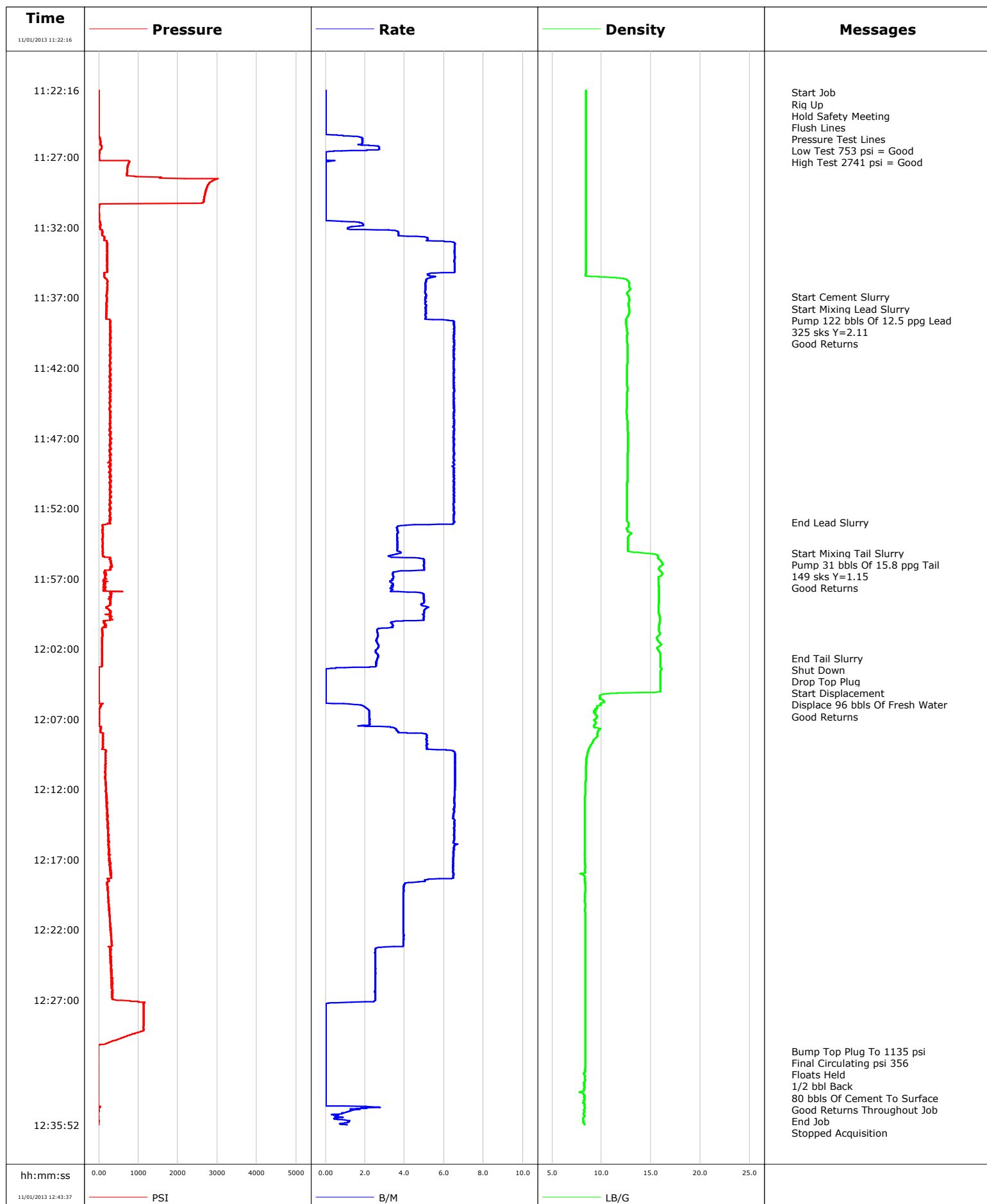


Well	Rose 22-1B	Client	Encana
Field	Mamm Creek	SIR No.	
Engineer	Justin Zika	Job Type	Surface
Country	United States	Job Date	11-01-2013

