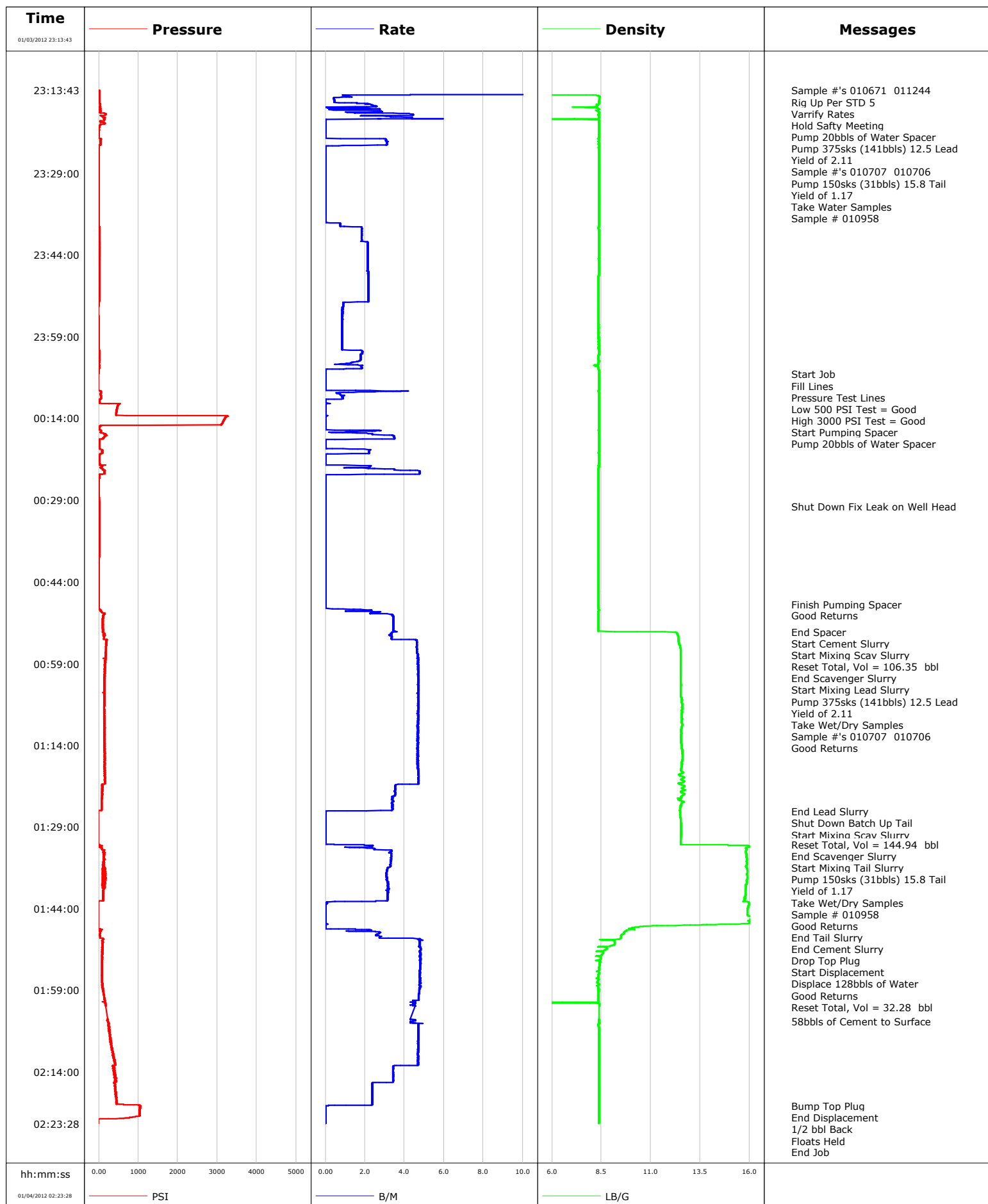


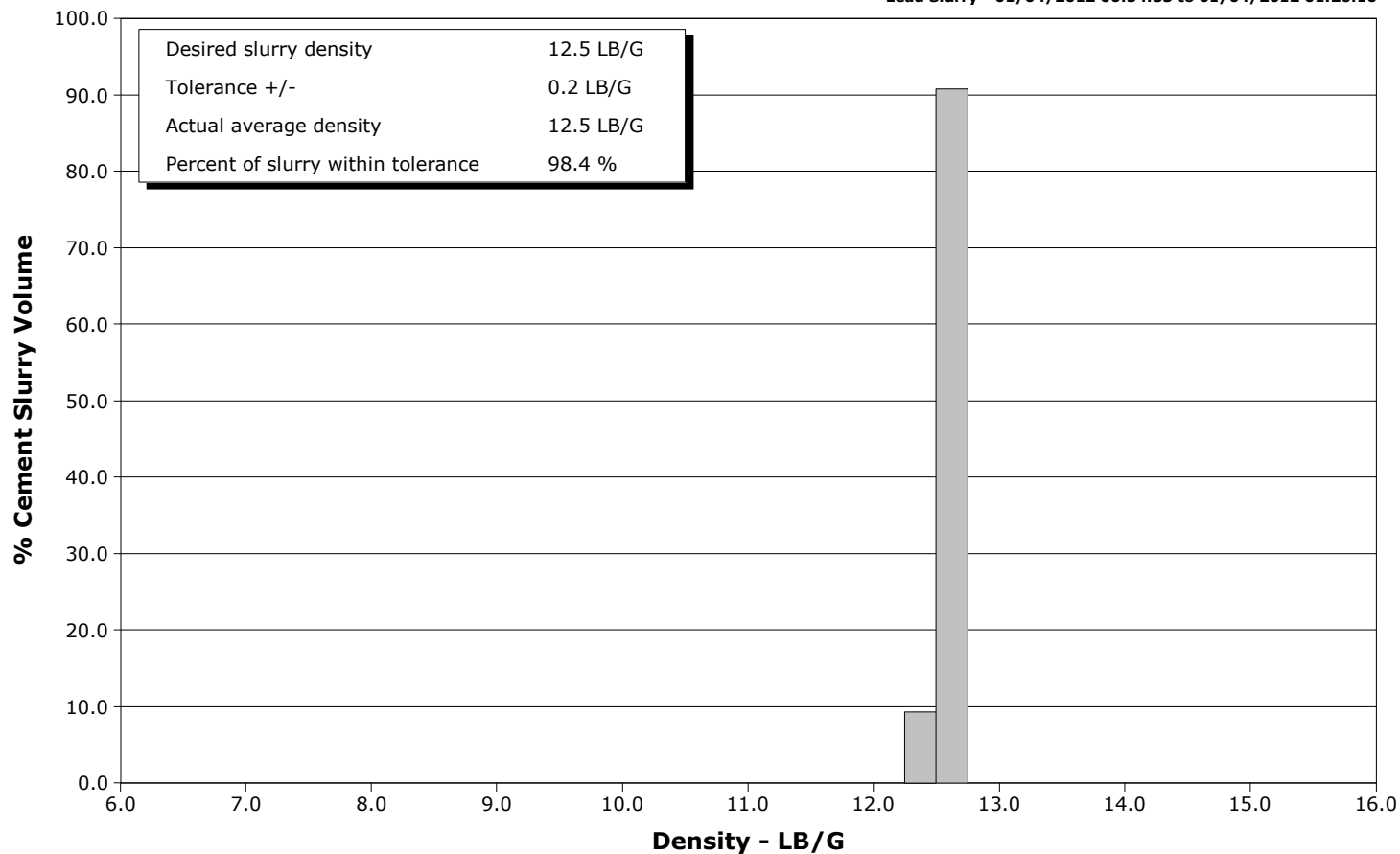
Well	HMU FEDERAL 16-8D	Client	Encana
Field	Mamm Creek	SIR No.	682783
Engineer	Dant Ryan/ Ted Hansen	Job Type	9 5/8 Surface
Country	United States	Job Date	01-03-2012



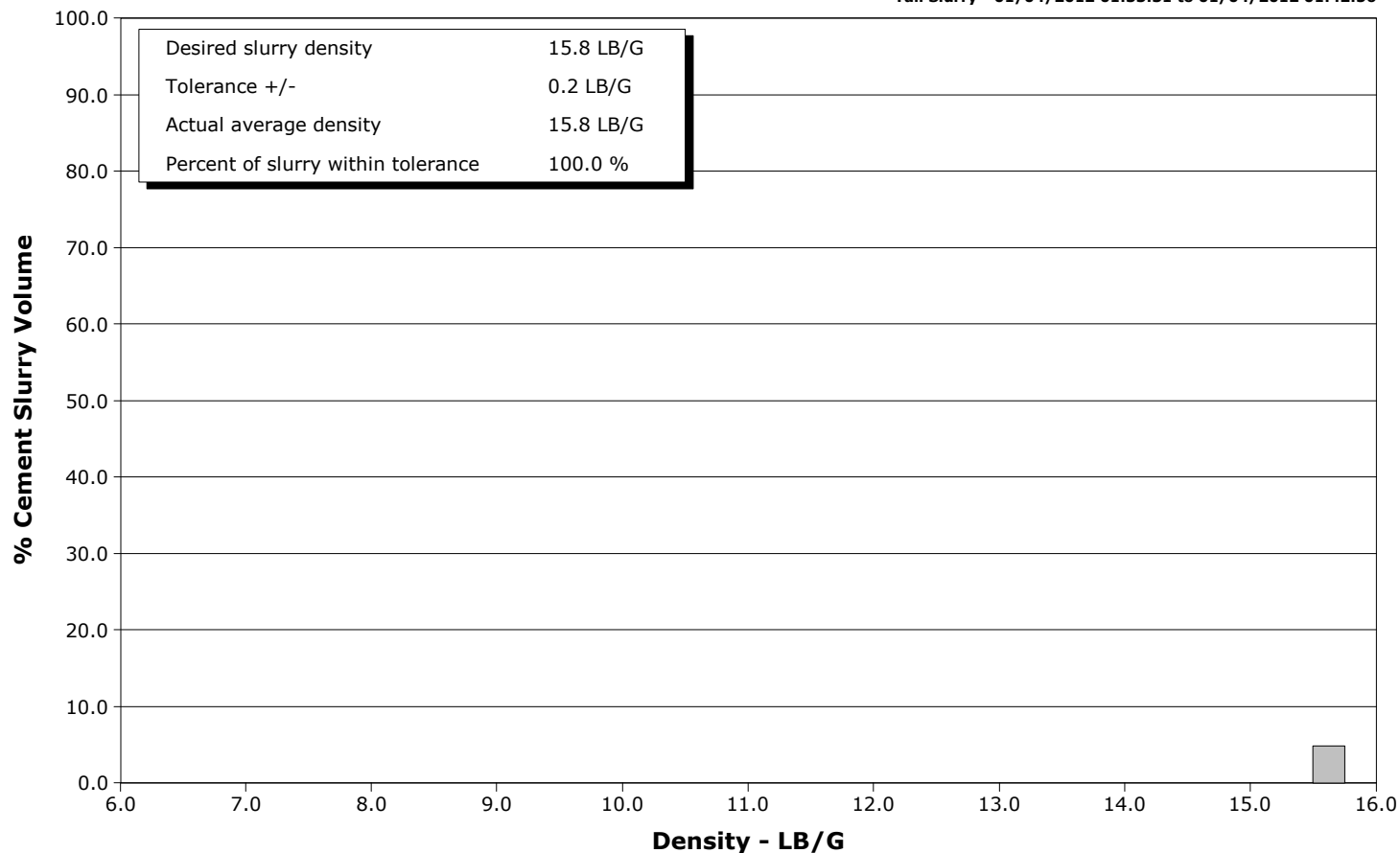
Well HMU FEDERAL 16-8D
Field Mamm Creek
Engineer Dant Ryan/ Ted Hansen
Country United States

Client Encana
SIR No. 682783
Job Type 9 5/8 Surface
Job Date 01-03-2012

Lead Slurry - 01/04/2012 00:54:33 to 01/04/2012 01:26:10



Tail Slurry - 01/04/2012 01:33:31 to 01/04/2012 01:42:56



				Customer Encana			Job Number 682783				
Well HMU FEDERAL 16-8D 16-8D			Location (legal) J 16 W			Schlumberger Location			Job Start Jan/03/2012		
Field Mamm Creek		Formation Name/Type Shale		Deviation deg		Bit Size 12.3 in		Well MD 1695.0 ft		Well TVD 1695.0 ft	
County Garfield		State/Province Colorado		BHP psi		BHST 100 degF		BHCT 86 degF		Pore Press. Gradient lb/gal	
Well Master 0631254654		API/UWI									
Rig Name Nabors M-11		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		40.0		16.0		65.0	
						1695.0		9.6		36.0	
								N/A		N/A	
								K55		8RD	
Drilling Fluid Type Bentonite		Max. Density 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						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	
						ft		ft			
						ft		ft		Diameter in	
						ft		ft			
						Treat Down Casing		Displacement 128.0 bbl		Packer Type	
										Packer Depth ft	
						Tubing Vol. bbl		Casing Vol. 131.0 bbl		Annular Vol. 98.0 bbl	
