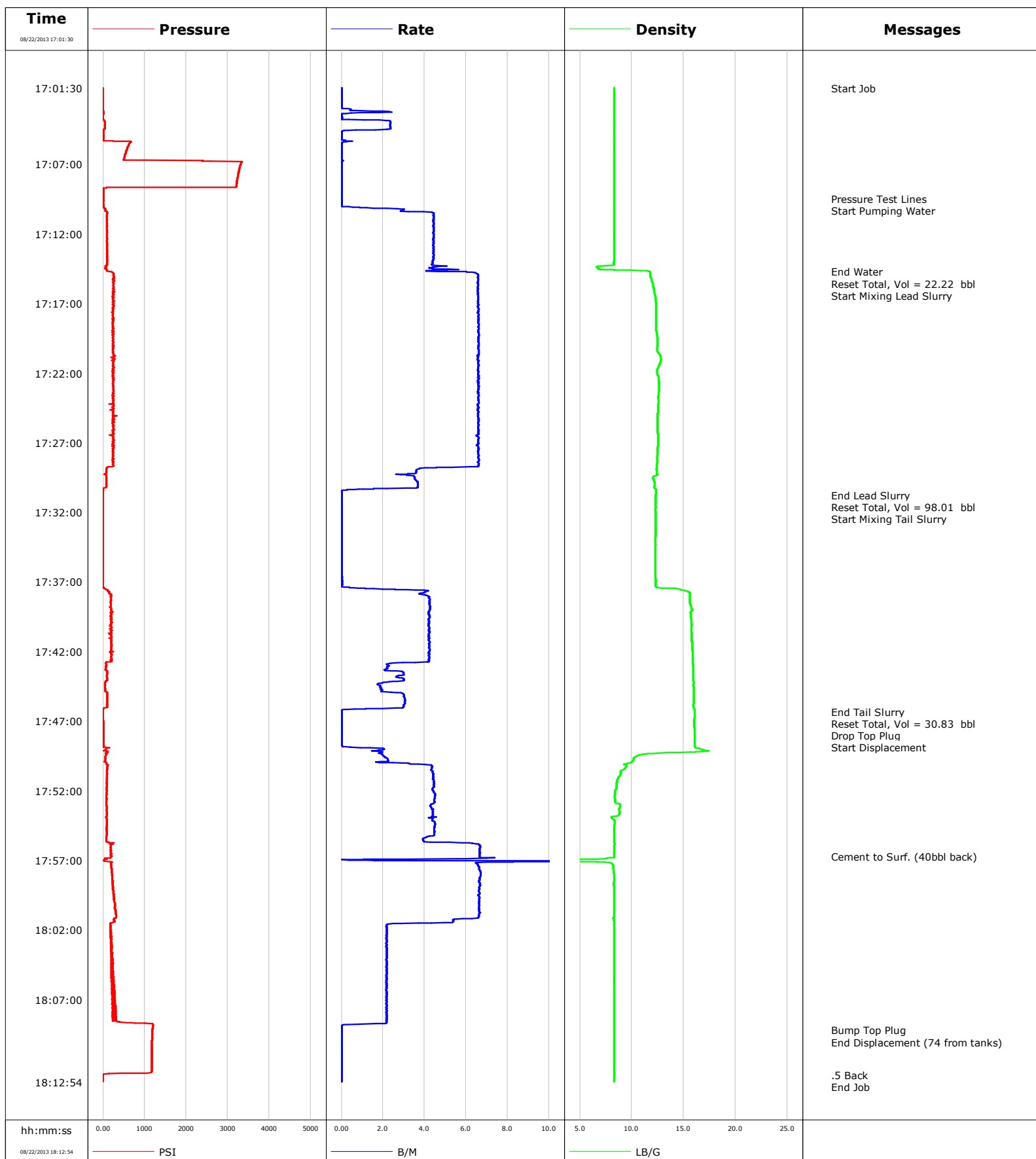


**Well** Hagen Fed 22-2d  
**Field** Parachute  
**Engineer**  
**Country** United States

**Client** Encana  
**SIR No.