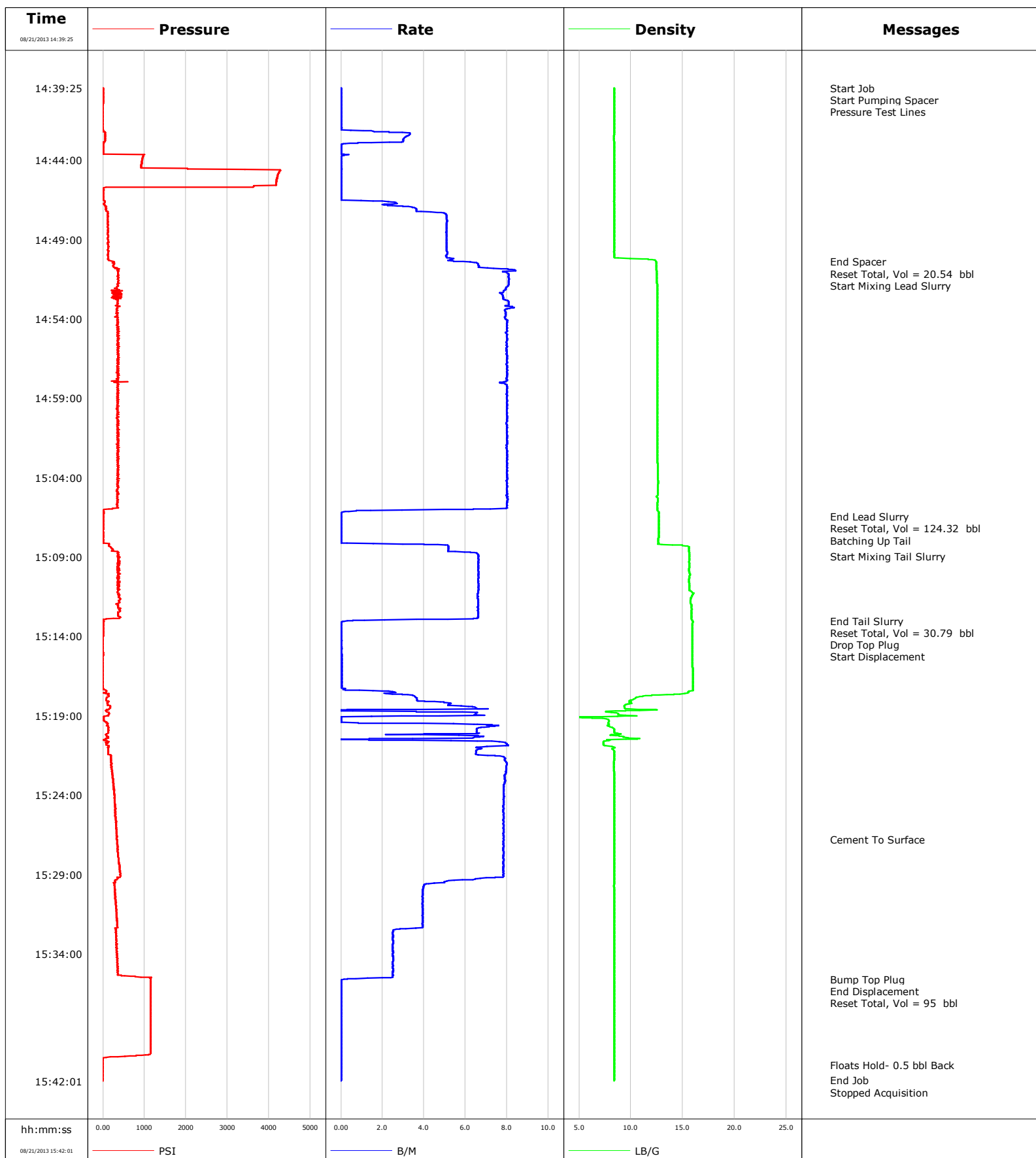


**Well** HMU 6-15D  
**Field** Mamm Creek  
**Engineer** Michael Simon/TJ Morrow  
**Country** United States

**Client** Encana  
**SIR No.** CFAO-00869  
**Job Type** 9 5/8 Surface  
**Job Date** 08-21-2013





# Cementing Service Report

					Customer Encana			Job Number CFAO-00869		
Well HMU 6-15D 6-15D			Location (legal) Grand Junction			Schlumberger Location Rock Springs		Job Start Aug/21/2013		
Field Mamm Creek		Formation Name/Type Shale		Deviation	Bit Size 13.5 in	Well MD 1271.0 ft		Well TVD 1271.0 ft		
County Garfield		State/Province Colorado		BHP	BHST 95 degF	BHCT 82 degF	Pore Press. Gradient			
Well Master 0631456238		API/UWI 05045219440000								
Rig Name Nabors M15	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	1271.0	9.630	36.0	J55	8RD			
			0.0	0.000	0.0					
Drilling Fluid Type		Max. Density 9.10 lb/gal	Plastic Viscosity	Tubing/Drill Pipe						
				Depth,	Size,	Weight,	Grade	Thread		
Service Line Cementing	Job Type 9 5/8 Surface									
Max. Allowed Tub. Press 3500 psi	Max. Allowed Ann. Press	WH Connection Single Cement head	Perforations/Open Hole							
			Top,	Bottom,		No. of Shots	Total Interval			
Service Instructions							Diameter			
			Treat Down Casing	Displacement 95.0 bbl	Packer Type	Packer Depth				
			Tubing Vol.	Casing Vol. 98.3 bbl	Annular Vol. 113.0 bbl	Openhole Vol. 213.0 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 629 psi				Shoe Type Float		Squeeze Type				
