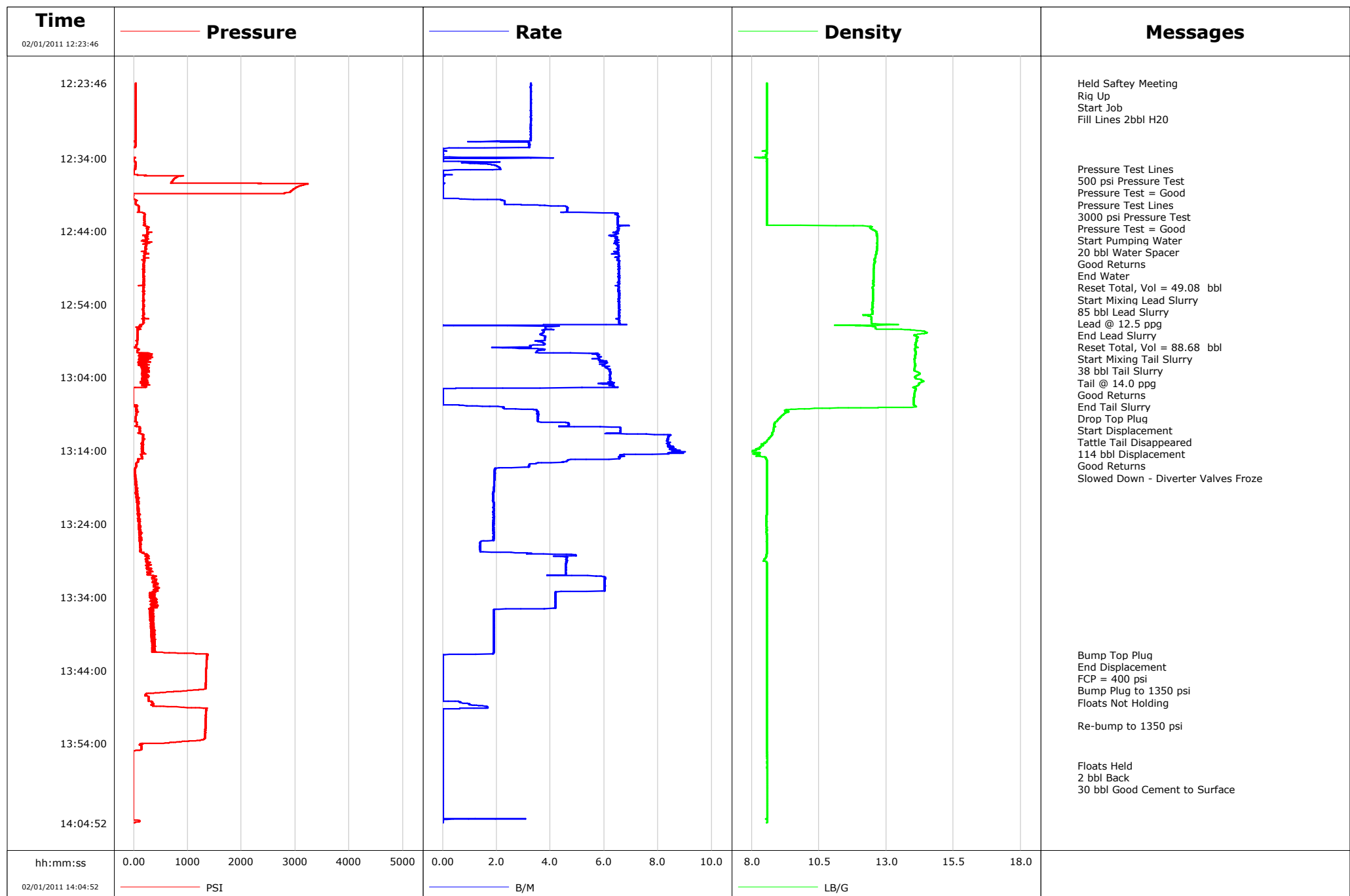


**Well** MF02D-16 H17 696  
**Field** North Parachute  
**Engineer** Ryan Bowditch  
**Country** United States

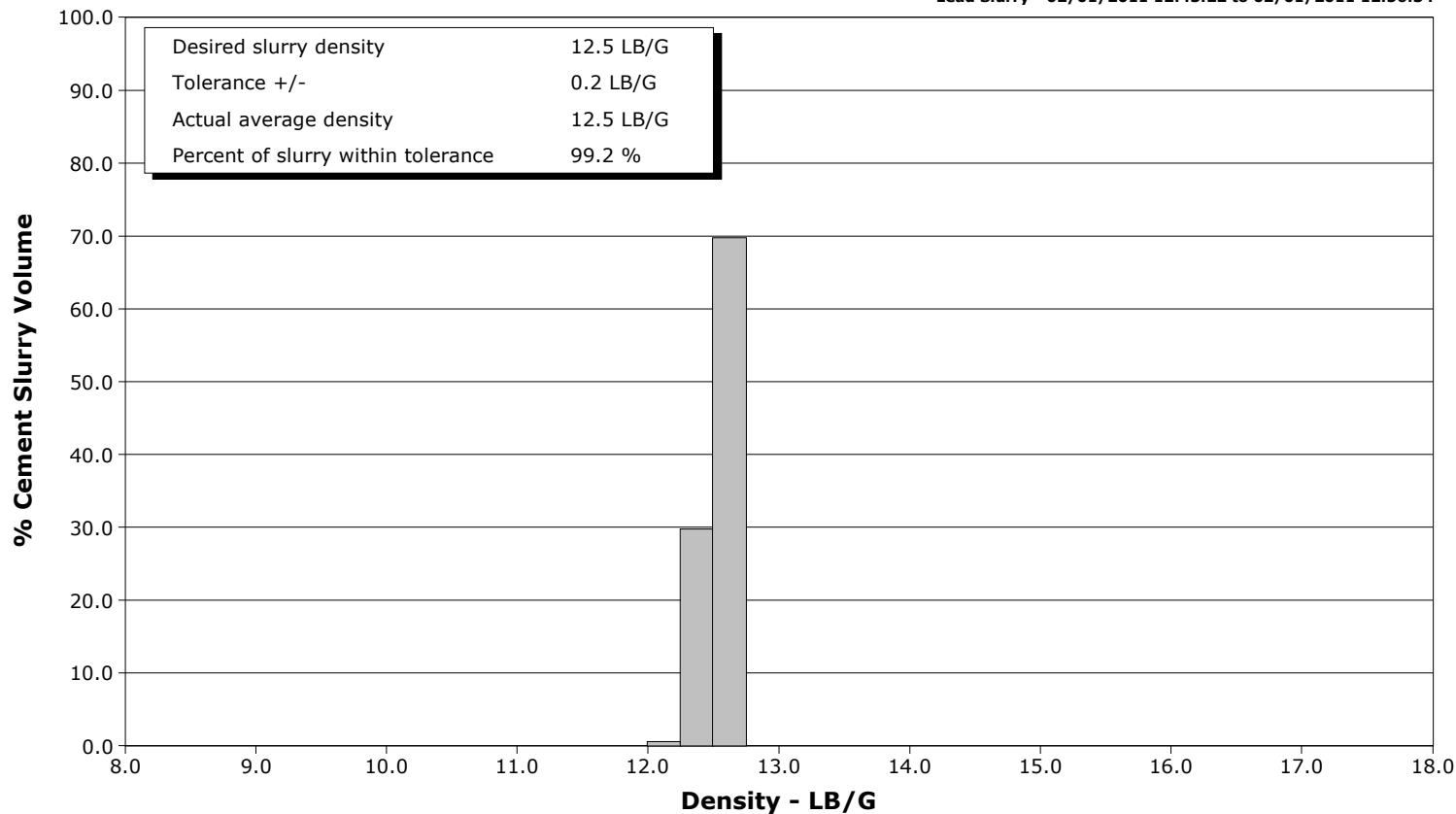
**Client** EnCana  
**SIR No.** BAD4-00291  
**Job Type** 9 5/8" Surface Casing  
**Job Date** 02-01-2011



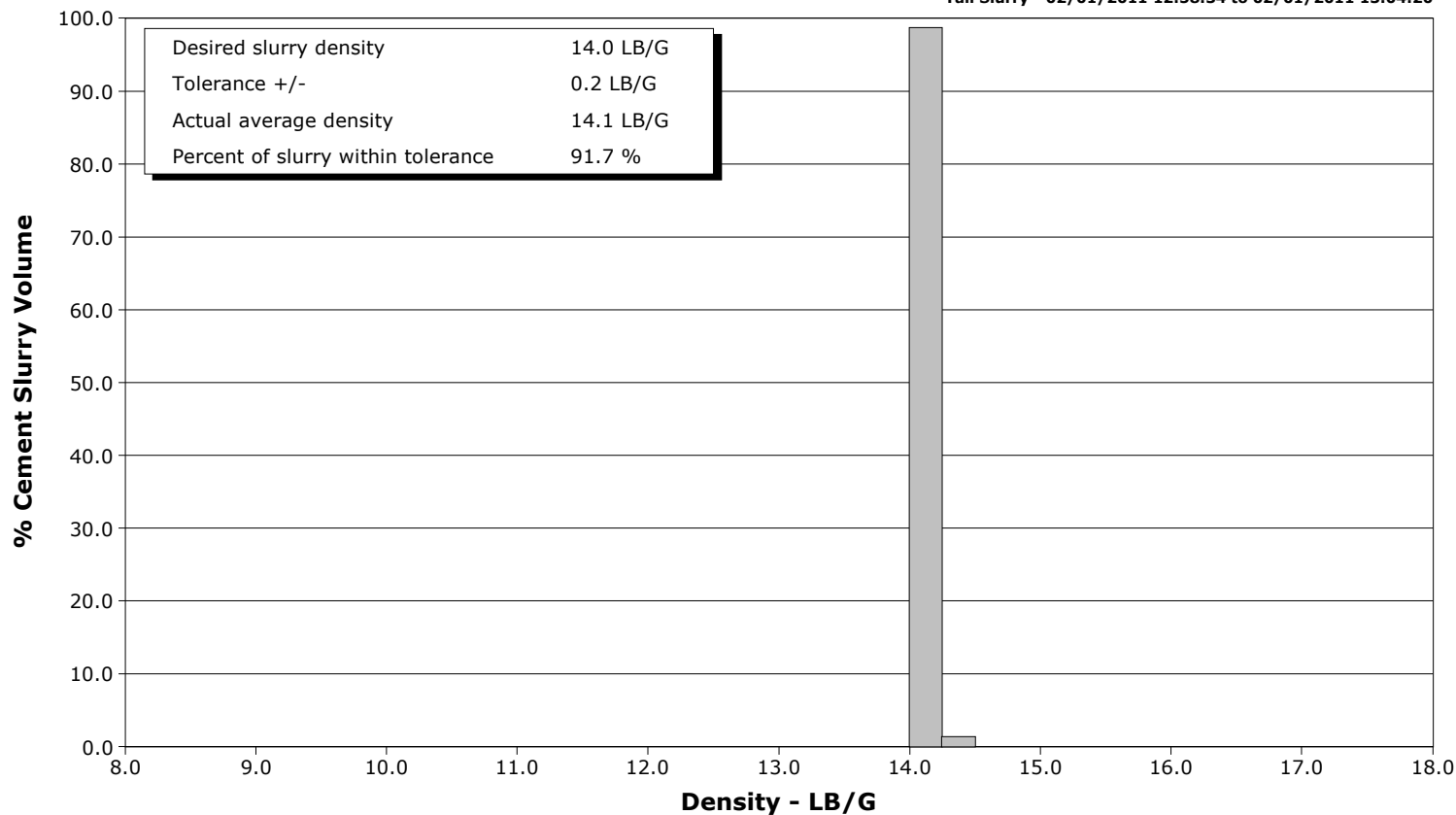
**Well** MF02D-16 H17 696  
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**Client** EnCana  
**SIR No.** BAD4-00291  
**Job Type** 9 5/8" Surface Casing  
**Job Date** 02-01-2011

**Lead Slurry - 02/01/2011 12:43:22 to 02/01/2011 12:56:34**



**Tail Slurry - 02/01/2011 12:58:34 to 02/01/2011 13:04:20**



# Cementing Service Report

				Customer EnCana		Job Number BAD4-00291		
Well MF02D-16 H17 696			Location (legal) H17		Schlumberger Location Grand Junction, CO		Job Start Feb/01/2011	
Field North Parachute		Formation Name/Type Shale		Deviation 0 deg	Bit Size 12.3 in	Well MD 1500.0 ft	Well TVD 1500.0 ft	
County Garfield		State/Province Colorado		BHP psi	BHST 100 degF	BHCT 86 degF	Pore Press. Gradient lb/gal	
Well Master 0631246302		API/UWI						
Rig Name Patterson 303	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	16.0	65.0		
				1500.0	9.6	36.0	K55	8RD
Drilling Fluid Type Bentonite		Max. Density 9.50 lb/gal	Plastic Viscosity cP	Tubing/Drill Pipe				