										Openhole Vol. 232.0 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 839 psi						Shoe Type Float				Squeeze Type	
Pipe Rotated <input type="checkbox"/>		Pipe Reciprocated <input type="checkbox"/>				Shoe Depth 1695.0 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 Jan/03/2012 15:00		Arrived on Location Jan/03/2012 15:00		Leave Location Jan/03/2012		Collar Type Float				Tail Pipe Depth ft	
						Collar Depth 1651.0 ft				Sqz. Total Vol. bbl	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message					
01/03/2012	23:13:43	4	25.0	-0.03	11297.6	Started Acquisition					
01/03/2012	23:13:44	4	25.0	-0.03	11298.0	Take Water Samples					
01/03/2012	23:13:45	4	25.0	-0.03	11298.5	Sample # 010958					
01/03/2012	23:15:23	4	0.4	8.39	11320.5						
01/03/2012	23:17:03	29	1.7	8.32	11322.6						
01/03/2012	23:18:43	140	4.1	8.37	11327.2						
01/03/2012	23:20:23	11	0.0	8.37	11328.7						
01/03/2012	23:22:03	-7	0.0	8.37	11328.7						
01/03/2012	23:23:43	41	3.1	8.35	11332.0						
01/03/2012	23:25:23	-8	0.0	8.36	0.0						
01/03/2012	23:27:03	-7	0.0	8.35	0.0						
01/03/2012	23:28:43	-6	0.0	8.35	0.0						
01/03/2012	23:30:23	-6	0.0	8.36	0.0						
01/03/2012	23:32:03	-5	0.0	8.36	0.0						
01/03/2012	23:33:43	-5	0.0	8.35	0.0						
01/03/2012	23:35:23	-5	0.0	8.36	0.0						
01/03/2012	23:37:03	-4	0.0	8.36	0.0						
01/03/2012	23:38:43	-0	0.7	8.36	0.5						
01/03/2012	23:40:23	11	1.8	8.35	3.4						
01/03/2012	23:42:03	15	2.1	8.35	6.6						
01/03/2012	23:43:43	13	2.1	8.35	10.2						

