

**Well** SGU 8503C-34 E34 496

**Field** Story Gulch

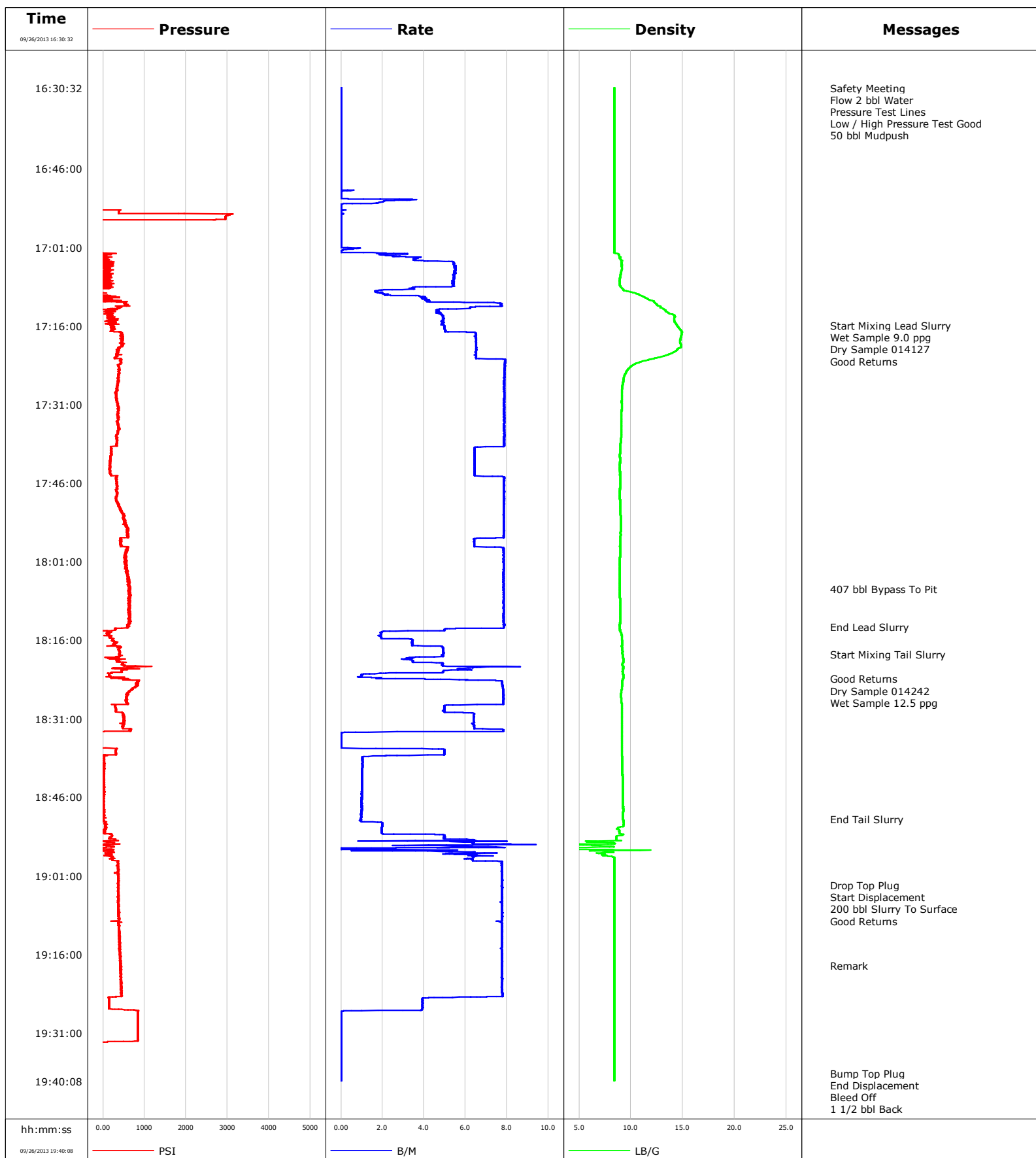
**Engineer** Travis Willardson / TJ Morrow