		T/D	Depth, ft	Size, in	Weight, lb/ft	Grade	Thread	
Service Line Cementing	Job Type 9 5/8" Surface Casing				0.0	0.0		
					0.0	0.0		
Max. Allowed Tub. Press 3000 psi	Max. Allowed Ann. Press 500 psi	WH Connection Single Cement head		Perforations/Open Hole				
		Top, ft	Bottom, ft	shot/ft	No. of Shots	Total Interval ft		
<b>Service Instructions</b> Cement 9 5/8" Surface Casing with:  20 bbl Water 85 bbl 12.5 ppg Lead (226 sks) 38 bbl 14.0 ppg Tail (139 sks)		ft	ft			Diameter in		
		ft	ft					
		ft	ft					
		Treat Down Casing		Displacement 114.5 bbl		Packer Type		Packer Depth ft
		Tubing Vol. bbl		Casing Vol. 116.0 bbl		Annular Vol. 93.0 bbl		Openhole Vol. 219.0 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 400 psi				Shoe Type Guide		Squeeze Type		
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>		Shoe Depth 1500.0 ft		Tool Type		
No. Centralizers	Top Plugs 1	Bottom Plugs		Stage Tool Type		Tool Depth ft		
Cement Head Type Single				Stage Tool Depth ft		Tail Pipe Size in		
Job Scheduled For Feb/01/2011	Arrived on Location Feb/01/2011	Leave Location Feb/01/2011		Collar Type Float		Tail Pipe Depth ft		
				Collar Depth 1481.0 ft		Sqz. Total Vol. bbl		
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message		
02/01/2011	12:23:46	32	3.3	8.56	0.1	Started Acquisition		
