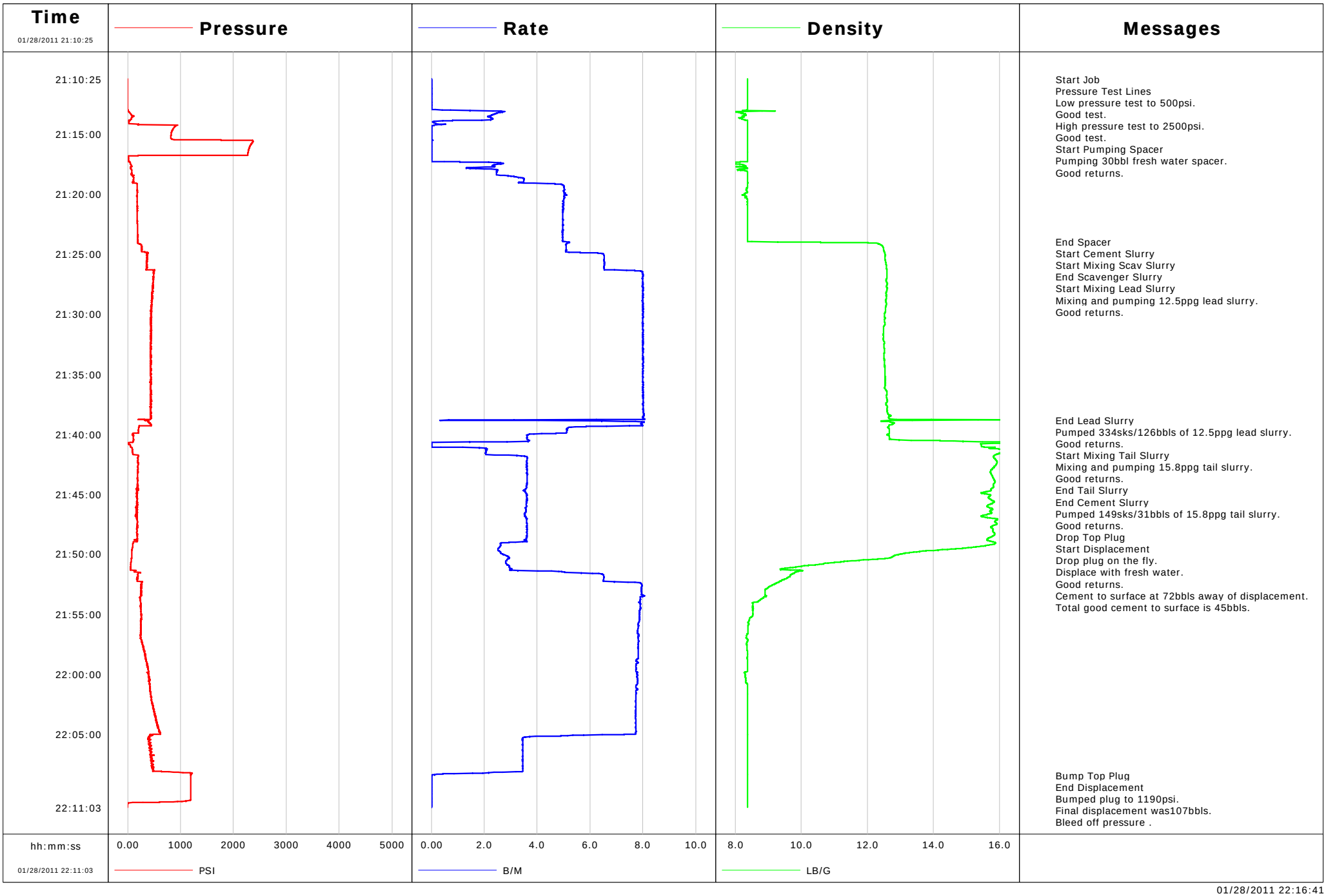
Schlumberger Cementing Job Report

Well	Benjamin Fed 28-14B2	**Client**	ENCANA
Field	Mamm Creek	**SIR No.**	BAD4-00269
Engineer	Jeff Patterson	**Job Type**	9 5/8" Surface
Country	United States	**Job Date**	01-28-2011