**Country** United States

**Client** EnCana

**SIR No.** CMI!-00247

**Job Type** 9 5/8 Surface

**Job Date** 09-26-2013


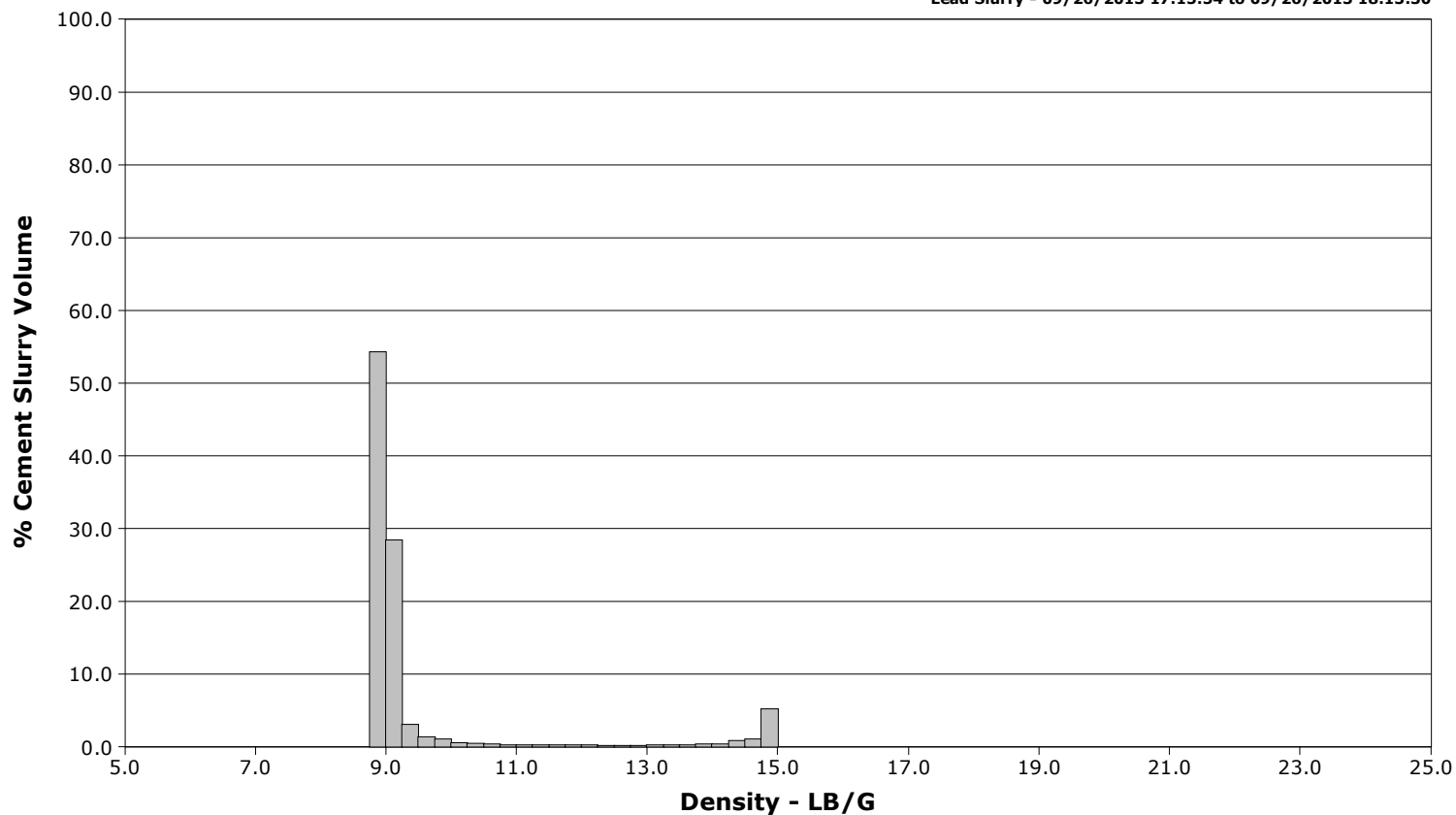


# Cementing Qa/Qc Density Report

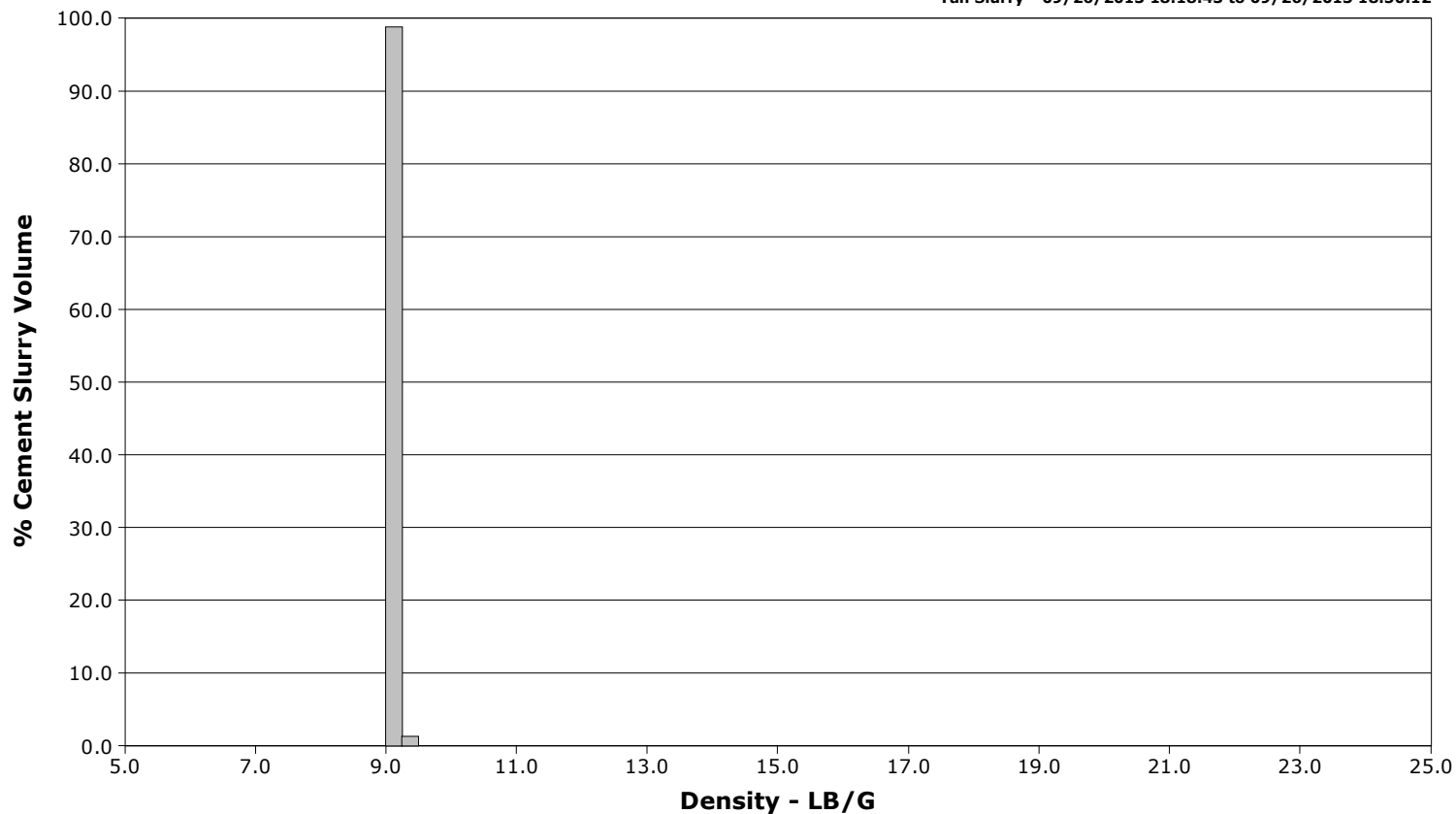
**Well** SGU 8503C-34 E34 496  
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**Engineer** Travis Willardson / TJ Morrow  
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**SIR No.** CMI!-00247  
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**Job Date** 09-26-2013