02/01/2011	12:23:49	33	3.3	8.56	0.2	Held Safety Meeting		
02/01/2011	12:23:52	32	3.3	8.56	0.4	Start Job		
02/01/2011	12:24:27	32	3.3	8.56	2.3	Fill Lines 2bbl H2O		
02/01/2011	12:25:26	32	3.3	8.56	5.5			
02/01/2011	12:27:06	32	3.3	8.56	10.9			
02/01/2011	12:28:46	33	3.3	8.56	16.4			
02/01/2011	12:30:26	34	3.3	8.56	21.8			
02/01/2011	12:32:06	30	3.2	8.56	27.1			
02/01/2011	12:33:46	-27	0.0	8.54	28.8			
02/01/2011	12:35:26	27	2.1	8.56	30.8			
02/01/2011	12:35:30	28	2.1	8.56	30.9	Pressure Test Lines		
02/01/2011	12:35:31	27	2.1	8.56	31.0	Pressure Test = Good		
02/01/2011	12:37:06	722	0.0	8.56	31.3			
02/01/2011	12:37:30	2367	0.1	8.56	31.3	Pressure Test Lines		
02/01/2011	12:38:46	2830	0.0	8.57	31.3			
02/01/2011	12:40:26	60	3.2	8.57	33.1			
02/01/2011	12:41:34	181	6.5	8.56	38.4	Start Pumping Water		
02/01/2011	12:41:35	187	6.5	8.56	38.5	20 bbl Water Spacer		
02/01/2011	12:42:06	201	6.5	8.56	41.8			
02/01/2011	12:43:10	195	6.5	8.56	48.8	End Water		

Well MF02D-16 H17 696			Field North Parachute		Job Start Feb/01/2011	Customer EnCana	Job Number BAD4-00291
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
02/01/2011	12:43:22	243	6.5	12.45	50.1	Start Mixing Lead Slurry	
02/01/2011	12:43:23	253	6.5	12.47	50.2	85 bbl Lead Slurry	
02/01/2011	12:43:46	253	6.5	12.50	52.7		
02/01/2011	12:45:26	181	6.4	12.67	63.4		
02/01/2011	12:47:06	277	6.3	12.63	74.2		
