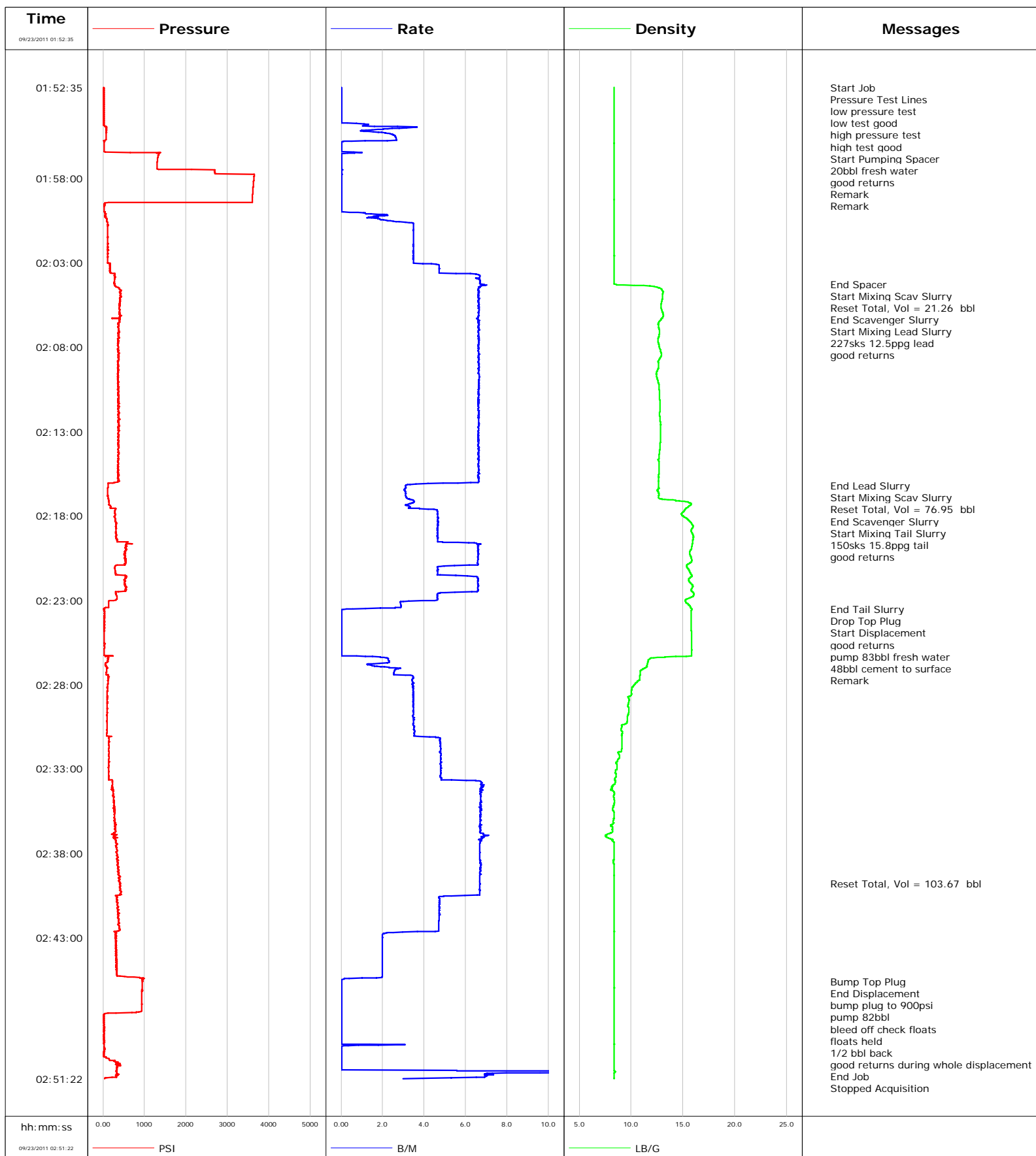


**Well** FEDERAL 20-13A  
**Field** S. PARACHUTE  
**Engineer** Jeff Patterson  
**Country** United