Lead Slurry - 09/26/2013 17:15:54 to 09/26/2013 18:13:30



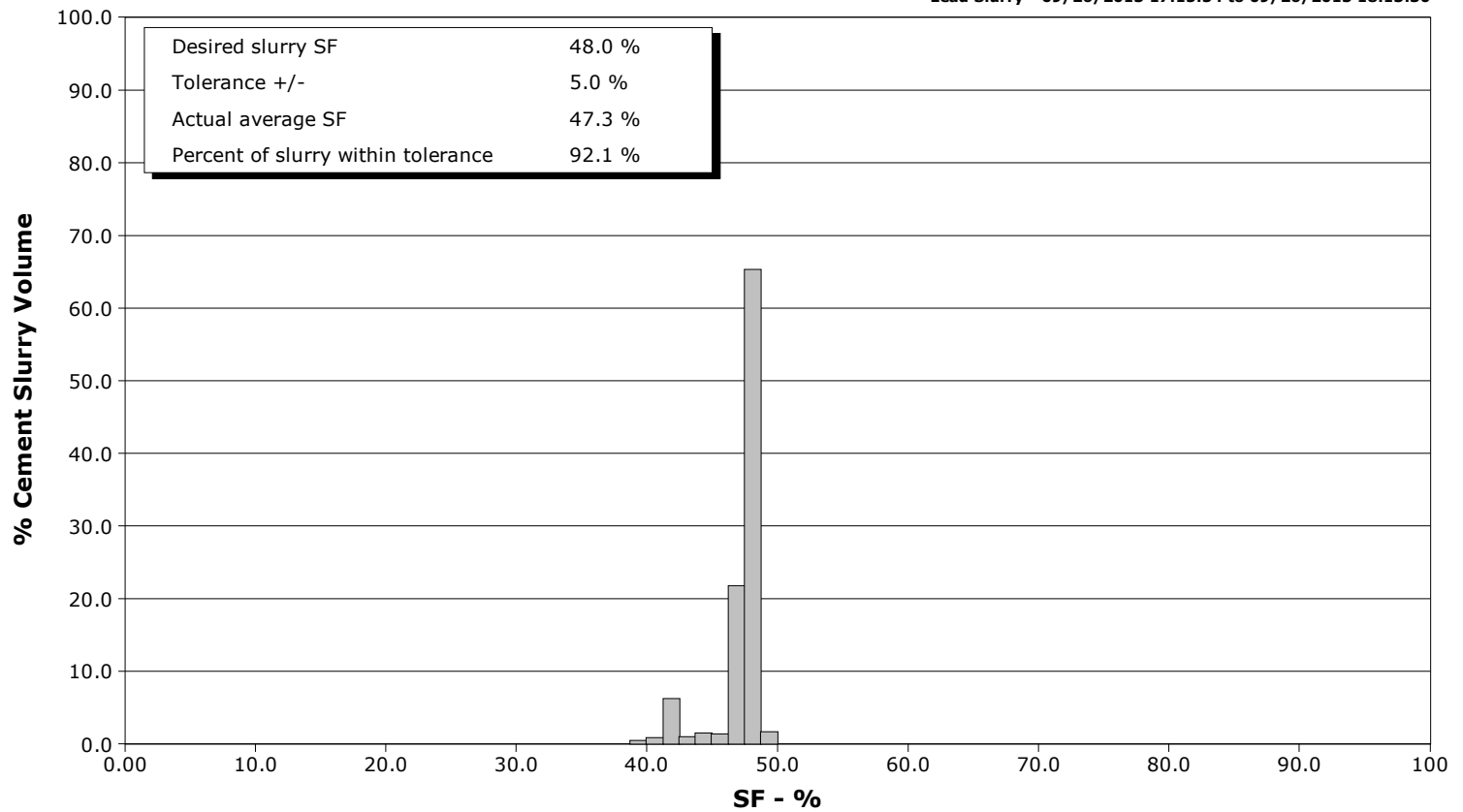
Tail Slurry - 09/26/2013 18:18:43 to 09/26/2013 18:50:12