02/01/2011	12:48:46	186	6.5	12.54	85.1		
02/01/2011	12:50:26	180	6.6	12.52	96.0		
02/01/2011	12:52:06	177	6.5	12.50	106.9		
02/01/2011	12:53:46	168	6.5	12.49	117.8		
02/01/2011	12:55:26	179	6.5	12.35	128.7		
02/01/2011	12:56:34	185	6.6	12.45	136.1	End Lead Slurry	
02/01/2011	12:56:49	152	6.1	13.25	137.8	Reset Total, Vol = 88.68 bbl	
02/01/2011	12:57:06	144	3.8	12.58	138.5		
02/01/2011	12:58:34	65	3.8	14.16	144.0	Start Mixing Tail Slurry	
02/01/2011	12:58:38	66	3.8	14.14	144.3	38 bbl Tail Slurry	
02/01/2011	12:58:39	66	3.8	14.14	144.3	Tail @ 14.0 ppg	
02/01/2011	12:58:46	62	3.8	14.12	144.8		
02/01/2011	13:00:18	67	3.6	14.07	150.1	Good Returns	
02/01/2011	13:00:26	64	3.5	14.08	150.6		
02/01/2011	13:02:06	205	6.1	14.06	159.7		
02/01/2011	13:03:46	191	6.2	14.13	170.0		
02/01/2011	13:04:20	196	6.2	14.29	173.5	End Tail Slurry	
02/01/2011	13:05:26	-12	3.6	14.02	180.3		
02/01/2011	13:07:06	-15	0.0	14.02	180.4		
02/01/2011	13:08:00	13	2.2	14.09	180.7	Drop Top Plug	
02/01/2011	13:08:01	54	2.2	14.11	180.7	Tattle Tail Disappeared	
02/01/2011	13:08:02	49	2.3	14.10	180.7	114 bbl Displacement	
02/01/2011	13:08:03	41	2.3	14.10	180.8	Good Returns	
02/01/2011	13:08:46	67	3.5	9.35	182.9		
02/01/2011	13:10:26	57	4.7	8.84	189.2		
02/01/2011	13:12:06	166	8.4	8.70	200.2		
02/01/2011	13:13:46	166	8.5	8.15	214.2		