States

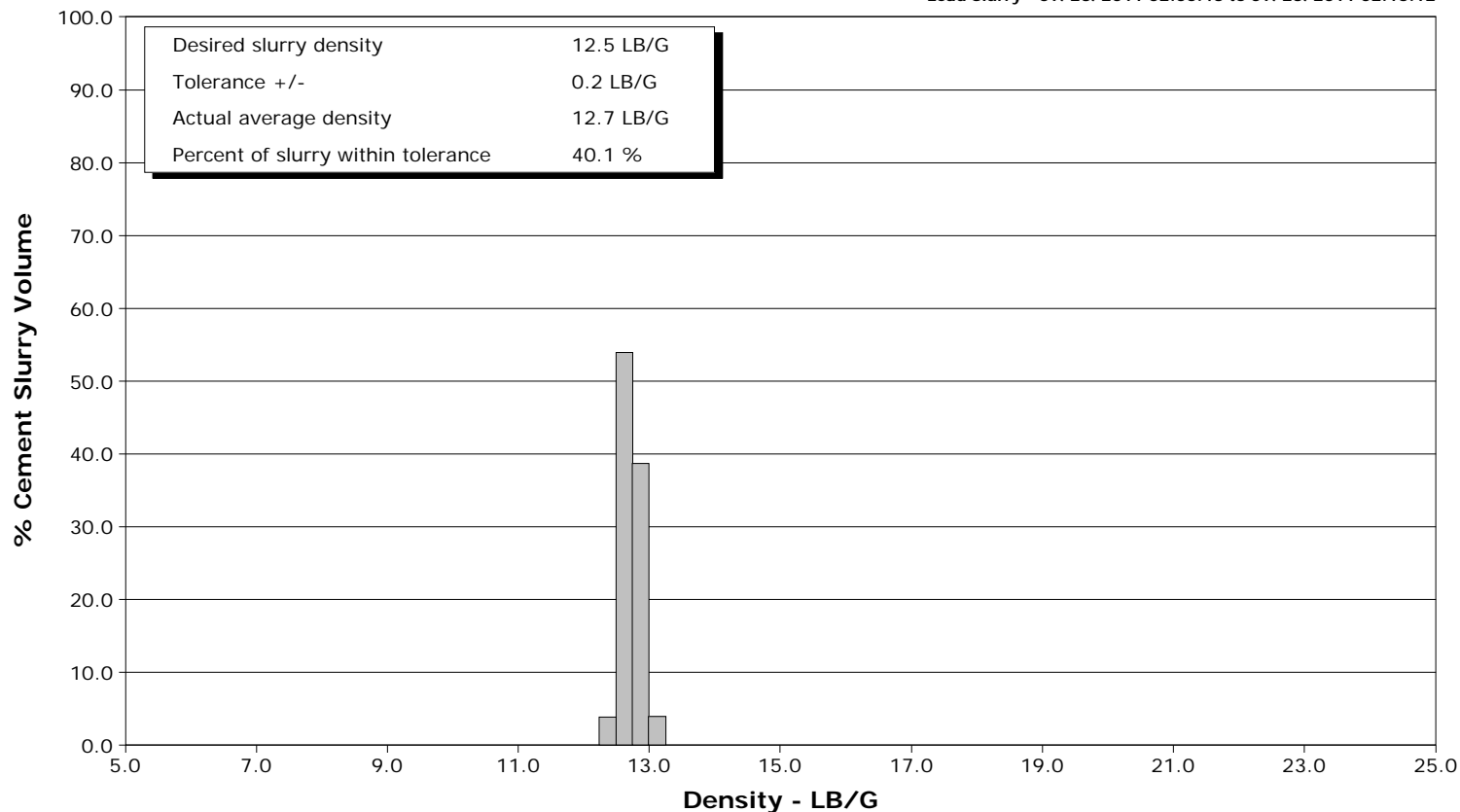
**Client** ENCANA  
**SIR No.** BUNM-00190  
**Job Type** 9 5/8" SURFACE  
**Job Date** 09-22-2011