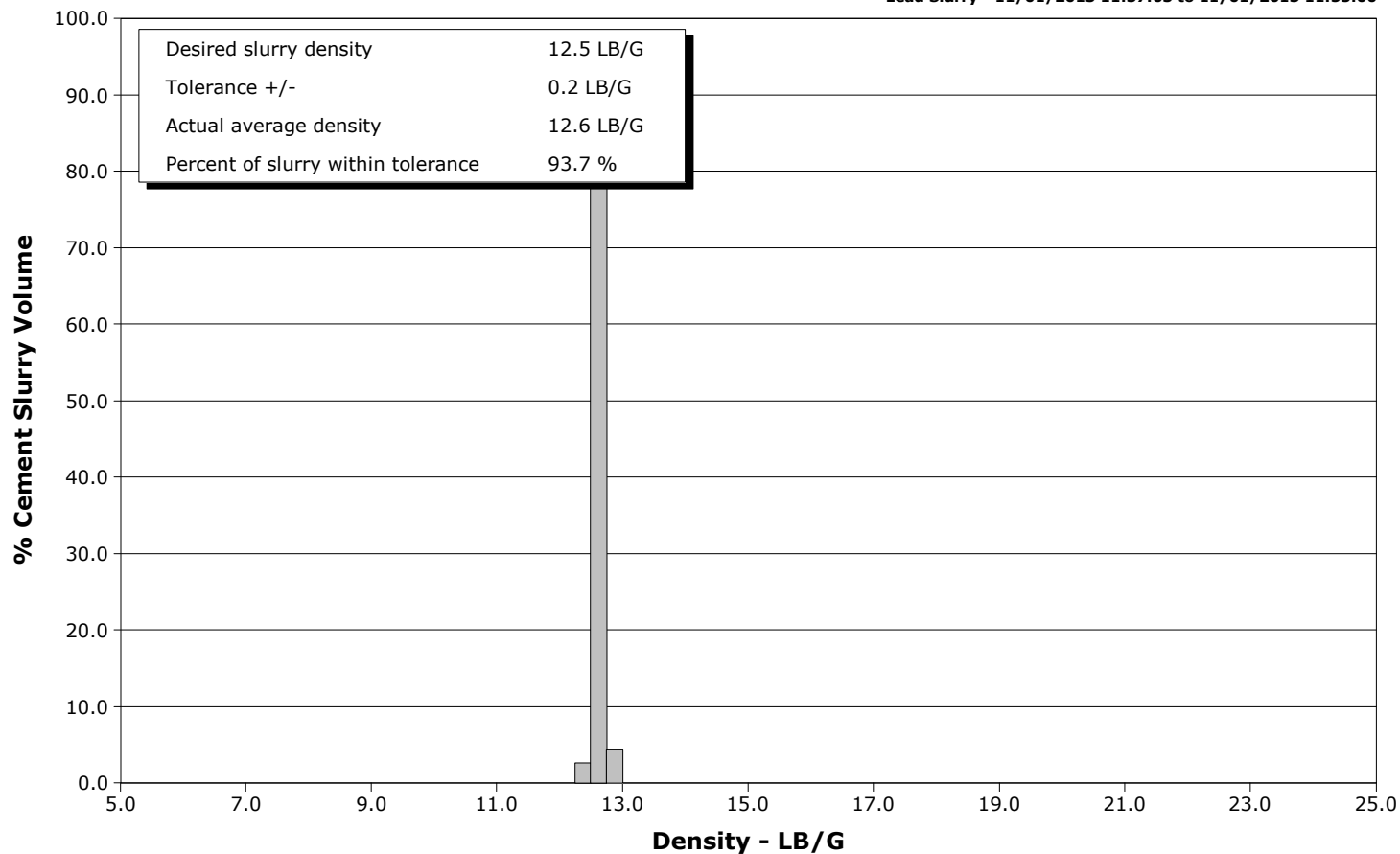


Schlumberger Cementing Qa/Qc Density Report