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>		Shoe Depth 1271.0 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 Aug/21/2013		Arrived on Location Aug/21/2013	Leave Location Aug/21/2013	Collar Type Float			Tail Pipe Depth			
				Collar Depth 1226.7 ft			Sqz. Total Vol.			
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Stage BBL	Message			
08/21/2013	13:55:48						Started Acquisition			
08/21/2013	14:39:25	0	0.0	8.39	0.0	0.0				
08/21/2013	14:39:26						Start Job			
08/21/2013	14:39:26	0	0.0	8.39	0.0	0.0				
08/21/2013	14:39:28						Start Pumping Spacer			
08/21/2013	14:39:28	0	0.0	8.39	0.0	0.0				
08/21/2013	14:39:29						Pressure Test Lines			
08/21/2013	14:39:29	0	0.0	8.39	0.0	0.0				
08/21/2013	14:40:48	-3	0.0	8.39	0.0	0.0				
08/21/2013	14:43:48	964	0.0	8.39	2.3	2.3				
08/21/2013	14:46:48	32	2.0	8.39	2.9	2.9				
08/21/2013	14:49:48	122	5.1	8.38	17.3	17.3				
08/21/2013	14:50:23						End Spacer			
08/21/2013	14:50:23	240	5.9	12.43	20.3	20.3				
08/21/2013	14:50:25						Reset Total, Vol = 20.54 bbl			
08/21/2013	14:50:25	277	6.2	12.43	20.5	20.5				
08/21/2013	14:50:31						Start Mixing Lead Slurry			
08/21/2013	14:50:31	264	6.6	12.44	0.7	0.7				
08/21/2013	14:52:48	356	7.9	12.56	18.5	18.5				
08/21/2013	14:55:48	350	8.0	12.54	42.5	42.5				
08/21/2013	14:58:48	368	8.0	12.54	66.5	66.5				