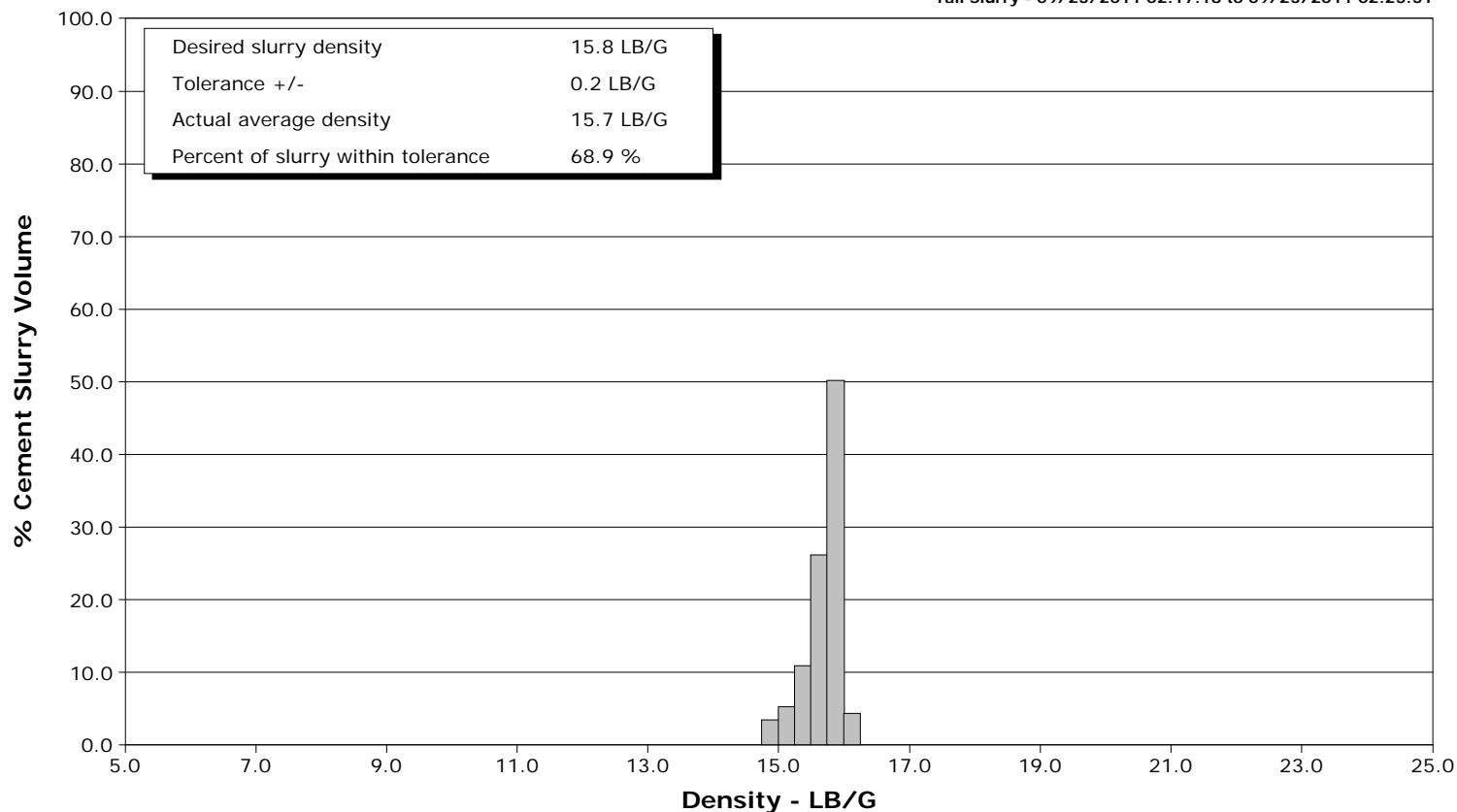
**Well** FEDERAL 20-13A  
**Field** S. PARACHUTE  
**Engineer** Jeff Patterson  
**Country** United States