02/01/2011	13:15:26	79	4.6	8.56	226.1		
02/01/2011	13:16:09	48	3.2	8.56	228.8	Slowed Down - Diverter Valves Froze	
02/01/2011	13:17:06	25	1.9	8.56	230.8		
02/01/2011	13:18:46	40	1.9	8.56	234.0		
02/01/2011	13:20:26	49	1.9	8.56	237.2		
02/01/2011	13:22:06	68	1.9	8.56	240.3		
02/01/2011	13:23:46	94	1.9	8.55	243.4		
02/01/2011	13:25:26	108	1.9	8.55	246.6		
02/01/2011	13:27:06	125	1.4	8.56	249.3		
02/01/2011	13:28:46	276	4.6	8.50	254.1		
02/01/2011	13:30:26	319	4.6	8.56	261.7		
02/01/2011	13:32:06	391	6.0	8.56	270.7		
02/01/2011	13:33:46	374	4.2	8.56	279.8		
02/01/2011	13:35:26	356	4.2	8.56	286.8		
02/01/2011	13:37:06	363	1.9	8.56	290.4		
02/01/2011	13:38:46	338	1.9	8.56	293.5		
02/01/2011	13:40:26	356	1.9	8.56	296.7		
02/01/2011	13:41:54	1369	0.0	8.56	299.3	Bump Top Plug	
02/01/2011	13:41:55	1364	0.0	8.56	299.3	End Displacement	
02/01/2011	13:41:57	1363	0.0	8.56	299.3	FCP = 400 psi	
02/01/2011	13:42:06	1357	0.0	8.56	299.3		
02/01/2011	13:43:46	1344	0.0	8.56	299.3		

Well			Field		Job Start		Customer		Job Number	
MF02D-16 H17 696			North Parachute		Feb/01/2011		EnCana		BAD4-00291	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message				
02/01/2011	13:47:06	436	0.0	8.56	299.3					
02/01/2011	13:47:41	273	0.0	8.57	299.3	Floats Not Holding				
02/01/2011	13:48:46	321	1.0	8.57	299.7					
