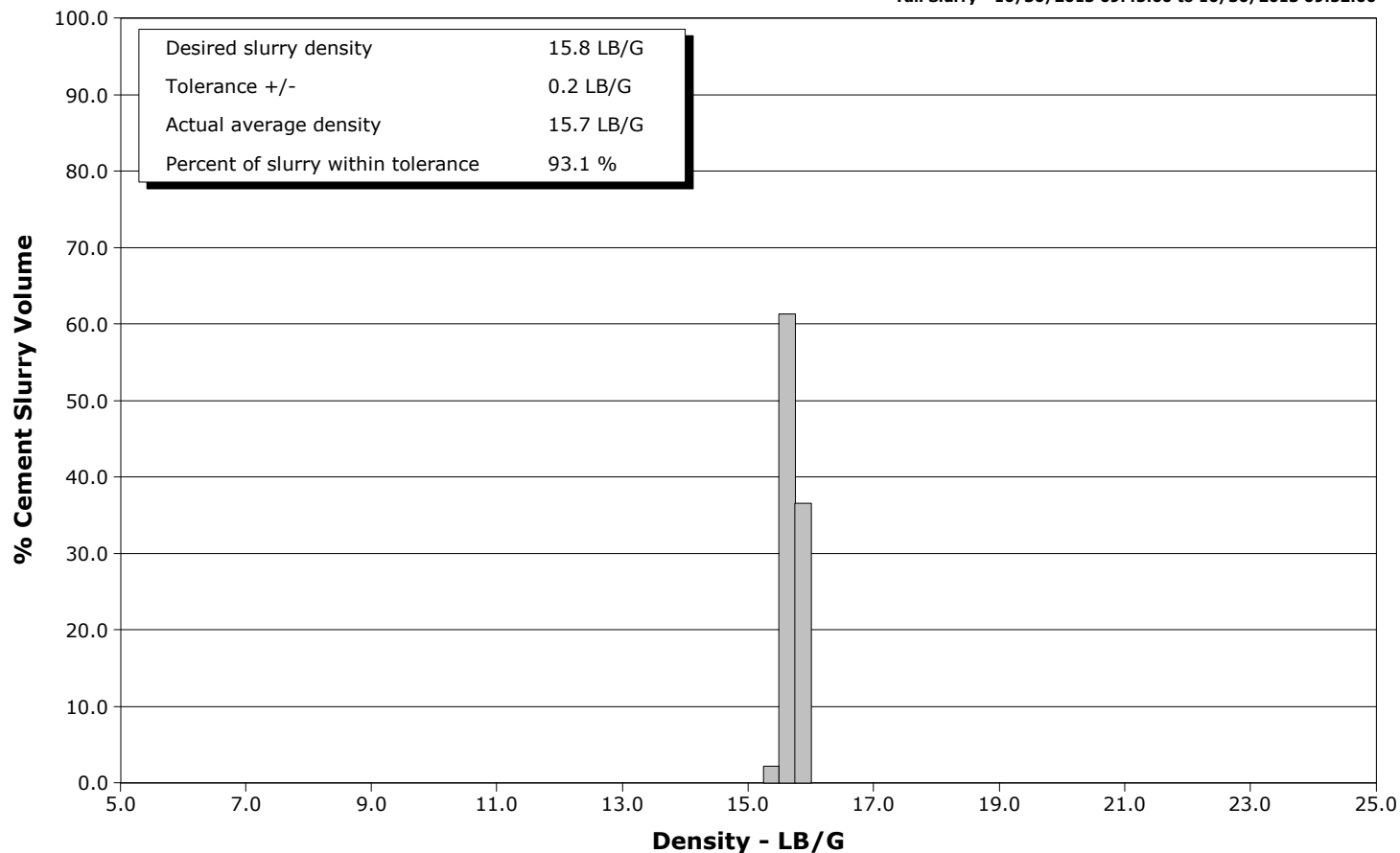
Well Rose 22-2C
Field Mamm Creek
Engineer Justin Zika
Country United States