**Client** ENCANA  
**SIR No.** BUNM-00190  
**Job Type** 9 5/8" SURFACE  
**Job Date** 09-22-2011

Lead Slurry - 09/23/2011 02:05:43 to 09/23/2011 02:16:12



Tail Slurry - 09/23/2011 02:17:18 to 09/23/2011 02:23:31





# Cementing Service Report

				Customer ENCANA		Job Number BUNM-00190	
Well FEDERAL 20-13A FEDERAL 20-13A			Location (legal) PA30		Schlumberger Location Grand Junction, Colorado		Job Start Sep/22/2011
Field S. PARACHUTE		Formation Name/Type Shale		Deviation 0 deg	Bit Size 12.3 in	Well MD 1120.8 ft	Well TVD 1120.8 ft
County GARFIELD		State/Province Colorado		BHP	BHST 90 degF	BHCT 81 degF	Pore Press. Gradient
Well Master 0631289090		API/UWI					
Rig Name nABORS M13		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	1120.0	9.630	36.0	K-55
				0.0	0.000	0.0	8RD
Drilling Fluid Type		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 3000 psi		Max. Allowed Ann. Press	WH Connection 9 5/8 CEMENT HEAD	Perforations/Open Hole			
				Top,	Bottom,	No. of Shots	Total Interval
							Diameter
				Treat Down Casing	Displacement 83.0 bbl	Packer Type	Packer Depth
				Tubing Vol.	Casing Vol. 87.0 bbl	Annular Vol. 66.0 bbl	Openhole Vol. 156.0 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 555 psi				Shoe Type Guide		Squeeze Type	
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>		Shoe Depth 1120.0 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/22/2011		Arrived on Location Sep/22/2011	Leave Location Sep/22/2011	Collar Type Float		Tail Pipe Depth	
				Collar Depth 1077.0 ft		Sqz. Total Vol.	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
09/23/2011	01:50:14					Started Acquisition	
09/23/2011	01:52:35					Start Job	
09/23/2011	01:52:35	23	0.0	8.35	0.0		
09/23/2011	01:52:38					Pressure Test Lines	
09/23/2011	01:52:38					low pressure test	
09/23/2011	01:52:38	22	0.0	8.35	0.0		
09/23/2011	01:52:39					low test good	
09/23/2011	01:52:39					high pressure test	
09/23/2011	01:52:39					high test good	
09/23/2011	01:52:39	23	0.0	8.36	0.0		
09/23/2011	01:52:41					Start Pumping Spacer	
09/23/2011	01:52:41	23	0.0	8.35	0.0		
09/23/2011	01:52:42					20bbl fresh water	
09/23/2011	01:52:42					good returns	
09/23/2011	01:52:42	23	0.0	8.35	0.0		
09/23/2011	01:52:43					Remark	
09/23/2011	01:52:43					Remark	
09/23/2011	01:52:43	23	0.0	8.35	0.0		
09/23/2011	01:52:44	23	0.0	8.35	0.0		
09/23/2011	01:53:14	23	0.0	8.36	0.0		
09/23/2011	01:53:44	22	0.0	8.36	0.0		

