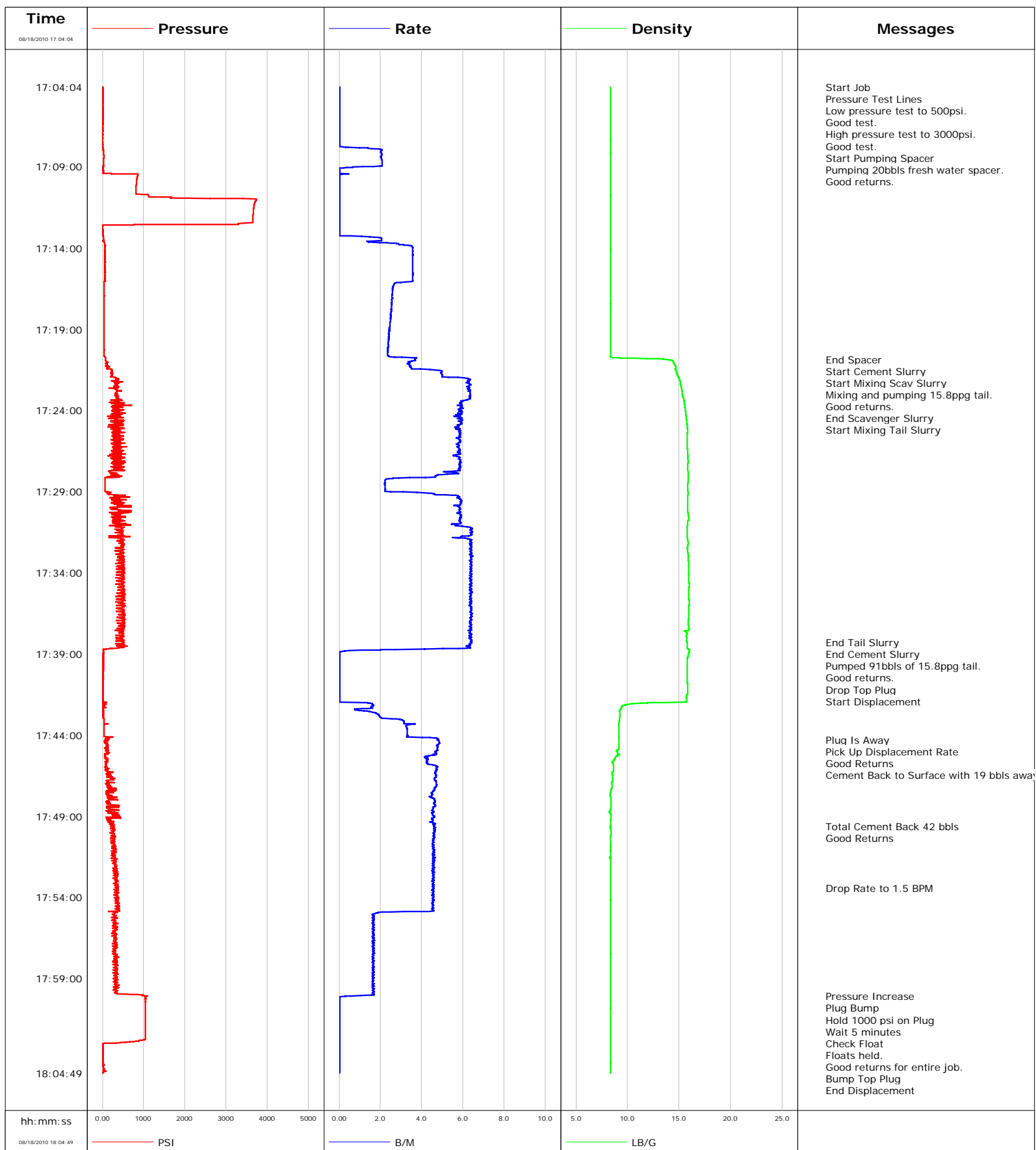


Well FEDERAL 20-7
Field Parachute
Engineer Jeff Patterson
Country United States

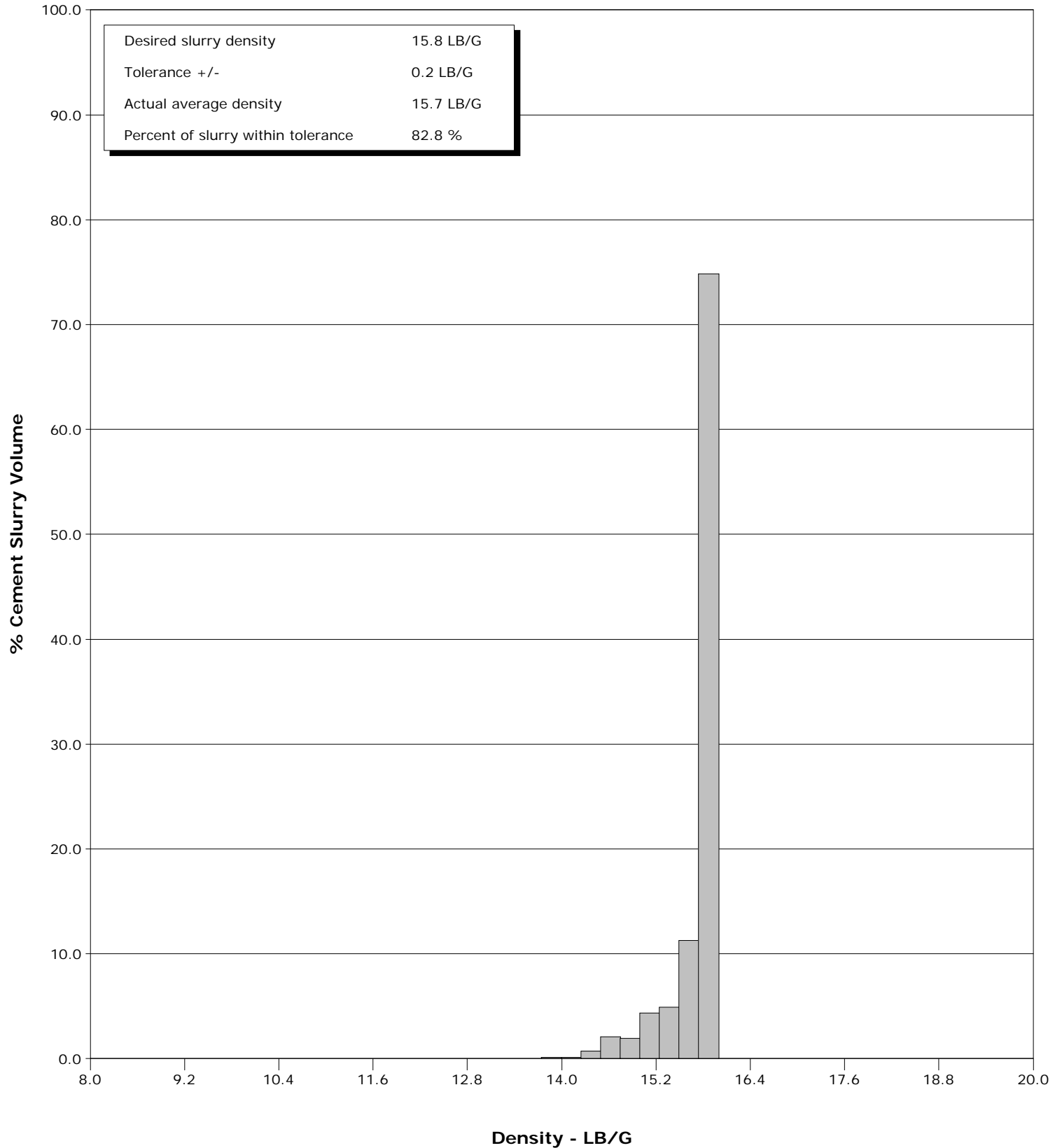
Client Encana
SIR No. BAD4-00160
Job Type 9 5/8" Surface
Job Date 08-18-2010