Well			Field		Job Start		Customer		Job Number	
HMU FEDERAL 16-8D 16-8D			Mamm Creek		Jan/03/2012		Encana		682783	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message				
01/03/2012	23:47:03	11	2.2	8.35	17.3					
01/03/2012	23:48:43	9	2.2	8.35	20.9					
01/03/2012	23:50:23	8	2.2	8.35	24.6					
01/03/2012	23:52:03	7	2.2	8.35	28.2					
01/03/2012	23:53:43	-13	0.9	8.35	30.5					
01/03/2012	23:55:23	-12	0.9	8.35	31.9					
01/03/2012	23:57:03	-12	0.9	8.35	33.3					
01/03/2012	23:58:43	-11	0.9	8.35	34.7					
01/04/2012	00:00:23	-10	0.8	8.35	36.1					
01/04/2012	00:02:03	3	1.9	8.35	38.1					
01/04/2012	00:03:43	2	1.4	8.35	41.0					
01/04/2012	00:05:23	-11	0.0	8.36	43.0					
01/04/2012	00:05:52	-15	0.0	8.36	43.0	Start Job				
01/04/2012	00:05:54	-15	0.0	8.36	43.0	Fill Lines				
01/04/2012	00:05:59	-14	0.0	8.36	43.0	Pressure Test Lines				
01/04/2012	00:06:01	-15	0.0	8.36	43.0	Low 500 PSI Test = Good				
01/04/2012	00:06:02	-15	0.0	8.36	43.0	High 3000 PSI Test = Good				
01/04/2012	00:06:07	-14	0.0	8.36	0.0	Start Pumping Spacer				
01/04/2012	00:06:08	-15	0.0	8.36	0.0	Pump 20bbls of Water Spacer				
01/04/2012	00:07:03	-15	0.0	8.36	0.0					
01/04/2012	00:08:43	-15	0.0	8.36	0.0					
01/04/2012	00:10:23	52	0.9	8.36	1.9					
01/04/2012	00:12:03	461	0.0	8.36	2.0					
01/04/2012	00:13:43	3226	0.0	8.36	2.0					
01/04/2012	00:15:23	57	0.0	8.36	2.0					
01/04/2012	00:17:03	182	3.2	8.36	3.6					
01/04/2012	00:18:43	4	0.0	8.36	6.4					
01/04/2012	00:20:23	86	2.2	8.35	8.0					
01/04/2012	00:22:03	2	0.0	8.35	8.3					
