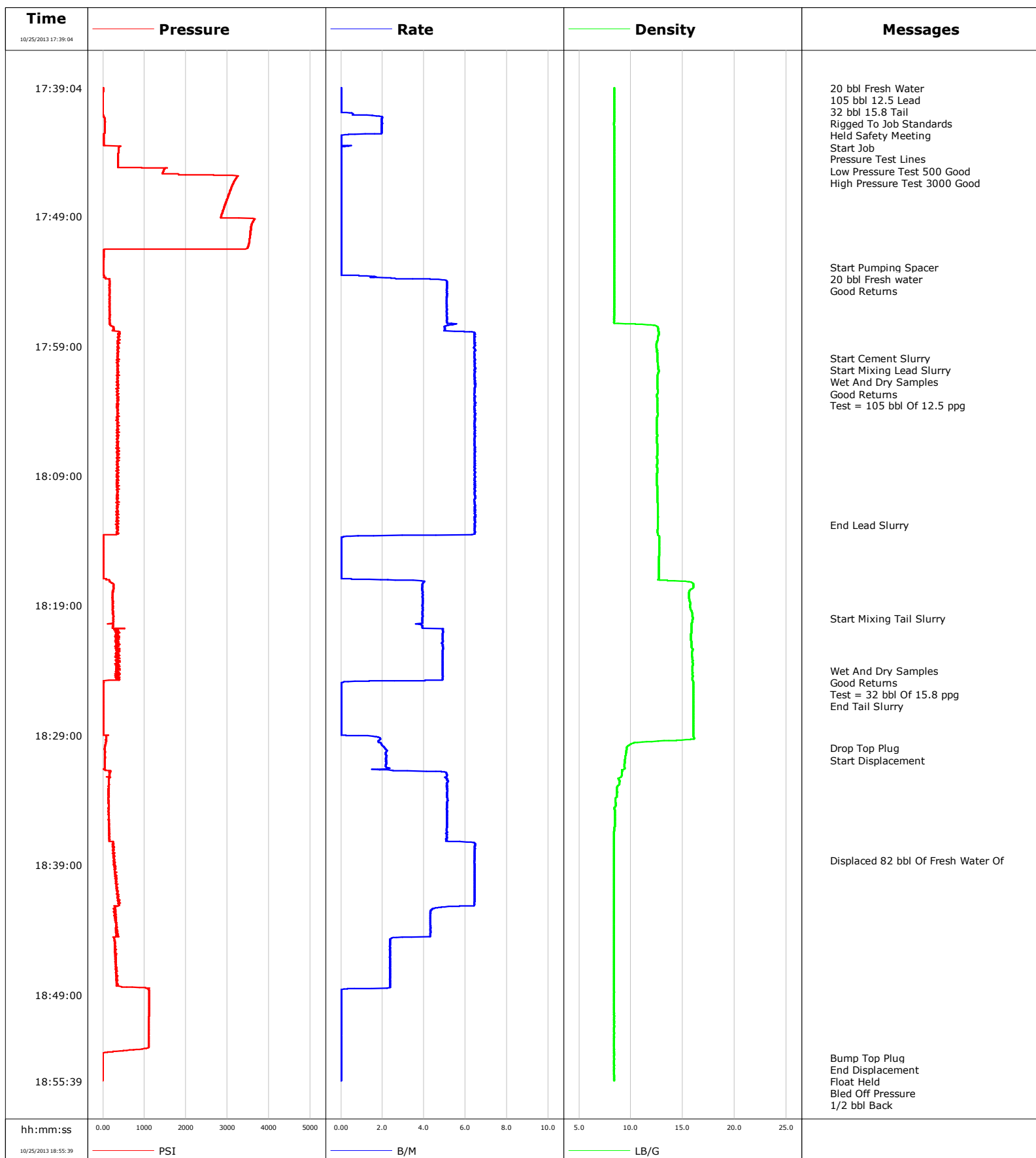


**Well** Rose 22-3C  
**Field** Mamm Creek  
**Engineer** Jordan Moreland / Stacy Terry  
**Country** United States

**Client** Encana  
**SIR No.**  
**Job Type** 9 5/8 Surface  
**Job Date** 10-25-2013





# Cementing Service Report

				Customer Encana		Job Number C459-01955	
Well Rose 22-3C			Location (legal) K22W		Schlumberger Location GCO		Job Start Oct/25/2013
Field Mamm Creek		Formation Name/Type		Deviation	Bit Size 12.7 in	Well MD	Well TVD
County Garfield		State/Province Colorado		BHP	BHST 94 degF	BHCT 82 degF	Pore Press. Gradient
Well Master 0631505159		API/UWI					
Rig Name Patterson 303		Drilled For Gas	Service Via Land	Casing/Liner			
				Depth, ft	Size, in	Weight, lb/ft	Grade
Offshore Zone		Well Class New	Well Type Development	1102.0	9.630	36.0	K55
				0.0	0.000	0.0	
Drilling Fluid Type		Max. Density	Plastic Viscosity	Tubing/Drill Pipe			
				Depth,	Size,	Weight,	Grade
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 82.0 bbl	Packer Type	Packer Depth
				Tubing Vol.	Casing Vol. 85.0 bbl	Annular Vol. 75.0 bbl	Openhole Vol. 163.0 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 545 psi				Shoe Type Guide		Squeeze Type	