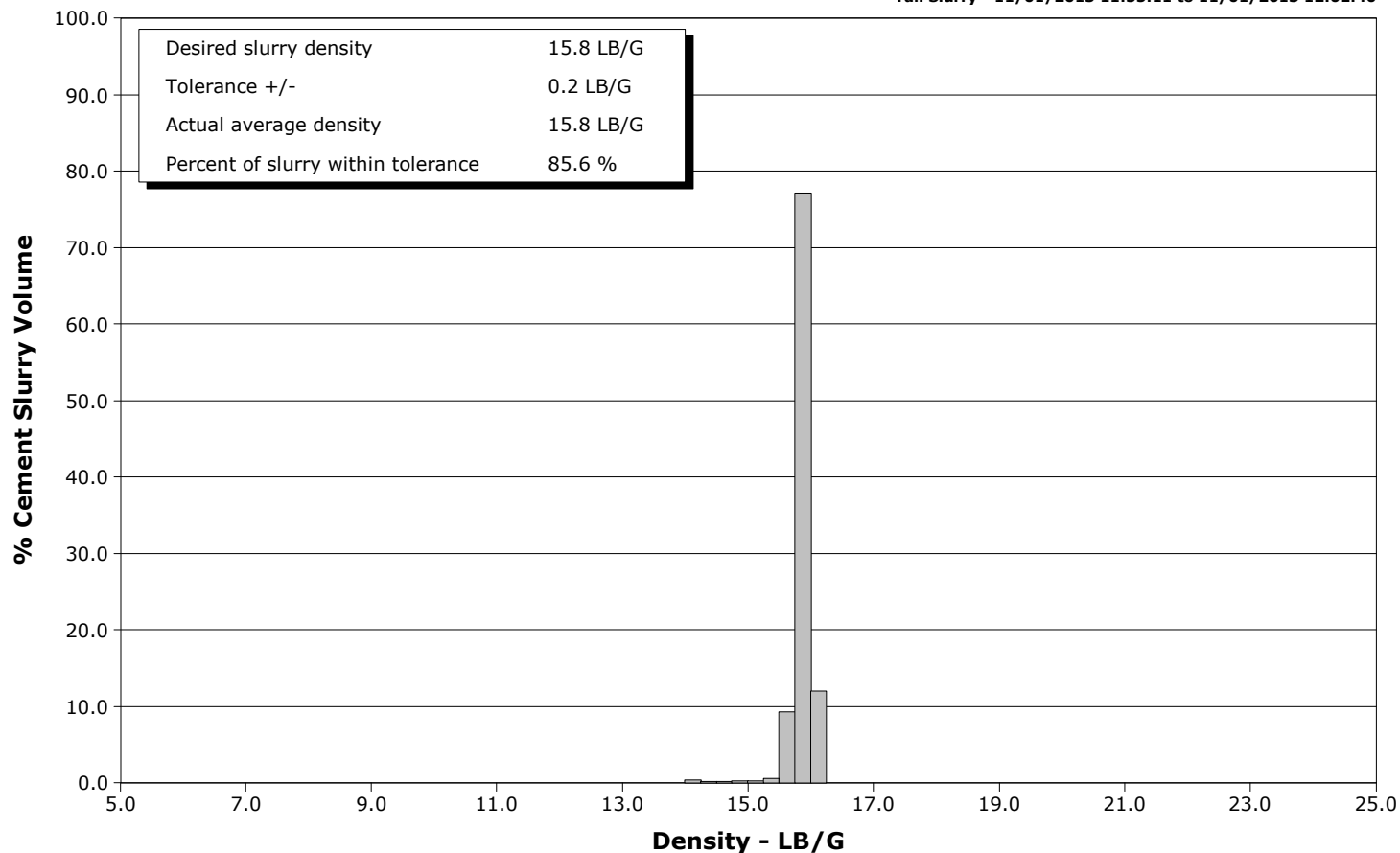
Well Rose 22-1B
Field Mamm Creek
Engineer Justin Zika
Country United States