01/04/2012	00:23:43	140	4.8	8.35	11.3					
01/04/2012	00:25:23	-1	0.0	8.35	14.2					
01/04/2012	00:27:03	-1	0.0	8.35	14.2					
01/04/2012	00:28:43	-0	0.0	8.35	14.2					
01/04/2012	00:30:08	1	0.0	8.35	14.2	Shut Down Fix Leak on Well Head				
01/04/2012	00:30:23	1	0.0	8.35	14.2					
01/04/2012	00:32:03	2	0.0	8.35	14.2					
01/04/2012	00:33:43	3	0.0	8.35	14.2					
01/04/2012	00:35:23	3	0.0	8.35	14.2					
01/04/2012	00:37:03	4	0.0	8.35	14.2					
01/04/2012	00:38:43	4	0.0	8.35	14.2					
01/04/2012	00:40:23	-8	0.0	8.35	14.2					
01/04/2012	00:42:03	-8	0.0	8.35	14.2					
01/04/2012	00:43:43	-7	0.0	8.35	14.2					
01/04/2012	00:45:23	-7	0.0	8.35	14.2					
01/04/2012	00:47:03	-7	0.0	8.35	14.2					
01/04/2012	00:48:09	-7	0.0	8.35	14.2	Finish Pumping Spacer				
01/04/2012	00:48:43	-7	0.0	8.35	14.2					
01/04/2012	00:50:09	116	3.4	8.35	16.9	Good Returns				
01/04/2012	00:50:23	104	3.4	8.35	17.7					
01/04/2012	00:52:03	104	3.4	8.34	23.4					
01/04/2012	00:53:12	99	3.5	11.73	27.4	End Spacer				
01/04/2012	00:53:15	98	3.4	12.17	27.6	Start Cement Slurry				
01/04/2012	00:53:16	98	3.4	12.24	27.6	Start Mixing Scav Slurry				
01/04/2012	00:53:29	124	3.4	12.32	28.4	Reset Total, Vol = 106.35 bbl				

Well			Field		Job Start		Customer		Job Number	
HMU FEDERAL 16-8D 16-8D			Mamm Creek		Jan/03/2012		Encana		682783	
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message				
01/04/2012	00:54:32	128	3.4	12.39	31.9	End Scavenger Slurry				
01/04/2012	00:54:33	128	3.4	12.39	31.9	Start Mixing Lead Slurry				