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>		Shoe Depth 1102.0 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/25/2013		Arrived on Location Oct/25/2013	Leave Location Oct/25/2013	Collar Type Float		Tail Pipe Depth	
				Collar Depth 1057.0 ft		Sqz. Total Vol.	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
10/25/2013	16:45:45					Started Acquisition	
10/25/2013	17:39:04	2	0.0	8.39	0.0		
10/25/2013	17:39:05					20 bbl Fresh Water	
10/25/2013	17:39:05	2	0.0	8.39	0.0		
10/25/2013	17:39:06					105 bbl 12.5 Lead	
10/25/2013	17:39:06					32 bbl 15.8 Tail	
10/25/2013	17:39:06					Rigged To Job Standards	
10/25/2013	17:39:06					Held Safety Meeting	
10/25/2013	17:39:06	2	0.0	8.39	0.0		
10/25/2013	17:39:08					Start Job	
10/25/2013	17:39:08	2	0.0	8.39	0.0		
10/25/2013	17:39:09					Pressure Test Lines	
10/25/2013	17:39:09	2	0.0	8.39	0.0		
10/25/2013	17:39:10					Low Pressure Test 500 Good	
10/25/2013	17:39:10					High Pressure Test 3000 Good	
10/25/2013	17:39:10	2	0.0	8.39	0.0		
10/25/2013	17:39:45	-1	0.0	8.39	0.0		
10/25/2013	17:41:45	45	2.0	8.38	1.2		
10/25/2013	17:43:45	378	0.0	8.38	3.0		
10/25/2013	17:45:45	1827	0.0	8.38	3.0		
10/25/2013	17:47:45	2982	0.0	8.38	3.0		