Client Encana
SIR No.
Job Type Surface
Job Date 10/30/2013

Lead Slurry - 10/30/2013 09:23:55 to 10/30/2013 09:40:00



Tail Slurry - 10/30/2013 09:45:00 to 10/30/2013 09:52:00





Cementing Service Report

				Customer Encana			Job Number 1866136								
Well Rose 22-2C 22-2C			Location (legal) Grand Junction, CO			Schlumberger Location GCO			Job Start Oct/30/2013						
Field Mamm Creek		Formation Name/Type Shale			Deviation		Bit Size 12.7 in		Well MD 1198.0 ft		Well TVD 1198.0 ft				
County Garfield		State/Province Colorado			BHP		BHST 94 degF		BHCT 82 degF		Pore Press. Gradient				
Well Master 0631485488		API/UWI													
Rig Name Patterson 303		Drilled For Gas		Service Via Land		Casing/Liner									
Offshore Zone		Well Class New		Well Type Development		Depth, ft		Size, in		Weight, lb/ft		Grade		Thread	
						1198.0		9.630		36.0		J55		8RD	
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 593 psi		Max. Allowed Ann. Press		WH Connection Single Cement head		Perforations/Open Hole									
Service Instructions Rig Up Hold Safety Meeting Flush Lines Pressure Test Lines Pump 20 bbls Of Fresh Water Pump 106 bbls Of 12.5 ppq Lead Pump 31 bbls Of 15.8 ppq Tail Shut Down Drop Top Plug Displace						Top,		Bottom,				No. of Shots		Total Interval	
						Treat Down Annulus		Displacement 89.0 bbl		Packer Type		Packer Depth			
						Tubing Vol.		Casing Vol. 92.0 bbl		Annular Vol. 81.0 bbl		Openhole Vol. 176.0 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 593 psi						Shoe Type Float				Squeeze Type					
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>				Shoe Depth 1198.0 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 Oct/30/2013 07:00		Arrived on Location Oct/30/2013 07:00		Leave Location Oct/30/2013 12:00		Collar Type Float				Tail Pipe Depth					
						Collar Depth 1152.0 ft				Sqz. Total Vol.					
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message									
10/30/2013	08:47:50					Started Acquisition									
10/30/2013	09:09:25	2	0.0	8.38	0.0										
10/30/2013	09:09:28					Start Job									
10/30/2013	09:09:28	2	0.0	8.38	0.0										
10/30/2013	09:09:30	1	0.0	8.38	0.0										
10/30/2013	09:09:35					Rig Up									
10/30/2013	09:09:35					Hold Safety Meeting									
10/30/2013	09:09:35					Flush Lines									
10/30/2013	09:09:35	1	0.0	8.38	0.0										
10/30/2013	09:09:40					Pressure Test Lines									
10/30/2013	09:09:40	2	0.0	8.38	0.0										
10/30/2013	09:09:44					Low Test 839 psi = Good									
10/30/2013	09:09:44					High Test 3243 psi = Good									
10/30/2013	09:09:44	1	0.0	8.38	0.0										
10/30/2013	09:11:10	3	0.0	8.38	0.0										
10/30/2013	09:12:50	22	1.5	8.26	0.3										
10/30/2013	09:14:30	15	0.0	8.38	2.1										
10/30/2013	09:16:10	783	0.0	8.38	2.1										
10/30/2013	09:17:50	23	0.0	8.38	2.1										
10/30/2013	09:19:30	58	2.3	8.38	4.0										
10/30/2013	09:21:10	168	5.1	8.37	11.3										

Well			Field		Job Start	Customer	Job Number
Rose 22-2C 22-2C			Mamm Creek		Oct/30/2013	Encana	1866136
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
10/30/2013	09:21:52	160	5.0	8.37	14.9		
10/30/2013	09:21:55					Pump 20 bbls Of Fresh Water	
10/30/2013	09:21:55	169	5.0	8.38	15.1		
10/30/2013	09:21:56					Good Returns	
10/30/2013	09:21:56	168	5.0	8.38	15.2		
10/30/2013	09:22:50	173	5.0	8.37	19.7		
10/30/2013	09:23:55					Start Mixing Lead Slurry	
10/30/2013	09:23:55	246	5.0	12.45	25.2		
10/30/2013	09:24:02					Pump 290 bbls Of 12.5 ppg Lead	
10/30/2013	09:24:02	247	5.1	12.51	25.8		
10/30/2013	09:24:03					290 sks Y= 2.11	
10/30/2013	09:24:03					Good Returns	
10/30/2013	09:24:03	254	5.1	12.53	25.9		
10/30/2013	09:24:30	258	5.0	12.63	28.1		
10/30/2013	09:26:10	236	5.1	12.56	36.5		
10/30/2013	09:27:50	342	6.4	12.53	46.8		
10/30/2013	09:29:30	329	6.4	12.52	57.4		
10/30/2013	09:31:10	324	6.4	12.52	68.1		
10/30/2013	09:32:50	337	6.4	12.54	78.8		
10/30/2013	09:34:30	332	6.4	12.58	89.5		
10/30/2013	09:36:10	332	6.4	12.60	100.1		
10/30/2013	09:37:50	338	6.4	12.68	110.8		
10/30/2013	09:39:30	276	6.5	12.63	121.5		
10/30/2013	09:40:00					End Lead Slurry	
10/30/2013	09:40:00	389	6.4	12.31	124.7		
10/30/2013	09:41:10	11	0.0	12.52	131.0		
10/30/2013	09:42:50	23	0.0	12.47	131.0		
10/30/2013	09:44:30	182	3.5	15.47	132.5		
10/30/2013	09:45:00					Start Mixing Tail Slurry	
10/30/2013	09:45:00	188	3.5	15.46	134.2		
10/30/2013	09:46:10	259	4.6	15.60	138.4		
10/30/2013	09:47:50	519	6.5	15.76	148.7		
10/30/2013	09:49:30	176	3.5	15.73	154.9		
10/30/2013	09:50:03					Pump 31 bbls Of 15.8 ppg Tail	
10/30/2013	09:50:03					151 sks Y=1.15	
10/30/2013	09:50:03	181	3.5	15.73	156.9		
10/30/2013	09:50:04					Good Returns	
10/30/2013	09:50:04	181	3.6	15.73	157.0		
10/30/2013	09:51:10	188	3.5	15.71	160.9		
10/30/2013	09:52:00					End Tail Slurry	
10/30/2013	09:52:00	181	3.5	15.71	163.8		
10/30/2013	09:52:50	15	0.0	15.73	165.1		
10/30/2013	09:54:30	22	0.0	15.72	165.1		
10/30/2013	09:56:10	28	0.0	15.61	165.1		
10/30/2013	09:57:00					Drop Top Plug	
10/30/2013	09:57:00					Start Displacement	
10/30/2013	09:57:00					Displace 89 bbls Of Fresh Water	
10/30/2013	09:57:00	27	0.0	15.45	165.1		
10/30/2013	09:57:50	51	1.9	9.90	166.0		
10/30/2013	09:59:30	124	4.6	9.12	170.1		
10/30/2013	10:01:10	121	4.7	8.93	177.8		
10/30/2013	10:02:50	111	4.6	8.37	185.6		
10/30/2013	10:04:30	229	6.5	8.37	195.7		
10/30/2013	10:06:10	270	6.5	8.37	206.5		