01/04/2012	00:54:35	201	3.8	12.39	32.0	Pump 375sks (141bbls) 12.5 Lead				
01/04/2012	00:54:37	196	4.5	12.39	32.2	Sample #'s 010707 010706				
01/04/2012	00:55:23	180	4.6	12.43	35.7					
01/04/2012	00:57:03	173	4.6	12.51	43.4					
01/04/2012	00:58:43	160	4.7	12.50	51.2					
01/04/2012	01:00:23	151	4.7	12.51	59.0					
01/04/2012	01:02:03	141	4.7	12.51	66.8					
01/04/2012	01:03:43	139	4.7	12.51	74.7					
01/04/2012	01:05:23	144	4.7	12.55	82.5					
01/04/2012	01:07:03	133	4.7	12.57	90.3					
01/04/2012	01:08:43	136	4.7	12.56	98.1					
01/04/2012	01:10:23	146	4.7	12.57	105.9					
01/04/2012	01:12:03	146	4.7	12.54	113.7					
01/04/2012	01:13:32	143	4.7	12.54	120.6	Good Returns				
01/04/2012	01:13:43	145	4.7	12.55	121.5					
01/04/2012	01:15:23	150	4.7	12.58	129.3					
01/04/2012	01:17:03	148	4.7	12.57	137.1					
01/04/2012	01:18:43	147	4.7	12.53	144.9					
01/04/2012	01:20:23	144	4.7	12.55	152.7					
01/04/2012	01:22:03	83	3.5	12.62	159.6					
01/04/2012	01:23:43	74	3.4	12.53	165.4					
01/04/2012	01:25:23	71	3.4	12.50	171.0					
01/04/2012	01:26:10	-21	0.0	12.48	173.3	End Lead Slurry				
01/04/2012	01:26:14	-21	0.0	12.49	173.3	Shut Down Batch Up Tail				
01/04/2012	01:26:16	-18	0.0	12.49	173.3	Start Mixing Scav Slurry				
01/04/2012	01:27:03	-16	0.0	12.49	173.3					
01/04/2012	01:28:43	-15	0.0	12.53	173.3					
01/04/2012	01:30:23	-19	0.0	12.52	173.3					
01/04/2012	01:32:03	-20	0.0	12.52	173.3					
01/04/2012	01:32:15	-7	0.4	12.51	173.3	Reset Total, Vol = 144.94 bbl				