** C567-00018  
**Job Type** Surface  
**Job Date** 08-22-2013

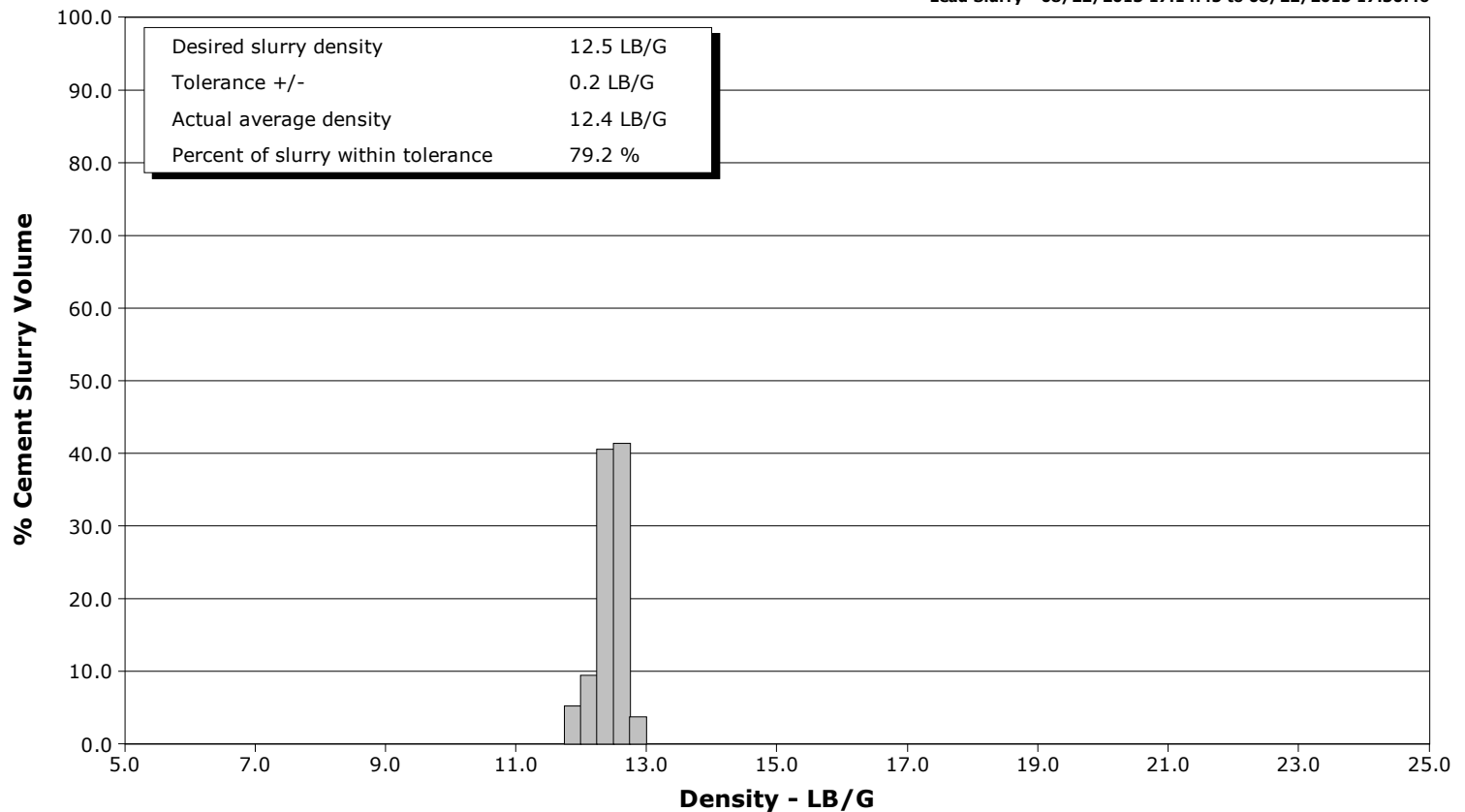


# Schlumberger Cementing Qa/Qc