Well FEDERAL 20-13A FEDERAL 20-13A			Field S. PARACHUTE		Job Start Sep/22/2011	Customer ENCANA	Job Number BUNM-00190
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
09/23/2011	01:54:44	22	0.7	8.36	0.0		
09/23/2011	01:55:14	83	1.6	8.35	0.9		
09/23/2011	01:55:44	49	2.7	8.35	2.2		
09/23/2011	01:56:14	29	0.0	8.36	2.2		
09/23/2011	01:56:44	1324	0.0	8.36	2.3		
09/23/2011	01:57:14	1303	0.0	8.36	2.3		
09/23/2011	01:57:44	2716	0.0	8.36	2.3		
09/23/2011	01:58:14	3628	0.0	8.36	2.3		
09/23/2011	01:58:44	3612	0.0	8.36	2.3		
09/23/2011	01:59:14	3600	0.0	8.36	2.3		
09/23/2011	01:59:44	30	0.0	8.36	2.3		
09/23/2011	02:00:14	70	1.6	8.36	2.7		
09/23/2011	02:00:44	114	3.5	8.36	3.9		
09/23/2011	02:01:14	115	3.5	8.35	5.6		
09/23/2011	02:01:44	113	3.5	8.36	7.4		
09/23/2011	02:02:14	112	3.5	8.36	9.1		
09/23/2011	02:02:44	113	3.5	8.36	10.8		
09/23/2011	02:03:14	162	4.7	8.36	12.8		
09/23/2011	02:03:44	286	6.7	8.36	15.3		
09/23/2011	02:04:14	273	6.7	8.36	18.7		
09/23/2011	02:04:15					End Spacer	
09/23/2011	02:04:15	273	6.7	8.36	18.8		
09/23/2011	02:04:18					Start Mixing Scav Slurry	
09/23/2011	02:04:18	281	6.9	8.58	19.1		
09/23/2011	02:04:37					Reset Total, Vol = 21.26 bbl	
09/23/2011	02:04:37	418	6.6	12.97	21.3		
09/23/2011	02:04:44	404	6.6	13.10	22.0		
09/23/2011	02:05:14	409	6.6	12.98	25.3		
09/23/2011	02:05:42					End Scavenger Slurry	
09/23/2011	02:05:42	392	6.6	12.89	28.4		
09/23/2011	02:05:43					Start Mixing Lead Slurry	
09/23/2011	02:05:43	383	6.6	12.91	28.5		
09/23/2011	02:05:44	397	6.6	12.91	28.7		
09/23/2011	02:05:59					227sks 12.5ppg lead	
09/23/2011	02:05:59					good returns	
09/23/2011	02:05:59	395	6.6	13.06	30.3		
09/23/2011	02:06:14	394	6.6	13.03	32.0		
09/23/2011	02:06:44	372	6.6	12.63	35.3		
09/23/2011	02:07:14	379	6.6	12.72	38.6		
09/23/2011	02:07:44	369	6.6	12.62	41.9		
09/23/2011	02:08:14	373	6.6	12.84	45.2		
09/23/2011	02:08:44	382	6.6	12.71	48.5		
09/23/2011	02:09:14	361	6.6	12.62	51.9		
09/23/2011	02:09:44	356	6.7	12.46	55.2		
09/23/2011	02:10:14	365	6.6	12.68	58.5		
09/23/2011	02:10:44	365	6.6	12.72	61.8		
09/23/2011	02:11:14	371	6.6	12.80	65.1		
09/23/2011	02:11:44	374	6.6	12.77	68.4		
09/23/2011	02:12:14	375	6.6	12.78	71.7		
09/23/2011	02:12:44	368	6.6	12.84	75.1		
09/23/2011	02:13:14	375	6.6	12.84	78.4		
09/23/2011	02:13:44	361	6.6	12.80	81.7		
09/23/2011	02:14:14	366	6.6	12.74	85.0		
09/23/2011	02:14:44	363	6.6	12.65	88.3		