01/04/2012	01:33:30	126	3.3	15.82	176.3	End Scavenger Slurry				
01/04/2012	01:33:31	137	3.3	15.82	176.3	Start Mixing Tail Slurry				
01/04/2012	01:33:33	130	3.3	15.82	176.4	Pump 150sks (31bbls) 15.8 Tail				
01/04/2012	01:33:43	101	3.2	15.83	177.0					
01/04/2012	01:34:31	133	3.3	15.83	179.6	Sample # 010958				
01/04/2012	01:34:36	130	3.3	15.84	179.9	Good Returns				
01/04/2012	01:35:23	133	3.3	15.85	182.5					
01/04/2012	01:37:03	92	3.1	15.89	187.9					
01/04/2012	01:38:43	176	3.1	15.88	193.1					
01/04/2012	01:40:23	119	3.2	15.80	198.3					
01/04/2012	01:42:03	108	3.1	15.76	203.6					
01/04/2012	01:42:56	-15	0.1	15.97	205.6	End Tail Slurry				
01/04/2012	01:42:57	-15	0.1	15.97	205.6	End Cement Slurry				
01/04/2012	01:42:58	-15	0.1	15.97	205.6	Drop Top Plug				
01/04/2012	01:42:59	-15	0.0	15.97	205.6	Start Displacement				
01/04/2012	01:43:00	-15	0.0	15.97	205.6	Displace 128bbls of Water				
01/04/2012	01:43:01	-15	0.1	15.98	205.6	Reset Total, Vol = 32.28 bbl				
01/04/2012	01:43:43	-15	0.0	15.93	205.7					
01/04/2012	01:45:23	-13	0.0	15.99	205.7					
01/04/2012	01:47:03	-13	0.0	13.01	205.7					
01/04/2012	01:48:43	23	2.6	9.60	207.8					
01/04/2012	01:50:23	87	4.8	9.17	214.2					

Well			Field		Job Start	Customer	Job Number
HMU FEDERAL 16-8D 16-8D			Mamm Creek		Jan/03/2012	Encana	682783
Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message	
01/04/2012	01:53:43	80	4.8	8.43	230.1		
01/04/2012	01:55:23	79	4.8	8.36	238.1		
01/04/2012	01:57:03	80	4.8	8.36	246.1		
01/04/2012	01:58:43	99	4.8	8.35	254.1		