Well			Field		Job Start	Customer	Job Number
HMU 6-15D 6-15D			Mamm Creek		Aug/21/2013	Encana	CFAO-00869
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Stage BBL	Message
08/21/2013	15:04:48	350	8.0	12.60	114.5	114.5	
08/21/2013	15:06:26						End Lead Slurry
08/21/2013	15:06:26						Reset Total, Vol = 124.32 bbl
08/21/2013	15:06:26	7	0.0	12.70	124.3	124.3	
08/21/2013	15:07:42						Batching Up Tail
08/21/2013	15:07:42	1	0.0	12.67	0.0	0.0	
08/21/2013	15:07:48	1	0.0	12.67	0.0	0.0	
08/21/2013	15:08:58						Start Mixing Tail Slurry
08/21/2013	15:08:58	373	6.6	15.63	4.5	4.5	
08/21/2013	15:10:48	360	6.6	15.63	16.6	16.6	
08/21/2013	15:13:02						End Tail Slurry
08/21/2013	15:13:02	13	0.3	15.95	30.8	30.8	
08/21/2013	15:13:03						Reset Total, Vol = 30.79 bbl
08/21/2013	15:13:03	13	0.2	15.96	30.8	30.8	
08/21/2013	15:13:05						Drop Top Plug
08/21/2013	15:13:05	12	0.1	15.96	0.0	0.0	
08/21/2013	15:13:06						Start Displacement
08/21/2013	15:13:06	12	0.0	15.96	0.0	0.0	
08/21/2013	15:13:48	1	0.0	15.93	0.0	0.0	
08/21/2013	15:16:48	-3	0.0	15.97	0.1	0.1	
08/21/2013	15:19:48	128	6.6	8.34	9.2	9.2	
08/21/2013	15:22:48	237	7.9	8.39	30.1	30.1	
08/21/2013	15:25:48	314	7.8	8.39	53.7	53.7	
08/21/2013	15:26:48						Cement To Surface
08/21/2013	15:26:48	339	7.8	8.39	61.5	61.5	
08/21/2013	15:28:48	405	7.8	8.39	77.2	77.2	
08/21/2013	15:31:48	338	3.9	8.39	91.2	91.2	
08/21/2013	15:34:48	362	2.5	8.39	99.6	99.6	
08/21/2013	15:35:36						Bump Top Plug
08/21/2013	15:35:36	1147	0.3	8.39	101.5	101.5	
08/21/2013	15:35:37						End Displacement
08/21/2013	15:35:37	1147	0.2	8.39	101.5	101.5	
08/21/2013	15:35:54						Reset Total, Vol = 95 bbl
08/21/2013	15:35:54	1152	0.0	8.39	101.5	101.5	
08/21/2013	15:37:48	1152	0.0	8.39	0.0	0.0	
08/21/2013	15:40:48	-4	0.0	8.40	0.0	0.0	
08/21/2013	15:41:01						Floats Hold- 0.5 bbl Back
08/21/2013	15:41:01	-3	0.0	8.40	0.0	0.0	
08/21/2013	15:41:59						End Job
08/21/2013	15:41:59	-3	0.0	8.40	0.0	0.0	
08/21/2013	15:42:01	1	0.0	8.40	0.0	0.0	

Well HMU 6-15D 6-15D	Field Mamm Creek	Job Start Aug/21/2013	Customer Encana	Job Number CFAO-00869
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Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl			
Slurry 5.8	N2		Mud 0.0	Maximum Rate 8.4	Total Slurry 154.0	Mud 0.0	Spacer 20.0	N2
Treating Pressure Summary, psi					Breakdown Fluid			
Maximum 4280	Final -7	Average 425	Bump Plug to 900	Breakdown	Type	Volume		Density
Avg. N2 Percent	Designed Slurry Volume 151.0 bbl		Displacement 95.0 bbl	Mix Water Temp 70 degF	Cement Circulated to Surface? <input checked="" type="checkbox"/>	Volume 55.0 bbl		
Customer or Authorized Representative Tony Ketterling			Schlumberger Supervisor Michael Simon/TJ Morrow		Washed Thru Perfs <input type="checkbox"/>	To		
					Circulation Lost <input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>		
					-		-	