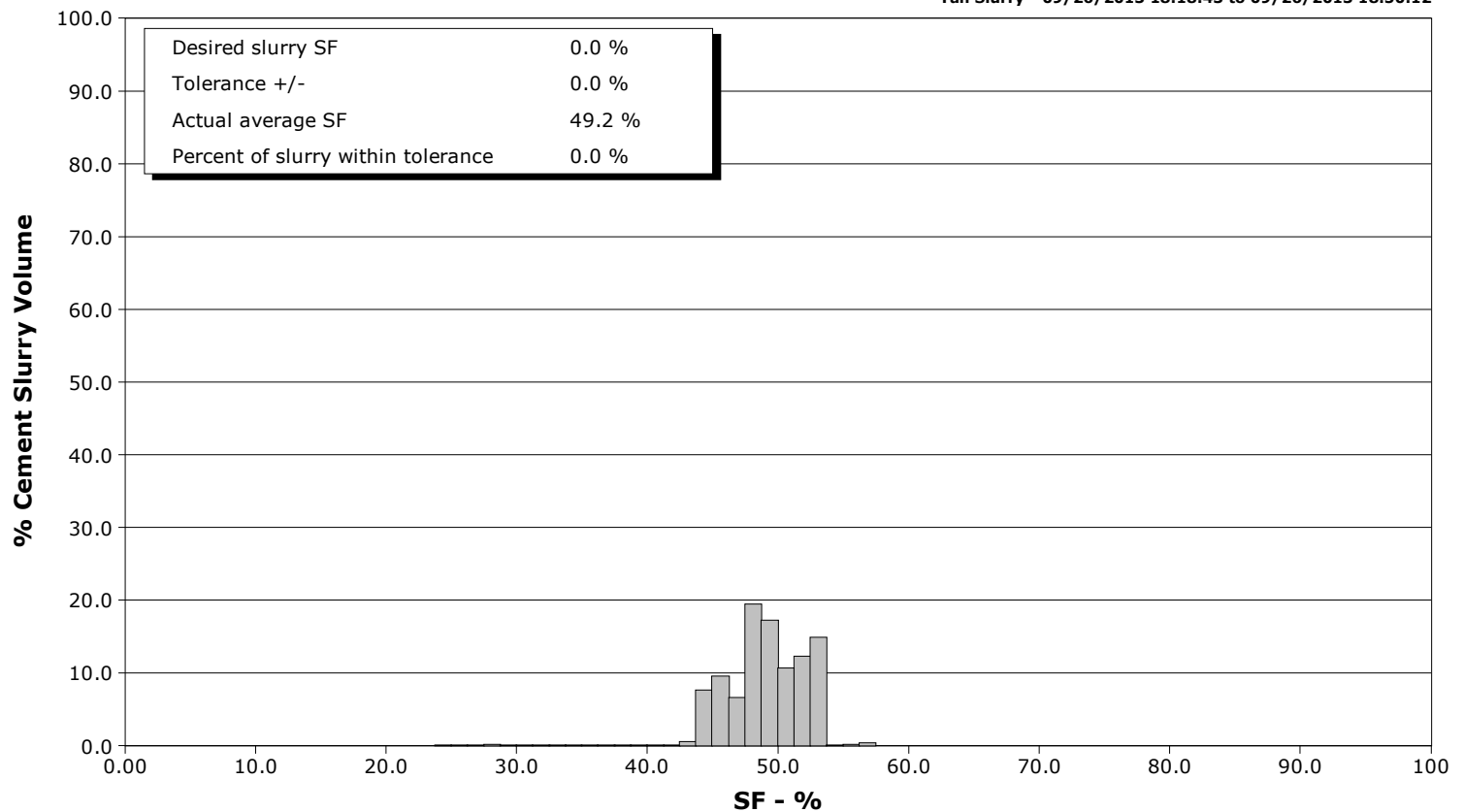
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**Lead Slurry - 09/26/2013 17:15:54 to 09/26/2013 18:13:30**