Well FEDERAL 20-13A FEDERAL 20-13A			Field S. PARACHUTE	Job Start Sep/22/2011	Customer ENCANA	Job Number BUNM-00190
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
09/23/2011	02:15:44	352	6.6	12.66	94.9	
09/23/2011	02:16:12					End Lead Slurry
09/23/2011	02:16:12	121	3.1	12.66	97.6	
09/23/2011	02:16:13					Start Mixing Scav Slurry
09/23/2011	02:16:13	121	3.1	12.66	97.6	
09/23/2011	02:16:14	121	3.1	12.67	97.7	
09/23/2011	02:16:24					Reset Total, Vol = 76.95 bbl
09/23/2011	02:16:24	116	3.1	12.65	98.2	
09/23/2011	02:16:44	117	3.1	12.67	99.2	
09/23/2011	02:17:14	144	3.4	15.68	100.9	
09/23/2011	02:17:16					End Scavenger Slurry
09/23/2011	02:17:16	144	3.4	15.77	101.0	
09/23/2011	02:17:18					Start Mixing Tail Slurry
09/23/2011	02:17:18	143	3.3	15.78	101.1	
09/23/2011	02:17:20					150sks 15.8ppg tail
09/23/2011	02:17:20					good returns
09/23/2011	02:17:20	143	3.2	15.76	101.2	
09/23/2011	02:17:44	293	4.6	15.06	102.7	
09/23/2011	02:18:14	301	4.7	15.47	105.0	
09/23/2011	02:18:44	319	4.6	15.90	107.4	
09/23/2011	02:19:14	309	4.6	16.00	109.7	
09/23/2011	02:19:44	567	6.6	15.87	112.3	
09/23/2011	02:20:14	533	6.6	15.63	115.6	
09/23/2011	02:20:44	559	6.6	15.82	118.9	
09/23/2011	02:21:14	296	4.6	15.59	121.7	
09/23/2011	02:21:44	526	6.6	15.59	124.3	
09/23/2011	02:22:14	557	6.6	15.92	127.6	
09/23/2011	02:22:44	330	4.6	16.01	130.6	
09/23/2011	02:23:14	140	2.9	15.49	132.5	
09/23/2011	02:23:31					End Tail Slurry
09/23/2011	02:23:31	17	0.5	15.86	133.3	
09/23/2011	02:23:39					Drop Top Plug
09/23/2011	02:23:39	39	0.0	15.79	133.3	
09/23/2011	02:23:40					Start Displacement
09/23/2011	02:23:40	32	0.0	15.79	133.3	
09/23/2011	02:23:41					good returns
09/23/2011	02:23:41	35	0.0	15.79	133.3	
09/23/2011	02:23:42					pump 83bbl fresh water
09/23/2011	02:23:42					48bbl cement to surface
09/23/2011	02:23:42	43	0.0	15.78	133.3	
09/23/2011	02:23:43					Remark
09/23/2011	02:23:43	43	0.0	15.78	133.3	
09/23/2011	02:23:44	37	0.0	15.78	133.3	
09/23/2011	02:24:14	37	0.0	15.79	133.3	
09/23/2011	02:24:44	34	0.0	15.81	133.3	
09/23/2011	02:25:14	31	0.0	15.82	133.3	
09/23/2011	02:25:44	35	0.0	15.84	133.3	
09/23/2011	02:26:14	29	0.0	15.85	133.3	
09/23/2011	02:26:44	62	2.2	11.58	134.2	
09/23/2011	02:27:14	85	2.6	10.88	135.2	
09/23/2011	02:27:44	122	3.4	10.81	136.8	
09/23/2011	02:28:14	112	3.5	10.07	138.5	
09/23/2011	02:28:44	106	3.5	9.71	140.2	
09/23/2011	02:29:14	103	3.5	9.71	142.0	