Well FEDERAL 20-7
Field Parachute
Engineer Jeff Patterson
Country United States

Client Encana
SIR No. BAD4-00160
Job Type 9 5/8" Surface
Job Date 08-18-2010

Cement Slurry - 08/18/2010 17:20:52 to 08/18/2010 17:38:19



Cementing Service Report

				Customer		Job Number	
				Encana		BAD4-00160	
Well			Location (legal)		Schlumberger Location		Job Start
FEDERAL 20-7 FEDERAL 20-7			PN20		Grand Junction		Aug/18/2010
Field		Formation Name/Type		Deviation	Bit Size	Well MD	Well TVD
Parachute		Shale		0 deg	12.3 in	829.0 ft	829.0 ft
County		State/Province		BHP	BHST	BHCT	Pore Press. Gradient
Garfield		Colorado					
Well Master		API /UWI		90 degF		80 degF	
Rig Name		Drilled For	Service Via	Casing/Liner			
Nabors M11		Gas	Land	Depth, ft	Size, in	Weight, lb/ft	Grade
Offshore Zone		Well Class	Well Type				Thread
		New	Development	829.0	9.630	36.0	K55
				0.0	0.000	0.0	8RD
Drilling Fluid Type		Max. Density	Plastic Viscosity	Tubing/Drill Pipe			
				Depth,	Size,	Weight,	Grade
							Thread
Service Line		Job Type					
Cementing		9 5/8" Surface					
Max. Allowed Tub. Press		Max. Allowed Ann. Press	WH Connection	Perforations/Open Hole			
3000 psi			9 5/8" Cement Head	Top,	Bottom,	No. of Shots	Total Interval
Service Instructions Cement 9 5/8" surface casing at 810ft in 12 1/2" OH 80% excess with: 20bbl water 438sks 15.8ppq tail Displace with water							
Treat Down		Displacement		Packer Type		Packer Depth	
Casing		60.5 bbl					
Tubing Vol.		Casing Vol.		Annular Vol.		Openhole Vol.	
		64.0 bbl		55.0 bbl		127.0 bbl	
Casing/Tubing Secured		1 Hole Vol. Circulated prior to Cement		Casing Tools		Squeeze Job	
<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>					
Lift Pressure		410 psi		Shoe Type		Squeeze Type	
				Guide			
Pipe Rotated		Pipe Reciprocated		Shoe Depth		Tool Type	
				829.0 ft			
No. Centralizers		Top Plugs	Bottom Plugs	Stage Tool Type		Tool Depth	
		1					
Cement Head Type		Single		Stage Tool Depth		Tail Pipe Size	
Job Scheduled For		Arrived on Location	Leave Location	Collar Type		Tail Pipe Depth	
Aug/18/2010		Aug/18/2010	Aug/18/2010	Float			
				Collar Depth		Sqz. Total Vol.	
				787.0 ft			
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
08/18/2010	16:55:57					Started Acquisition	
08/18/2010	17:04:04					Start Job	
08/18/2010	17:04:04	3	0.0	8.35	0.0		
08/18/2010	17:04:05					Pressure Test Lines	
08/18/2010	17:04:05	3	0.0	8.35	0.0		
08/18/2010	17:04:07					Low pressure test to 500psi.	
08/18/2010	17:04:07					Good test.	
08/18/2010	17:04:07					High pressure test to 3000psi.	
08/18/2010	17:04:07	3	0.0	8.35	0.0		
08/18/2010	17:04:08					Good test.	
08/18/2010	17:04:08	3	0.0	8.35	0.0		
08/18/2010	17:04:09					Start Pumping Spacer	
08/18/2010	17:04:09	3	0.0	8.35	0.0		