**Tail Slurry - 09/26/2013 18:18:43 to 09/26/2013 18:50:12**





# Cementing Service Report

				Customer EnCana		Job Number CMI-00247		
Well SGU 8503C-34 E34 496 8503C-34			Location (legal) E34		Schlumberger Location Grand Junction		Job Start Sep/26/2013	
Field Story Gulch		Formation Name/Type Dirty-Sandstone		Deviation	Bit Size 14.8 in	Well MD 2913.0 ft	Well TVD 2913.0 ft	
County Garfield		State/Province Colorado		BHP	BHST 120 degF	BHCT 89 degF	Pore Press. Gradient	
Well Master 0631491979		API/UWI						
Rig Name Patterson 326		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	120.0	20.000	52.4	N/A	N/A
				2913.0	9.630	36.0	J55	8RD
Drilling Fluid Type Bentonite		Max. Density	Plastic Viscosity	Tubing/Drill Pipe				
				Depth,	Size,	Weight,	Grade	Thread
Service Line Cementing		Job Type 9 5/8 Surface						
Max. Allowed Tub. Press		Max. Allowed Ann. Press	WH Connection Single Cement head	Perforations/Open Hole				
				Top,	Bottom,		No. of Shots	Total Interval
								Diameter
				Treat Down Casing	Displacement 221.0 bbl	Packer Type	Packer Depth	
				Tubing Vol.	Casing Vol.	Annular Vol. 371.0 bbl	Openhole Vol. 613.0 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 1441 psi				Shoe Type Float		Squeeze Type		
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>		Shoe Depth 2913.0 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 Sep/26/2013		Arrived on Location Sep/26/2013	Leave Location Sep/26/2013	Collar Type Float		Tail Pipe Depth		
				Collar Depth 2868.0 ft		Sqz. Total Vol.		
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message		
09/26/2013	16:05:56					Started Acquisition		
09/26/2013	16:30:32	-114	0.0	8.42	0.0			
09/26/2013	16:30:36					Safety Meeting		
09/26/2013	16:30:36					Flow 2 bbl Water		
09/26/2013	16:30:36	-114	0.0	8.42	0.0			
09/26/2013	16:30:50					Pressure Test Lines		
09/26/2013	16:30:50	-114	0.0	8.42	0.0			
09/26/2013	16:30:51					Low / High Pressure Test Good		
09/26/2013	16:30:51					50 bbl Mudpush		
09/26/2013	16:30:51	-114	0.0	8.42	0.0			
09/26/2013	16:35:56	-114	0.0	8.42	0.0			
09/26/2013	16:39:16	-114	0.0	8.42	0.0			
09/26/2013	16:42:36	-114	0.0	8.42	0.0			
09/26/2013	16:49:16	-117	0.0	8.42	0.0			
09/26/2013	16:52:36	-74	1.7	8.41	1.9			
09/26/2013	16:55:56	-75	0.0	8.41	2.1			
09/26/2013	16:59:16	-68	0.0	8.42	2.1			
09/26/2013	17:02:36	-31	2.2	8.84	3.5			
09/26/2013	17:05:56	138	5.5	9.03	19.6			
09/26/2013	17:09:16	-49	1.8	9.33	36.0			
09/26/2013	17:12:36	406	6.2	12.85	51.0			

Well SGU 8503C-34 E34 496 8503C-34			Field Story Gulch	Job Start Sep/26/2013	Customer EnCana	Job Number CMI-00247
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
09/26/2013	17:15:54	181	4.9	14.44	67.2	
09/26/2013	17:15:56	172	5.0	14.44	67.3	
09/26/2013	17:16:29					Wet Sample 9.0 ppg
09/26/2013	17:16:29					Dry Sample 014127
09/26/2013	17:16:29	213	5.0	14.64	70.1	
09/26/2013	17:16:30					Good Returns
09/26/2013	17:16:30	254	5.0	14.64	70.2	
09/26/2013	17:19:16	437	6.5	14.75	87.1	
09/26/2013	17:22:36	416	7.9	11.52	109.2	
09/26/2013	17:25:56	368	7.9	9.31	135.5	
09/26/2013	17:29:16	317	7.9	9.11	161.7	
09/26/2013	17:32:36	360	7.9	9.09	187.9	
09/26/2013	17:35:56	375	7.9	9.06	214.1	
09/26/2013	17:39:16	191	6.4	8.97	240.1	
09/26/2013	17:42:36	161	6.4	8.95	261.6	
09/26/2013	17:45:56	324	7.9	8.97	284.8	
09/26/2013	17:49:16	309	7.9	8.95	311.0	
09/26/2013	17:52:36	490	7.9	9.02	337.1	
09/26/2013	17:55:56	600	7.8	9.00	363.3	
09/26/2013	17:59:16	537	7.8	8.96	387.0	
09/26/2013	18:02:36	567	7.8	8.94	413.1	
09/26/2013	18:05:56	642	7.8	8.93	439.3	
09/26/2013	18:06:14					407 bbl Bypass To Pit
09/26/2013	18:06:14	655	7.8	8.93	441.6	
09/26/2013	18:09:16	611	7.8	8.97	465.4	
09/26/2013	18:12:36	649	7.8	8.95	491.5	
09/26/2013	18:13:30					End Lead Slurry
09/26/2013	18:13:30	578	7.8	8.94	498.6	
09/26/2013	18:15:56	220	3.4	9.12	506.6	
09/26/2013	18:18:43					Start Mixing Tail Slurry
09/26/2013	18:18:43	390	4.9	9.20	518.6	
09/26/2013	18:19:16	319	3.6	9.22	521.2	
09/26/2013	18:22:36	142	1.0	9.24	535.8	
09/26/2013	18:23:21					Good Returns
09/26/2013	18:23:21	615	2.0	9.25	536.7	
09/26/2013	18:23:23					Dry Sample 014242
09/26/2013	18:23:23	463	2.6	9.24	536.8	
09/26/2013	18:23:44					Wet Sample 12.5 ppg
09/26/2013	18:23:44	861	7.6	9.18	538.8	
09/26/2013	18:25:56	637	7.8	9.07	555.9	
09/26/2013	18:29:16	315	5.0	9.10	579.4	
09/26/2013	18:32:36	482	6.4	9.10	599.9	
09/26/2013	18:35:56	-49	0.0	9.12	606.4	
09/26/2013	18:39:16	27	1.0	9.16	614.3	
09/26/2013	18:42:36	18	1.0	9.20	617.7	
09/26/2013	18:45:56	4	1.0	9.22	621.1	
09/26/2013	18:49:16	25	1.0	9.20	624.4	
09/26/2013	18:50:12					End Tail Slurry
09/26/2013	18:50:12	-3	1.0	9.21	625.3	
09/26/2013	18:52:36	53	2.0	8.86	629.5	
09/26/2013	18:55:56	223	0.0	4.37	645.1	
09/26/2013	18:59:16	362	7.8	8.42	666.3	
09/26/2013	19:02:36	375	7.8	8.42	692.2	
09/26/2013	19:02:45					Drop Top Plug