01/04/2012	02:00:23	134	4.7	8.34	262.0		
01/04/2012	02:04:41	226	4.4	8.38	281.2	58bbls of Cement to Surface	
01/04/2012	02:05:23	247	4.7	8.34	284.4		
01/04/2012	02:07:03	282	4.7	8.36	292.2		
01/04/2012	02:08:43	308	4.7	8.36	300.0		
01/04/2012	02:10:23	333	4.7	8.36	307.8		
01/04/2012	02:12:03	395	4.7	8.36	315.6		
01/04/2012	02:13:43	408	3.4	8.36	322.3		
01/04/2012	02:15:23	418	3.4	8.36	328.1		
01/04/2012	02:17:03	405	2.4	8.36	332.6		
01/04/2012	02:18:43	446	2.4	8.36	336.5		
01/04/2012	02:20:13	1059	0.0	8.36	339.9	Bump Top Plug	
01/04/2012	02:20:14	1056	0.0	8.36	339.9	End Displacement	
01/04/2012	02:20:23	1046	0.0	8.36	339.9		
01/04/2012	02:22:03	1035	0.0	8.36	339.9		
01/04/2012	02:22:47	-15	0.0	8.36	339.9	1/2 bbl Back	

Post Job Summary

Average Pump Rates, bbl/min					Volume of Fluid Injected, bbl							
Slurry 3.3	N2	Mud	Maximum Rate 5.0		Total Slurry 407.5	Mud 0.0	Spacer 27.4	N2				
Treating Pressure Summary, psi					Breakdown Fluid							
Maximum 3269	Final -12	Average 176	Bump Plug to 900	Breakdown	Type	Volume bbl	Density lb/gal					
Avg. N2 Percent %	Designed Slurry Volume 172.0 bbl	Displacement 123.9 bbl	Mix Water Temp 60 degF	Cement Circulated to Surface?		<input checked="" type="checkbox"/>	Volume 58.0 bbl					
				Washed Thru Perfs		<input type="checkbox"/>	To ft					
Customer or Authorized Representative Jeff Johnson			Schlumberger Supervisor Dant Ryan/ Ted Hansen			Circulation Lost <input type="checkbox"/>	Job Completed <input checked="" type="checkbox"/>					
						-	-					