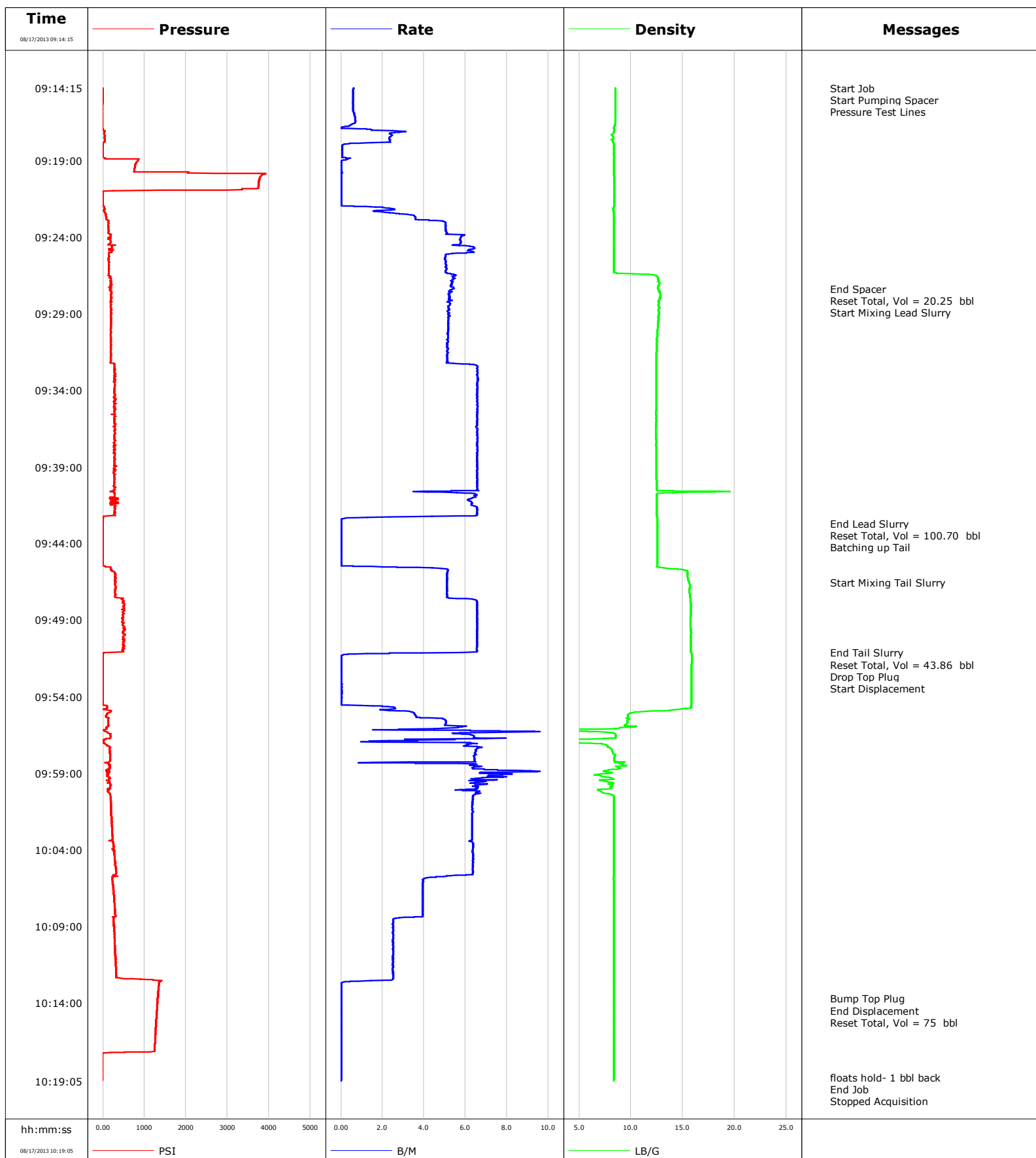


**Well** Hagen 22-3A  
**Field** Parachute  
**Engineer** Michael Simon/TJ Morrow  
**Country** United States

**Client** Encana  
**SIR No.** C567-00012  
**Job Type** 9 5/8 Surface  
**Job Date** 08-17-2013





# Cementing Service Report

					Customer Encana			Job Number C567-00012							
Well Hagen 22-3A 22-3A				Location (legal) Grand Junction			Schlumberger Location Rock Springs			Job Start Aug/17/2013					
Field Parachute		Formation Name/Type Shale			Deviation		Bit Size 14.8 in		Well MD 1013.3 ft		Well TVD 1013.0 ft				
County Garfield		State/Province Colorado			BHP		BHST 94 degF		BHCT 85 degF		Pore Press. Gradient				
Well Master 0631489108		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	
						1013.3		9.630		36.0		J55		8RD	
Drilling Fluid Type		Max. Density 9.20 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 3000 psi		Max. Allowed Ann. Press		WH Connection Single Cement head		Perforations/Open Hole									
Service Instructions						Top,		Bottom,				No. of Shots		Total Interval	
														Diameter	
		Treat Down Casing		Displacement 75.0 bbl		Packer Type		Packer Depth							
		Tubing Vol.		Casing Vol. 78.3 bbl		Annular Vol. 90.0 bbl		Openhole Vol. 170.0 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 501 psi				Shoe Type Float		Squeeze Type									
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>		Shoe Depth 1013.3 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/17/2013		Arrived on Location Aug/17/2013		Leave Location Aug/17/2013		Collar Type Float				Tail Pipe Depth					
						Collar Depth 966.7 ft				Sqz. Total Vol.					
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Stage BBL	Message								
08/17/2013	07:28:32						Started Acquisition								
08/17/2013	09:14:15						Start Job								
08/17/2013	09:14:15	-10	0.6	8.48	0.0	0.0									
08/17/2013	09:14:22						Start Pumping Spacer								
08/17/2013	09:14:22	-10	0.6	8.48	0.1	0.1									
08/17/2013	09:14:26						Pressure Test Lines								
08/17/2013	09:14:26	-9	0.6	8.48	0.1	0.1									
08/17/2013	09:16:32	-14	0.7	8.49	1.4	1.4									
08/17/2013	09:19:32	760	0.0	8.38	3.8	3.8									
08/17/2013	09:22:32	76	3.2	8.37	5.0	5.0									
08/17/2013	09:25:32	132	5.0	8.37	20.7	20.7									
08/17/2013	09:27:23						End Spacer								
08/17/2013	09:27:23	208	5.4	12.66	30.4	30.4									
08/17/2013	09:27:24						Reset Total, Vol = 20.25 bbl								
08/17/2013	09:27:24	197	5.4	12.61	30.5	30.5									
08/17/2013	09:27:26						Start Mixing Lead Slurry								
08/17/2013	09:27:26	178	5.3	12.64	30.7	30.7									
08/17/2013	09:28:32	190	5.2	12.69	0.2	0.2									
08/17/2013	09:31:32	195	5.1	12.47	15.7	15.7									
08/17/2013	09:34:32	264	6.6	12.44	34.3	34.3									
08/17/2013	09:37:32	280	6.5	12.43	54.0	54.0									