Well			Field		Job Start	Customer		Job Number
Rose 22-2C 22-2C			Mamm Creek		Oct/30/2013	Encana		1866136
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message		
10/30/2013	10:09:30	342	6.5	8.37	228.2			
10/30/2013	10:11:10	317	4.6	8.37	238.7			
10/30/2013	10:12:50	343	4.3	8.37	246.0			
10/30/2013	10:14:30	318	2.2	8.37	251.0			
10/30/2013	10:16:10	333	2.2	8.37	254.7			
10/30/2013	10:17:50	1126	0.0	8.38	257.5			
10/30/2013	10:18:45					Bump Top Plug To 1151 psi		
10/30/2013	10:18:45	1125	0.0	8.38	257.5			
10/30/2013	10:18:48					Final Circulating psi 356		
10/30/2013	10:18:48					Floats Held		
10/30/2013	10:18:48					1/2 A bbl Back		
10/30/2013	10:18:48					69 bbls Of Cement To Surface		
10/30/2013	10:18:48	1125	0.0	8.38	257.5			
10/30/2013	10:18:49					Good Returns Throughout Job		
10/30/2013	10:18:49					Rig Down		
10/30/2013	10:18:49					End Job		
10/30/2013	10:18:49	1125	0.0	8.38	257.5			
10/30/2013	10:19:30	734	0.0	8.38	257.5			
10/30/2013	10:21:10	10	0.0	8.38	257.5			
10/30/2013	10:22:50	10	0.0	8.38	257.5			
10/30/2013	10:24:30	22	0.0	8.38	257.5			
10/30/2013	10:26:10	23	0.0	8.38	257.5			
10/30/2013	10:27:50	66	3.1	8.41	259.8			
10/30/2013	10:29:30	75	3.2	8.37	265.1			
10/30/2013	10:31:10	10	0.0	8.38	267.5			
10/30/2013	10:32:50	22	2.1	8.42	273.6			
10/30/2013	10:34:30	159	5.1	8.31	280.9			
10/30/2013	10:36:10	11	0.0	0.01	284.6			
10/30/2013	10:37:50	11	0.0	0.21	284.6			

Post Job Summary

Average Pump Rates,					Volume of Fluid Injected, bbl					
Slurry	N2	Mud	Maximum Rate		Total Slurry 137.0	Mud	Spacer 20.0	N2		
Treating Pressure Summary, psi					Breakdown Fluid					
Maximum 3000	Final 356	Average	Bump Plug to 1151	Breakdown	Type	Volume		Density		
Avg. N2 Percent		Designed Slurry Volume 137.0 bbl		Displacement 89.0 bbl	Mix Water Temp 55 degF	Cement Circulated to Surface? <input checked="" type="checkbox"/>		Volume 69.0 bbl		
						Washed Thru Perfs <input type="checkbox"/>		To		
Customer or Authorized Representative Charlie Brown			Schlumberger Supervisor Justin Zika			Circulation Lost <input type="checkbox"/>		Job Completed <input checked="" type="checkbox"/>		
						-		-		