Well			Field		Job Start		Customer		Job Number	
Rose 22-3C			Mamm Creek		Oct/25/2013		Encana		C459-01955	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message				
10/25/2013	17:51:45	14	0.0	8.38	3.0					
10/25/2013	17:52:55					Start Pumping Spacer				
10/25/2013	17:52:55	11	0.0	8.39	3.0					
10/25/2013	17:52:57					20 bbl Fresh water				
10/25/2013	17:52:57					Good Returns				
10/25/2013	17:52:57	11	0.0	8.38	3.0					
10/25/2013	17:53:45	60	2.4	8.39	3.3					
10/25/2013	17:55:45	157	5.1	8.38	13.3					
10/25/2013	17:57:45	259	5.0	12.65	23.5					
10/25/2013	17:59:45	350	6.4	12.55	36.2					
10/25/2013	17:59:55					Start Cement Slurry				
10/25/2013	17:59:55	354	6.4	12.55	37.3					
10/25/2013	17:59:58					Start Mixing Lead Slurry				
10/25/2013	17:59:58	346	6.5	12.55	37.6					
10/25/2013	18:00:01					Wet And Dry Samples				
10/25/2013	18:00:01					Good Returns				
10/25/2013	18:00:01	399	6.5	12.55	37.9					
10/25/2013	18:00:02					Test = 105 bbl Of 12.5 ppg				
10/25/2013	18:00:02	339	6.5	12.55	38.0					
10/25/2013	18:01:45	380	6.4	12.54	49.1					
10/25/2013	18:03:45	326	6.4	12.56	62.0					
10/25/2013	18:05:45	356	6.4	12.52	74.9					
10/25/2013	18:07:45	352	6.5	12.54	87.8					
10/25/2013	18:09:45	383	6.5	12.52	100.7					
10/25/2013	18:11:45	318	6.4	12.59	113.6					
10/25/2013	18:12:46					End Lead Slurry				
10/25/2013	18:12:46	339	6.4	12.60	120.2					
10/25/2013	18:13:45	5	0.0	12.75	125.5					
10/25/2013	18:15:45	4	0.0	12.71	125.5					
10/25/2013	18:17:45	257	3.9	15.77	128.4					
10/25/2013	18:19:45	249	3.9	15.94	136.3					
10/25/2013	18:20:00					Start Mixing Tail Slurry				
10/25/2013	18:20:00	241	3.9	15.97	137.2					
10/25/2013	18:21:45	295	4.9	15.84	145.0					
10/25/2013	18:23:45	360	4.9	15.93	154.8					
10/25/2013	18:24:00					Wet And Dry Samples				
10/25/2013	18:24:00					Good Returns				
10/25/2013	18:24:00					Test = 32 bbl Of 15.8 ppg				
10/25/2013	18:24:00	318	4.9	15.95	156.1					
10/25/2013	18:25:45	6	0.0	16.01	160.0					
10/25/2013	18:26:00					End Tail Slurry				
10/25/2013	18:26:00	5	0.0	16.01	160.0					
10/25/2013	18:27:45	3	0.0	16.02	160.0					
10/25/2013	18:29:45	60	2.0	9.90	161.3					
10/25/2013	18:30:00					Drop Top Plug				
10/25/2013	18:30:00					Start Displacement				
10/25/2013	18:30:00	36	2.1	9.59	161.8					
10/25/2013	18:31:45	154	3.2	9.15	165.7					
10/25/2013	18:33:45	129	5.1	8.65	175.8					
10/25/2013	18:35:45	156	5.1	8.44	186.1					
10/25/2013	18:37:45	248	6.5	8.38	197.0					
10/25/2013	18:38:40					Displaced 82 bbl Of Fresh Water Of				
10/25/2013	18:38:40	260	6.4	8.38	202.9					
10/25/2013	18:39:45	308	6.5	8.38	209.9					

Well			Field	Job Start	Customer	Job Number
Rose 22-3C			Mamm Creek	Oct/25/2013	Encana	C459-01955
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
10/25/2013	18:43:45	318	4.3	8.38	232.4	
10/25/2013	18:45:45	317	2.4	8.38	238.7	
10/25/2013	18:47:45	322	2.4	8.38	243.4	
10/25/2013	18:49:45	1110	0.0	8.38	245.3	
10/25/2013	18:51:45	1104	0.0	8.38	245.3	
10/25/2013	18:53:45	-4	0.0	8.38	245.3	
10/25/2013	18:53:50					Bump Top Plug
10/25/2013	18:53:50	-4	0.0	8.38	245.3	
10/25/2013	18:53:54					End Displacement
10/25/2013	18:53:54	-5	0.0	8.38	245.3	
10/25/2013	18:53:57					Float Held
10/25/2013	18:53:57	-4	0.0	8.38	245.3	
10/25/2013	18:53:58					Bled Off Pressure
10/25/2013	18:53:58					1/2 bbl Back
10/25/2013	18:53:58	-4	0.0	8.38	245.3	
10/25/2013	18:55:31					53 bbl Cement To Surface
10/25/2013	18:55:31	-4	0.0	8.38	245.3	
10/25/2013	18:55:32					Rig Down
10/25/2013	18:55:32	-5	0.0	8.38	245.3	

Post Job Summary

Average Pump Rates,					Volume of Fluid Injected,			
Slurry	N2	Mud	Maximum Rate		Total Slurry	Mud	Spacer	N2
Treating Pressure Summary,					Breakdown Fluid			
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume		Density
Avg. N2 Percent		Designed Slurry Volume		Displacement	Mix Water Temp	Cement Circulated to Surface?		Volume
					65 degF	<input checked="" type="checkbox"/>		
						<input type="checkbox"/>		To
Customer or Authorized Representative			Schlumberger Supervisor			Circulation Lost		Job Completed
Charlie Brown			Jordan Moreland / Stacy Terry			<input type="checkbox"/>		<input checked="" type="checkbox"/>
						-		-