08/18/2010	17:04:10					Pumping 20bbbls fresh water spacer.	
08/18/2010	17:04:10	3	0.0	8.35	0.0		
08/18/2010	17:04:11					Good returns.	
08/18/2010	17:04:11	3	0.0	8.35	0.0		
08/18/2010	17:04:17	3	0.0	8.35	0.0		
08/18/2010	17:05:57	0	0.0	8.35	0.0		
08/18/2010	17:07:37	0	0.0	8.35	0.0		
08/18/2010	17:09:17	13	0.0	8.36	2.4		

Well FEDERAL 20-7 FEDERAL 20-7			Field Parachute		Job Start Aug/18/2010	Customer Encana	Job Number BAD4-00160
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
08/18/2010	17:12:37	3	0.0	8.35	2.4		
08/18/2010	17:14:17	64	3.6	8.35	5.2		
08/18/2010	17:15:57	53	3.6	8.36	11.1		
08/18/2010	17:17:37	43	2.5	8.36	15.6		
08/18/2010	17:19:17	42	2.4	8.36	19.7		
08/18/2010	17:20:51					End Spacer	
08/18/2010	17:20:51	79	3.7	13.49	23.6		
08/18/2010	17:20:52					Start Cement Slurry	
08/18/2010	17:20:52	78	3.7	13.88	23.7		
08/18/2010	17:20:53					Start Mixing Scav Slurry	
08/18/2010	17:20:53	82	3.7	13.88	23.7		
08/18/2010	17:20:57	81	3.6	14.39	24.0		
08/18/2010	17:21:04					Mixing and pumping 15.8ppg tail.	
08/18/2010	17:21:04					Good returns.	
08/18/2010	17:21:04	102	3.4	14.46	24.4		
08/18/2010	17:22:37	390	6.3	15.22	32.3		
08/18/2010	17:24:12					End Scavenger Slurry	
08/18/2010	17:24:12	411	5.8	15.65	41.9		
08/18/2010	17:24:13					Start Mixing Tail Slurry	
08/18/2010	17:24:13	233	5.8	15.65	42.0		
08/18/2010	17:24:17	285	5.7	15.66	42.4		
08/18/2010	17:25:57	429	5.9	15.80	52.1		
08/18/2010	17:27:37	308	5.8	15.86	61.8		
08/18/2010	17:29:17	345	5.8	15.84	67.8		
08/18/2010	17:30:57	395	5.9	15.82	77.6		
08/18/2010	17:32:37	478	6.4	15.81	88.0		
08/18/2010	17:34:17	527	6.4	15.93	98.6		
08/18/2010	17:35:57	515	6.4	15.96	109.2		
08/18/2010	17:37:37	480	6.4	15.57	119.9		
08/18/2010	17:38:18					End Tail Slurry	
08/18/2010	17:38:18	501	6.4	15.77	124.2		
08/18/2010	17:38:19					End Cement Slurry	
08/18/2010	17:38:19	513	6.4	15.78	124.3		
08/18/2010	17:38:24					Pumped 91bbls of 15.8ppg tail.	
08/18/2010	17:38:24	423	6.3	15.80	124.9		
08/18/2010	17:38:25					Good returns.	
08/18/2010	17:38:25	532	6.3	15.80	125.0		
08/18/2010	17:38:42					Drop Top Plug	
08/18/2010	17:38:42					Start Displacement	
08/18/2010	17:38:42	100	4.1	15.86	126.7		
08/18/2010	17:39:17	17	0.0	15.78	127.0		
08/18/2010	17:40:57	11	0.0	15.83	127.0		
08/18/2010	17:42:37	21	1.7	9.27	127.8		
08/18/2010	17:44:16					Plug Is Away	
08/18/2010	17:44:16					Pick Up Displacement Rate	
08/18/2010	17:44:16	153	4.8	9.18	132.9		
08/18/2010	17:44:17	148	4.8	9.18	132.9		
08/18/2010	17:44:55					Good Returns	
08/18/2010	17:44:55	86	4.8	9.03	136.0		
08/18/2010	17:45:28					Cement Back to Surface with 19 bbls away	
08/18/2010	17:45:28	70	4.3	8.74	138.5		
08/18/2010	17:45:57	97	4.8	8.66	140.6		
08/18/2010	17:47:37	136	4.5	8.33	148.3		
08/18/2010	17:49:17	168	4.5	8.35	155.9		