Well			Field		Job Start		Customer		Job Number	
SGU 8503C-34 E34 496 8503C-34			Story Gulch		Sep/26/2013		EnCana		CMI1-00247	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message				
09/26/2013	19:02:47					Start Displacement				
09/26/2013	19:02:47	361	7.8	8.42	693.6					
09/26/2013	19:02:49					200 bbl Slurry To Surface				
09/26/2013	19:02:49	372	7.8	8.42	693.9					
09/26/2013	19:05:15					Good Returns				
09/26/2013	19:05:15	370	7.8	8.42	712.8					
09/26/2013	19:05:56	376	7.8	8.42	718.1					
09/26/2013	19:09:16	376	7.8	8.42	743.9					
09/26/2013	19:12:36	398	7.8	8.42	769.8					
09/26/2013	19:15:56	415	7.8	8.42	795.6					
09/26/2013	19:18:05					Remark				
09/26/2013	19:18:05	425	7.8	8.42	812.3					
09/26/2013	19:19:16	429	7.8	8.42	821.5					
09/26/2013	19:22:36	442	7.8	8.42	847.4					
09/26/2013	19:25:56	148	3.9	8.42	866.5					
09/26/2013	19:29:16	840	0.0	8.42	869.6					
09/26/2013	19:32:36	635	0.0	8.42	869.6					
09/26/2013	19:35:56	-106	0.0	8.42	869.6					
09/26/2013	19:38:38					Bump Top Plug				
09/26/2013	19:38:38	-106	0.0	8.42	869.6					
09/26/2013	19:38:39					End Displacement				
09/26/2013	19:38:39	-106	0.0	8.42	869.6					
09/26/2013	19:39:16	-106	0.0	8.42	869.6					
09/26/2013	19:39:23					Bleed Off				
09/26/2013	19:39:23	-107	0.0	8.42	869.6					
09/26/2013	19:39:27					1 1/2 bbl Back				
09/26/2013	19:39:27	-107	0.0	8.42	869.6					
09/26/2013	19:40:11					Stopped Acquisition				

Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl			
Slurry 6.0	N2	Mud 0.0	Maximum Rate 9.4		Total Slurry 559.0	Mud 0.0	Spacer 0.0	N2
Treating Pressure Summary, psi					Breakdown Fluid			
Maximum 3127	Final -107	Average 390	Bump Plug to	Breakdown	Type	Volume 847.0 bbl		Density
Avg. N2 Percent		Designed Slurry Volume 559.0 bbl		Displacement 221.0 bbl	Mix Water Temp 62 degF	Cement Circulated to Surface? <input checked="" type="checkbox"/>		Volume 200.0 bbl
						Washed Thru Perfs <input type="checkbox"/>		To
Customer or Authorized Representative			Schlumberger Supervisor			Circulation Lost <input type="checkbox"/>		Job Completed <input checked="" type="checkbox"/>
Norman McCreary			Travis Willardson / TJ Morrow			-		-