Density Report

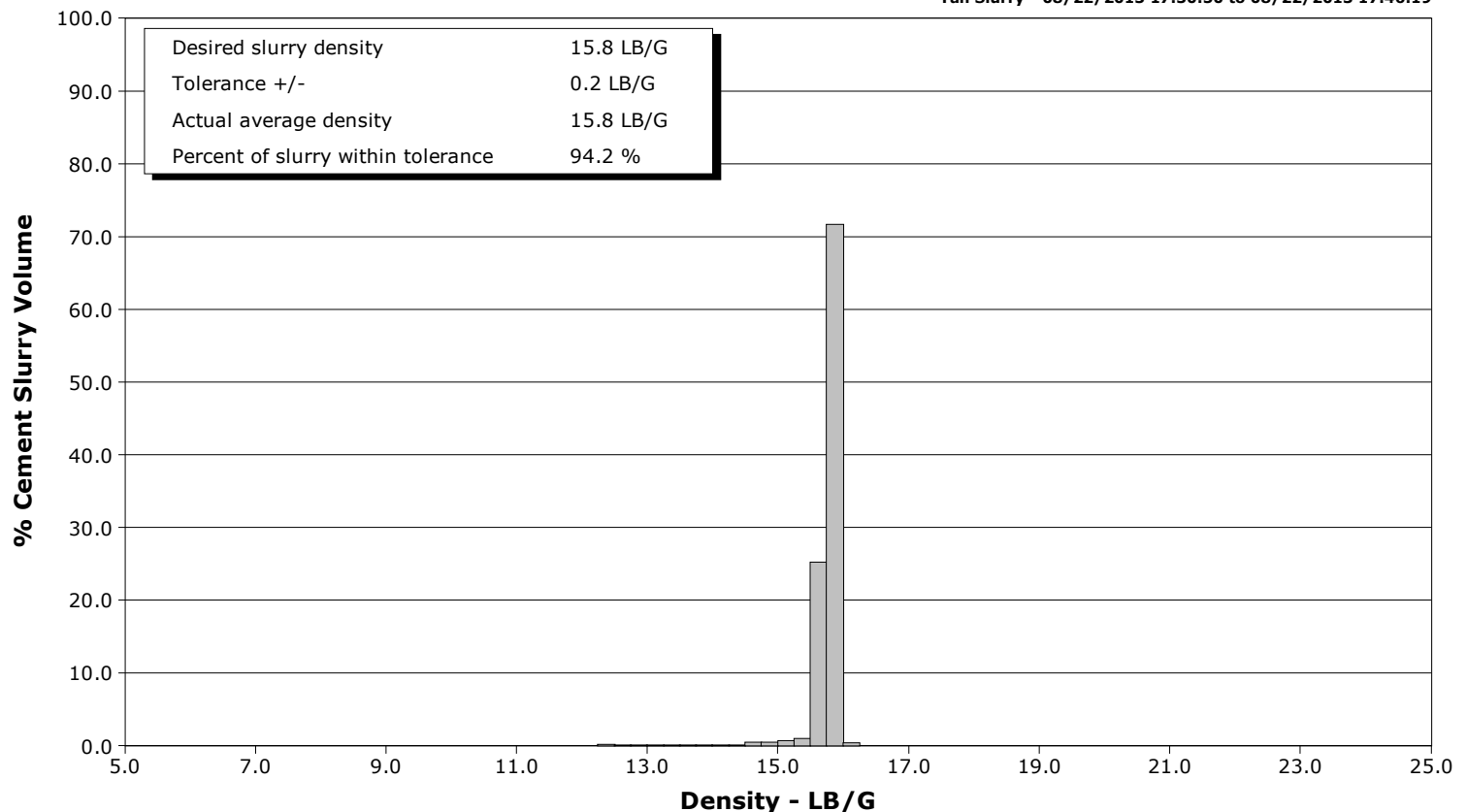
**Well** Hagen Fed 22-2d  
**Field** Parachute  
**Engineer**  
**Country** United States