Well			Field		Job Start	Customer	Job Number
Hagen 22-3A 22-3A			Parachute		Aug/17/2013	Encana	C567-00012
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Stage BBL	Message
08/17/2013	09:42:41						End Lead Slurry
08/17/2013	09:42:41	-7	0.0	12.54	10.1	10.1	
08/17/2013	09:42:42						Reset Total, Vol = 100.70 bbl
08/17/2013	09:42:42	-8	0.0	12.53	10.1	10.1	
08/17/2013	09:43:32	-10	0.0	12.53	10.1	10.1	
08/17/2013	09:43:47						Batching up Tail
08/17/2013	09:43:47	-10	0.0	12.54	10.1	10.1	
08/17/2013	09:46:32						Start Mixing Tail Slurry
08/17/2013	09:46:32	309	5.1	15.61	15.1	15.1	
08/17/2013	09:49:32	489	6.6	15.77	33.2	33.2	
08/17/2013	09:51:08						End Tail Slurry
08/17/2013	09:51:08	25	5.8	15.81	43.7	43.7	
08/17/2013	09:51:11						Reset Total, Vol = 43.86 bbl
08/17/2013	09:51:11	2	2.3	15.86	43.9	43.9	
08/17/2013	09:51:12						Drop Top Plug
08/17/2013	09:51:12	2	1.3	15.87	0.0	0.0	
08/17/2013	09:51:13						Start Displacement
08/17/2013	09:51:13	-0	0.7	15.87	0.0	0.0	
08/17/2013	09:52:32	-9	0.0	15.84	0.1	0.1	
08/17/2013	09:55:32	129	5.0	9.69	3.2	3.2	
08/17/2013	09:58:32	163	6.6	9.02	20.4	20.4	
08/17/2013	10:01:32	199	6.4	8.37	40.5	40.5	
08/17/2013	10:04:32	282	6.4	8.37	59.5	59.5	
08/17/2013	10:07:32	279	3.9	8.37	74.2	74.2	
08/17/2013	10:10:32	295	2.5	8.37	83.0	83.0	
08/17/2013	10:13:32	1324	0.0	8.38	88.0	88.0	
08/17/2013	10:13:42						Bump Top Plug
08/17/2013	10:13:42	1320	0.0	8.38	88.0	88.0	
08/17/2013	10:13:43						End Displacement
08/17/2013	10:13:43	1320	0.0	8.38	88.0	88.0	
08/17/2013	10:13:45						Reset Total, Vol = 75 bbl
08/17/2013	10:13:45	1318	0.0	8.38	88.0	88.0	
08/17/2013	10:16:32	1252	0.0	8.38	0.0	0.0	
08/17/2013	10:18:50						floats hold- 1 bbl back
08/17/2013	10:18:50	-16	0.0	8.38	0.0	0.0	
08/17/2013	10:19:00						End Job
08/17/2013	10:19:00	-15	0.0	8.38	0.0	0.0	
08/17/2013	10:19:05	-15	0.0	8.38	0.0	0.0	

<b>Well</b> Hagen 22-3A 22-3A	<b>Field</b> Parachute	<b>Job Start</b> Aug/17/2013	<b>Customer</b> Encana	<b>Job Number</b> C567-00012
----------------------------------	---------------------------	---------------------------------	---------------------------	---------------------------------

Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl			
Slurry 4.7	N2	Mud 0.0	Maximum Rate 9.6	Total Slurry 143.0	Mud 0.0	Spacer 20.0	N2	
Treating Pressure Summary, psi					Breakdown Fluid			
Maximum 3924	Final -15	Average 423	Bump Plug to 750	Breakdown	Type	Volume	Density	
Avg. N2 Percent	Designed Slurry Volume 125.0 bbl		Displacement 75.0 bbl	Mix Water Temp 75 degF	Cement Circulated to Surface? <input checked="" type="checkbox"/>	Volume 35.0 bbl		
Customer or Authorized Representative Mike Olsen			Schlumberger Supervisor Michael Simon/TJ Morrow		Washed Thru Perfs <input type="checkbox"/>	To		
					Circulation Lost <input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>		
					-		-	