02/01/2011	13:50:26	1335	0.0	8.57	300.5					
02/01/2011	13:51:29	1330	0.0	8.57	300.5	Re-bump to 1350 psi				
02/01/2011	13:52:06	1326	0.0	8.57	300.5					
02/01/2011	13:53:46	909	0.0	8.57	300.5					
02/01/2011	13:55:26	-12	0.0	8.57	300.5					
02/01/2011	13:56:59	-12	0.0	8.57	300.5	Floats Held				
02/01/2011	13:57:00	-12	0.0	8.57	300.5	2 bbl Back				
02/01/2011	13:57:06	-12	0.0	8.57	300.5					
02/01/2011	13:57:25	-16	0.0	8.57	300.5	30 bbl Good Cement to Surface				
02/01/2011	13:58:46	-17	0.0	8.57	300.5					
02/01/2011	14:00:26	-17	0.0	8.57	300.5					
02/01/2011	14:02:06	-16	0.0	8.57	300.5					

### Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl							
Slurry 4.0	N2	Mud	Maximum Rate 8.0	Total Slurry 123.0	Mud 0.0	Spacer 20.0	N2					
Treating Pressure Summary, psi					Breakdown Fluid							
Maximum 3240	Final 14	Average 351	Bump Plug to 1350	Breakdown	Type	Volume bbl	Density lb/gal					
Avg. N2 Percent %	Designed Slurry Volume 123.0 bbl	Displacement 114.0 bbl	Mix Water Temp 75 degF	Cement Circulated to Surface? <input checked="" type="checkbox"/>		Volume 31.0 bbl						
				Washed Thru Perfs <input type="checkbox"/>		To ft						
Customer or Authorized Representative Cody Huseby			Schlumberger Supervisor Ryan Bowditch			Circulation Lost <input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>					
						-	-					