Client Encana
SIR No.
Job Type Surface
Job Date 11-01-2013

Lead Slurry - 11/01/2013 11:37:03 to 11/01/2013 11:53:00



Tail Slurry - 11/01/2013 11:55:11 to 11/01/2013 12:02:40





Cementing Service Report

				Customer Encana			Job Number 1866141								
Well Rose 22-1B 22-1B			Location (legal) Grand Junction, CO			Schlumberger Location GCO			Job Start Nov/01/2013						
Field Mamm Creek		Formation Name/Type Shale			Deviation		Bit Size 12.7 in		Well MD 1282.0 ft		Well TVD 1282.0 ft				
County Garfield		State/Province Colorado			BHP		BHST 94 degF		BHCT 82 degF		Pore Press. Gradient				
Well Master 0631485492		API/UWI 05045221190000													
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	
						1282.0		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 634 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 122 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 Casing		Displacement 96.0 bbl		Packer Type		Packer Depth	
								Tubing Vol.		Casing Vol. 99.0 bbl		Annular Vol. 86.0 bbl		Openhole Vol. 188.0 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 634 psi				Shoe Type Float				Squeeze Type							
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>		Shoe Depth 1282.0 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 Nov/01/2013 11:00		Arrived on Location Nov/01/2013 11:00		Leave Location Nov/01/2013 15:00		Collar Type Float				Tail Pipe Depth					
						Collar Depth 1236.0 ft				Sqz. Total Vol.					
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message									
11/01/2013	10:52:50					Started Acquisition									
11/01/2013	10:53:12					Start Mixing Scav Slurry									
11/01/2013	11:22:16	-3	0.0	8.39	0.0										
11/01/2013	11:22:25					Start Job									
11/01/2013	11:22:25	-3	0.0	8.39	0.0										
11/01/2013	11:22:26					Rig Up									
11/01/2013	11:22:26					Hold Safety Meeting									
11/01/2013	11:22:26	-3	0.0	8.39	0.0										
11/01/2013	11:22:27					Flush Lines									
11/01/2013	11:22:27	-3	0.0	8.39	0.0										
11/01/2013	11:22:30					Pressure Test Lines									
11/01/2013	11:22:30	-2	0.0	8.39	0.0										
11/01/2013	11:22:32					Low Test 753 psi = Good									
11/01/2013	11:22:32					High Test 2741 psi = Good									
11/01/2013	11:22:32	-3	0.0	8.39	0.0										
11/01/2013	11:22:50	-3	0.0	8.39	0.0										
11/01/2013	11:24:30	-6	0.0	8.39	0.0										
11/01/2013	11:26:10	43	1.8	8.39	1.2										
11/01/2013	11:27:50	722	0.0	8.39	2.3										
11/01/2013	11:29:30	2699	0.0	8.39	2.3										
11/01/2013	11:31:10	8	0.0	8.39	2.3										

Well			Field		Job Start		Customer		Job Number	
Rose 22-1B 22-1B			Mamm Creek		Nov/01/2013		Encana		1866141	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message				
11/01/2013	11:34:30	201	6.5	8.39	16.4					
11/01/2013	11:36:10	232	5.1	12.76	26.1					
11/01/2013	11:36:58					Start Cement Slurry				
11/01/2013	11:36:58	213	5.1	12.75	30.2					
11/01/2013	11:37:03					Start Mixing Lead Slurry				
11/01/2013	11:37:03	205	5.1	12.77	30.6					
11/01/2013	11:37:09					Pump 122 bbls Of 12.5 ppg Lead				
11/01/2013	11:37:09	199	5.0	12.81	31.1					
11/01/2013	11:37:10					325 sks Y=2.11				
11/01/2013	11:37:10	196	5.0	12.81	31.2					
11/01/2013	11:37:15					Good Returns				
11/01/2013	11:37:15	210	5.0	12.80	31.6					
11/01/2013	11:37:50	202	5.1	12.79	34.6					
11/01/2013	11:39:30	314	6.5	12.60	44.3					
11/01/2013	11:41:10	285	6.5	12.64	55.1					
11/01/2013	11:42:50	293	6.5	12.59	65.9					
11/01/2013	11:44:30	275	6.5	12.57	76.7					
11/01/2013	11:46:10	286	6.5	12.63	87.6					
11/01/2013	11:47:50	286	6.5	12.66	98.4					
11/01/2013	11:49:30	268	6.5	12.62	109.2					
11/01/2013	11:51:10	307	6.5	12.58	120.0					
11/01/2013	11:52:50	275	6.5	12.58	130.8					
11/01/2013	11:53:00					End Lead Slurry				
11/01/2013	11:53:00	270	6.5	12.68	131.9					
11/01/2013	11:54:30	96	3.6	12.66	137.9					
11/01/2013	11:55:11					Start Mixing Tail Slurry				
11/01/2013	11:55:11	101	3.8	14.05	140.4					
11/01/2013	11:55:22					Pump 31 bbls Of 15.8 ppg Tail				
11/01/2013	11:55:22	107	3.3	15.68	141.1					
11/01/2013	11:55:24					149 sks Y=1.15				
11/01/2013	11:55:24	104	3.2	15.71	141.2					
11/01/2013	11:55:25					Good Returns				
11/01/2013	11:55:25	107	3.2	15.70	141.2					
11/01/2013	11:56:10	291	5.0	15.92	144.8					
11/01/2013	11:57:50	183	3.4	15.81	150.9					
11/01/2013	11:59:30	293	5.0	15.80	159.0					
11/01/2013	12:01:10	86	2.6	15.64	165.0					
11/01/2013	12:02:40					End Tail Slurry				
11/01/2013	12:02:40	84	2.6	15.95	168.9					
11/01/2013	12:02:45					Shut Down				
11/01/2013	12:02:45	84	2.6	15.95	169.1					
11/01/2013	12:02:50	84	2.6	15.95	169.3					
11/01/2013	12:02:53					Drop Top Plug				
11/01/2013	12:02:53	86	2.6	15.95	169.5					
11/01/2013	12:02:58					Start Displacement				
11/01/2013	12:02:58	84	2.6	15.95	169.7					
11/01/2013	12:03:01					Displace 96 bbls Of Fresh Water				
11/01/2013	12:03:01	85	2.6	15.95	169.8					
11/01/2013	12:03:02					Good Returns				
11/01/2013	12:03:02	85	2.6	15.95	169.8					
11/01/2013	12:04:30	-12	0.0	15.97	170.6					
11/01/2013	12:06:10	29	2.0	9.54	171.1					
11/01/2013	12:07:50	49	3.6	9.66	175.1					
11/01/2013	12:09:30	170	6.6	8.56	183.8					