Well			Field	Job Start	Customer	Job Number
FEDERAL 20-7 FEDERAL 20-7			Parachute	Aug/18/2010	Encana	BAD4-00160
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
08/18/2010	17:49:37					Good Returns
08/18/2010	17:49:37	195	4.6	8.33	157.5	
08/18/2010	17:50:57	272	4.6	8.37	163.6	
08/18/2010	17:52:37	304	4.6	8.36	171.2	
08/18/2010	17:53:26					Drop Rate to 1.5 BPM
08/18/2010	17:53:26	352	4.6	8.36	174.9	
08/18/2010	17:54:17	366	4.6	8.37	178.8	
08/18/2010	17:55:57	335	1.6	8.36	183.3	
08/18/2010	17:57:37	282	1.6	8.36	186.0	
08/18/2010	17:59:17	313	1.6	8.36	188.8	
08/18/2010	18:00:04					Pressure Increase
08/18/2010	18:00:04					Plug Bump
08/18/2010	18:00:04					Hold 1000 psi on Plug
08/18/2010	18:00:04	1086	0.6	8.36	190.1	
08/18/2010	18:00:51					Wait 5 minutes
08/18/2010	18:00:51					Check Float
08/18/2010	18:00:51	1044	0.0	8.36	190.1	
08/18/2010	18:00:57	1043	0.0	8.36	190.1	
08/18/2010	18:02:28					Floats held.
08/18/2010	18:02:28	1043	0.0	8.36	190.1	
08/18/2010	18:02:29					Good returns for entire job.
08/18/2010	18:02:29	1043	0.0	8.36	190.1	
08/18/2010	18:02:37	1043	0.0	8.36	190.1	
08/18/2010	18:04:17	15	0.0	8.36	190.1	
08/18/2010	18:04:28					Bump Top Plug
08/18/2010	18:04:28	28	0.0	8.36	190.1	
08/18/2010	18:04:29					End Displacement
08/18/2010	18:04:29	34	0.0	8.36	190.1	
08/18/2010	18:04:44					End Job
08/18/2010	18:04:44	23	0.0	8.36	190.1	

Post Job Summary

Average Pump Rates,					Volume of Fluid Injected, bbl				
Slurry	N2	Mud	Maximum Rate 8.0		Total Slurry 91.0	Mud	Spacer 20.0	N2	
Treating Pressure Summary, psi					Breakdown Fluid				
Maximum 3000	Final 1000	Average 300	Bump Plug to 1000	Breakdown	Type		Volume		Density
Avg. N2 Percent		Designed Slurry Volume 91.0 bbl		Displacement 60.5 bbl	Mix Water Temp 64 degF		Cement Circulated to Surface? <input checked="" type="checkbox"/>	Volume 42.0 bbl	
							Washed Thru Perfs <input type="checkbox"/>	To	
Customer or Authorized Representative Les Fuglevand				Schlumberger Supervisor Jeff Patterson			Circulation Lost <input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>	
							-	-	