Well FEDERAL 20-13A FEDERAL 20-13A			Field S. PARACHUTE		Job Start Sep/22/2011	Customer ENCANA	Job Number BUNM-00190
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
09/23/2011	02:30:14	98	3.5	9.60	145.4		
09/23/2011	02:30:44	98	3.5	9.02	147.2		
09/23/2011	02:31:14	147	4.8	9.10	149.1		
09/23/2011	02:31:44	144	4.8	9.10	151.5		
09/23/2011	02:32:14	141	4.8	8.89	153.9		
09/23/2011	02:32:44	143	4.8	8.64	156.3		
09/23/2011	02:33:14	138	4.8	8.45	158.7		
09/23/2011	02:33:44	229	6.7	8.47	161.2		
09/23/2011	02:34:14	239	6.7	8.03	164.6		
09/23/2011	02:34:44	253	6.7	8.34	168.0		
09/23/2011	02:35:14	276	6.8	8.28	171.3		
09/23/2011	02:35:44	284	6.7	8.37	174.7		
09/23/2011	02:36:14	278	6.7	8.28	178.0		
09/23/2011	02:36:44	303	6.7	8.21	181.4		
09/23/2011	02:37:14	310	6.7	8.15	184.8		
09/23/2011	02:37:44	330	6.7	8.36	188.2		
09/23/2011	02:38:14	359	6.7	8.36	191.5		
09/23/2011	02:38:44	353	6.7	8.35	194.8		
09/23/2011	02:39:14	380	6.7	8.35	198.2		
09/23/2011	02:39:44	413	6.7	8.36	201.5		
09/23/2011	02:39:47					Reset Total, Vol = 103.67 bbl	
09/23/2011	02:39:47	426	6.7	8.36	201.9		
09/23/2011	02:40:14	425	6.7	8.36	204.9		
09/23/2011	02:40:44	333	4.7	8.35	207.8		
09/23/2011	02:41:14	365	4.7	8.35	210.2		
09/23/2011	02:41:44	370	4.7	8.36	212.6		
09/23/2011	02:42:14	367	4.7	8.36	214.9		
09/23/2011	02:42:44	311	2.2	8.36	217.1		
09/23/2011	02:43:14	317	2.0	8.36	218.1		
09/23/2011	02:43:44	316	2.0	8.36	219.1		
09/23/2011	02:44:14	318	2.0	8.36	220.1		
09/23/2011	02:44:44	320	2.0	8.36	221.1		
09/23/2011	02:45:14	338	2.0	8.36	222.1		
09/23/2011	02:45:36					Bump Top Plug	
09/23/2011	02:45:36	955	0.0	8.36	222.5		
09/23/2011	02:45:37					End Displacement	
09/23/2011	02:45:37	947	0.0	8.36	222.5		
09/23/2011	02:45:44	946	0.0	8.36	222.5		
09/23/2011	02:46:14	940	0.0	8.36	222.5		
09/23/2011	02:46:15					bump plug to 900psi	
09/23/2011	02:46:15					pump 82bbl	
09/23/2011	02:46:15	940	0.0	8.36	222.5		
09/23/2011	02:46:24					bleed off check floats	
09/23/2011	02:46:24	938	0.0	8.36	222.5		
09/23/2011	02:46:25					floats held	
09/23/2011	02:46:25					1/2 bbl back	
09/23/2011	02:46:25					good returns during whole displacement	
09/23/2011	02:46:25	938	0.0	8.36	222.5		
09/23/2011	02:46:44	936	0.0	8.36	222.5		
09/23/2011	02:47:14	931	0.0	8.36	222.5		
09/23/2011	02:47:44	23	0.0	8.36	222.5		
09/23/2011	02:48:14	23	0.0	8.36	222.5		
09/23/2011	02:48:44	24	0.0	8.36	222.5		
09/23/2011	02:49:14	24	0.0	8.36	222.5		

Well FEDERAL 20-13A FEDERAL 20-13A			Field S. PARACHUTE		Job Start Sep/22/2011	Customer ENCANA		Job Number BUNM-00190	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message			
09/23/2011	02:50:14	148	0.0	8.36	222.6				
09/23/2011	02:50:44	329	0.0	8.36	222.6				
09/23/2011	02:51:14	322	7.0	8.36	226.1				
09/23/2011	02:55:41					End Job			

### Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl			
Slurry 6.0	N2	Mud	Maximum Rate 8.0	Total Slurry 117.0	Mud	Spacer 20.0	N2	
Treating Pressure Summary, psi					Breakdown Fluid			
Maximum 3000	Final 900	Average 200	Bump Plug to 900	Breakdown	Type	Volume	Density	
Avg. N2 Percent	Designed Slurry Volume 117.0 bbl		Displacement 83.0 bbl	Mix Water Temp 65 degF	Cement Circulated to Surface? <input checked="" type="checkbox"/>	Volume 48.0 bbl		
					Washed Thru Perfs <input type="checkbox"/>	To		
Customer or Authorized Representative VLAD KOCHETOV			Schlumberger Supervisor Jeff Patterson			Circulation Lost <input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>	
						-	-	