Well			Field		Job Start	Customer		Job Number
Rose 22-1B 22-1B			Mamm Creek		Nov/01/2013	Encana		1866141
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message		
11/01/2013	12:12:50	191	6.5	8.32	205.6			
11/01/2013	12:14:30	239	6.5	8.32	216.5			
11/01/2013	12:16:10	255	6.5	8.32	227.3			
11/01/2013	12:17:50	289	6.4	8.33	238.1			
11/01/2013	12:19:30	232	3.9	8.32	246.3			
11/01/2013	12:21:10	273	3.9	8.35	252.9			
11/01/2013	12:22:50	327	3.9	8.35	259.5			
11/01/2013	12:24:30	296	2.5	8.35	264.2			
11/01/2013	12:26:10	325	2.5	8.35	268.4			
11/01/2013	12:27:50	1132	0.0	8.35	270.9			
11/01/2013	12:29:30	790	0.0	8.35	270.9			
11/01/2013	12:30:39					Bump Top Plug To 1135 psi		
11/01/2013	12:30:39	-17	0.0	8.36	270.9			
11/01/2013	12:30:45					Final Circulating psi 356		
11/01/2013	12:30:45	-17	0.0	8.36	270.9			
11/01/2013	12:30:46					Floats Held		
11/01/2013	12:30:46	-17	0.0	8.36	270.9			
11/01/2013	12:30:47					1/2 bbl Back		
11/01/2013	12:30:47	-17	0.0	8.36	270.9			
11/01/2013	12:30:49					80 bbls Of Cement To Surface		
11/01/2013	12:30:49	-17	0.0	8.36	270.9			
11/01/2013	12:31:10	-17	0.0	8.36	270.9			
11/01/2013	12:32:00					Good Returns Throughout Job		
11/01/2013	12:32:00	-17	0.0	8.32	270.9			
11/01/2013	12:32:01					End Job		
11/01/2013	12:32:01	-17	0.0	8.34	270.9			
11/01/2013	12:32:50	-17	0.0	8.24	270.9			
11/01/2013	12:34:30	-19	0.0	8.25	270.9			
11/01/2013	12:36:10	-13	0.9	8.18	272.6			
11/01/2013	12:37:50	-27	0.0	8.21	275.7			
11/01/2013	12:39:30	65	4.0	8.35	280.0			
11/01/2013	12:41:10	-32	0.0	8.30	284.7			
11/01/2013	12:42:50	-19	0.0	8.36	284.7			

Post Job Summary

Average Pump Rates,					Volume of Fluid Injected, bbl			
Slurry	N2	Mud	Maximum Rate	Total Slurry 153.0	Mud	Spacer 20.0	N2	
Treating Pressure Summary, psi					Breakdown Fluid			
Maximum 3000	Final 356	Average	Bump Plug to 1135	Breakdown	Type	Volume	Density	
Avg. N2 Percent		Designed Slurry Volume		Displacement 96.0 bbl	Mix Water Temp 57 degF	Cement Circulated to Surface? <input checked="" type="checkbox"/>	Volume 80.0 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"/>	
						-	-	