**Client** Encana  
**SIR No.** C567-00018  
**Job Type** Surface  
**Job Date** 08-22-2013

Lead Slurry - 08/22/2013 17:14:45 to 08/22/2013 17:30:46



Tail Slurry - 08/22/2013 17:30:50 to 08/22/2013 17:46:19



# Cementing Service Report

				Customer Encana			Job Number C567-00018	
Well Hagen Fed 22-2d			Location (legal)			Schlumberger Location		Job Start Aug/22/2013
Field Parachute		Formation Name/Type		Deviation		Bit Size		Well MD
County garfield		State/Province Colorado		BHP		BHST		BHCT
Well Master		API/UWI						Pore Press. Gradient
Rig Name		Drilled For Gas		Service Via Land		Casing/Liner		
Offshore Zone		Well Class New		Well Type Exploration		Thread		
Drilling Fluid Type		Max. Density		Plastic Viscosity		Tubing/Drill Pipe		
Service Line Cementing		Job Type Surface						
Max. Allowed Tub. Press		Max. Allowed Ann. Press		WH Connection		Perforations/Open Hole		
Service Instructions								Diameter
		Treat Down Casing		Displacement 74.2 bbl		Packer Type		Packer Depth
		Tubing Vol.		Casing Vol.		Annular Vol.		Openhole Vol.
Casing/Tubing Secured <input checked="" type="checkbox"/>		1 Hole Vol. Circulated prior to Cement <input checked="" type="checkbox"/>		Casing Tools		Squeeze Job		
Lift Pressure 250 psi		Shoe Type Guide		Squeeze Type				
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>		Shoe Depth 1007.0 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/22/2013		Arrived on Location Aug/22/2013		Leave Location Aug/22/2013		Collar Type Float		Tail Pipe Depth
						Collar Depth 960.0 ft		Sqz. Total Vol.
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Stage BBL	Message	
08/22/2013	17:01:30						Start Job	
08/22/2013	17:01:30	-7	0.0	8.30	0.0	0.0		
08/22/2013	17:04:00	45	2.4	8.31	0.8	0.8		
08/22/2013	17:06:30	514	0.0	8.30	2.1	2.1		
08/22/2013	17:09:00	4	0.0	8.30	2.2	2.2		
08/22/2013	17:09:30						Pressure Test Lines	
08/22/2013	17:09:30	4	0.0	8.30	2.2	2.2		
08/22/2013	17:09:33						Start Pumping Water	
08/22/2013	17:09:33	3	0.0	8.30	2.2	2.2		
08/22/2013	17:11:30	100	4.4	8.30	7.8	7.8		
08/22/2013	17:14:00	105	4.4	8.30	18.9	18.9		
08/22/2013	17:14:42						End Water	
08/22/2013	17:14:42	150	4.7	11.71	22.0	22.0		
08/22/2013	17:14:44						Reset Total, Vol = 22.22 bbl	
08/22/2013	17:14:44	206	6.0	11.78	22.2	22.2		
08/22/2013	17:14:45						Start Mixing Lead Slurry	
08/22/2013	17:14:45	212	6.0	11.78	22.3	0.1		
08/22/2013	17:16:30	225	6.6	12.27	33.8	11.6		
08/22/2013	17:19:00	253	6.6	12.38	50.3	28.1		
08/22/2013	17:21:30	240	6.6	12.62	66.8	44.6		
08/22/2013	17:24:00	252	6.6	12.58	83.3	61.0		

Well			Field		Job Start		Customer		Job Number	
Hagen Fed 22-2d			Parachute		Aug/22/2013		Encana		C567-00018	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Stage BBL	Message			
08/22/2013	17:29:00	81	3.6	12.42	115.6	93.4				
08/22/2013	17:30:46						End Lead Slurry			
08/22/2013	17:30:46	-1	0.0	12.32	120.2	98.0				
08/22/2013	17:30:47						Reset Total, Vol = 98.01 bbl			
08/22/2013	17:30:47	-1	0.0	12.31	120.2	98.0				
08/22/2013	17:30:50						Start Mixing Tail Slurry			
08/22/2013	17:30:50	-1	0.0	12.31	120.2	0.0				
08/22/2013	17:31:30	-2	0.0	12.29	120.2	0.0				
08/22/2013	17:34:00	-1	0.0	12.28	120.2	0.0				
08/22/2013	17:36:30	-1	0.0	12.28	120.2	0.0				
08/22/2013	17:39:00	198	4.3	15.81	126.5	6.3				
08/22/2013	17:41:30	208	4.2	15.85	137.0	16.8				
08/22/2013	17:44:00	103	3.0	15.95	145.6	25.4				
08/22/2013	17:46:19						End Tail Slurry			
08/22/2013	17:46:19	-1	0.0	16.07	151.1	30.8				
08/22/2013	17:46:21						Reset Total, Vol = 30.83 bbl			
08/22/2013	17:46:21	-0	0.0	16.07	151.1	30.8				
08/22/2013	17:46:22						Drop Top Plug			
08/22/2013	17:46:22	-1	0.0	16.07	151.1	0.0				
08/22/2013	17:46:23						Start Displacement			
08/22/2013	17:46:23	-0	0.0	16.07	151.1	0.0				
08/22/2013	17:46:30	-1	0.0	16.06	151.1	0.0				
08/22/2013	17:49:00	78	2.1	16.66	151.3	0.2				
08/22/2013	17:51:30	85	4.5	8.57	159.8	8.7				
08/22/2013	17:54:00	86	4.4	8.10	170.8	19.8				
08/22/2013	17:56:30	205	6.7	8.30	183.5	32.4				
08/22/2013	17:56:44						Cement to Surf. (40bbl back)			
08/22/2013	17:56:44	194	6.7	8.30	185.0	34.0				
08/22/2013	17:59:00	229	6.6	8.30	200.4	49.3				
08/22/2013	18:01:30	178	3.7	8.30	216.5	65.5				
08/22/2013	18:04:00	237	2.2	8.30	222.0	71.0				
08/22/2013	18:06:30	286	2.2	8.30	227.4	76.4				
08/22/2013	18:09:00	1192	0.0	8.30	232.3	81.3				
08/22/2013	18:09:10						Bump Top Plug			
08/22/2013	18:09:10						End Displacement (74 from tanks)			
08/22/2013	18:09:10	1189	0.0	8.30	232.3	81.3				
08/22/2013	18:11:30	1170	0.0	8.30	232.4	81.3				
08/22/2013	18:12:23						.5 Back			
08/22/2013	18:12:23	-6	0.0	8.30	232.4	81.3				
08/22/2013	18:12:51						End Job			

<b>Well</b> Hagen Fed 22-2d	<b>Field</b> Parachute	<b>Job Start</b> Aug/22/2013	<b>Customer</b> Encana	<b>Job Number</b> C567-00018
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Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl			
Slurry 3.7	N2	Mud 0.0	Maximum Rate 25.0	Total Slurry 129.0	Mud 0.0	Spacer 22.3	N2	
Treating Pressure Summary, psi					Breakdown Fluid			
Maximum 3346	Final -7	Average 331	Bump Plug to 1190	Breakdown	Type	Volume	Density	
Avg. N2 Percent	Designed Slurry Volume 125.0 bbl		Displacement 74.0 bbl	Mix Water Temp 70 degF	Cement Circulated to Surface? <input checked="" type="checkbox"/>	Volume 40.0 bbl		
Customer or Authorized Representative Micheal Olsen			Schlumberger Supervisor		Washed Thru Perfs <input type="checkbox"/>	To		
					Circulation Lost <input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>		
					-	-		