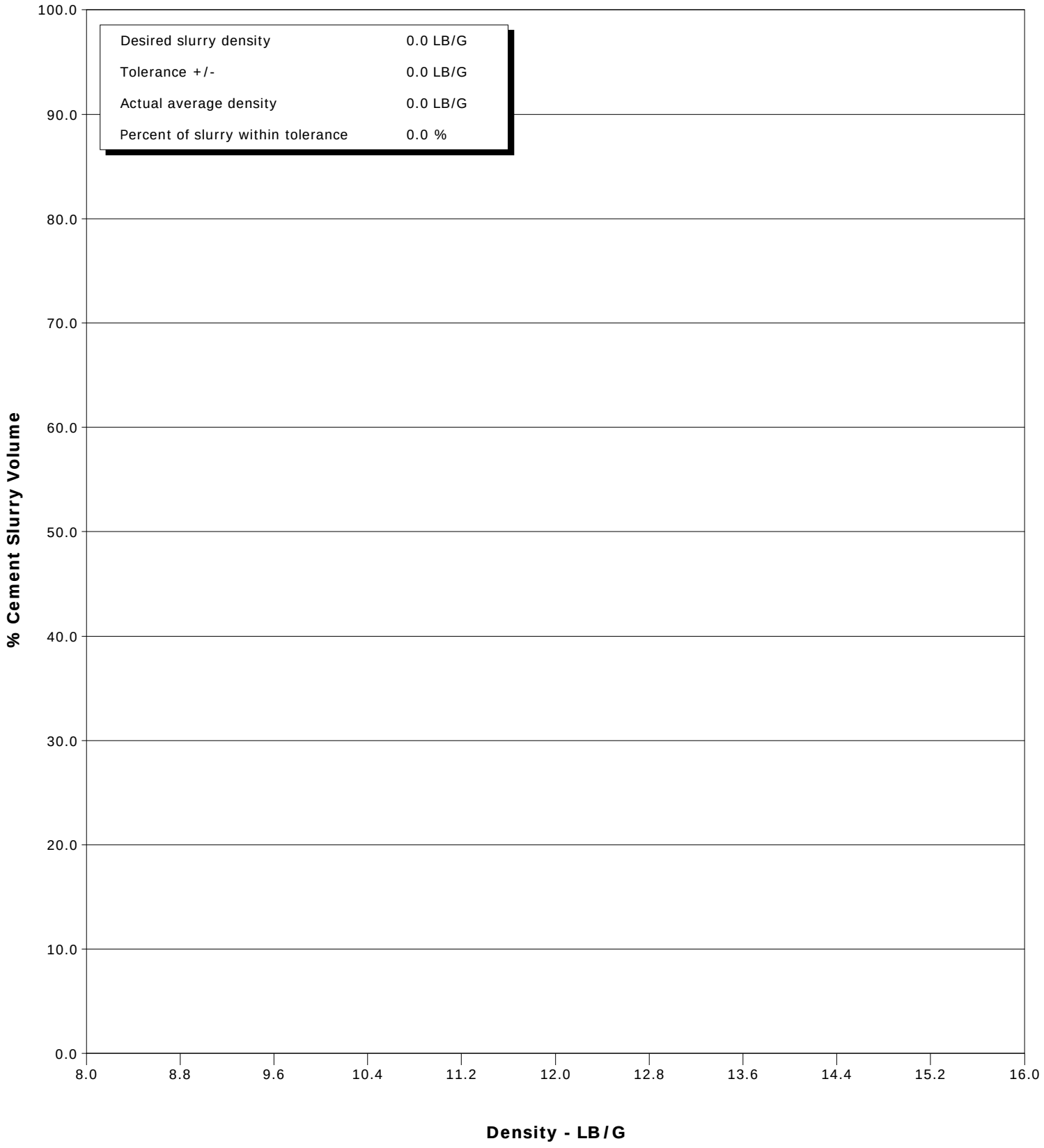
Schlumberger

Cementing Qa/Qc Density Report

Well	Benjamin Fed 28-14B2	**Client**	ENCANA
Field	Mamm Creek	**SIR No.**	BAD4-00269
Engineer	Jeff Patterson	**Job Type**	9 5/8" Surface
Country	United States	**Job Date**	01-28-2011

- 04/08/1972 21:14:40 to 04/08/1972 21:25:20

Desired slurry density	0.0 LB/G
Tolerance +/-	0.0 LB/G
Actual average density	0.0 LB/G
Percent of slurry within tolerance	0.0 %



Schlumberger Cementing Service Report

Customer	Job Number
ENCANA	BAD4-00269

Well	Location (legal)	Schlumberger Location	Job Start
Benjamin Fed 28-14B2 Benjamin Fed 28-14B2	K28NW	Grand Junction,Colorado	Jan/28/2011

Field	Formation Name/Type	Deviation	Bit Size	Well MD	Well TVD
Mamm Creek	Shale	0 deg	12.3 in	1528.0 ft	1528.0 ft

County	State/Province	BHP	BHST	BHCT	Pore Press. Gradient
GARFIELD	Colorado	psi	98 degF	90 degF	lb/gal
Well Master 0631233170	API/UWI				

Rig Name	Drilled For	Service Via
Nabors M-15	Gas	Land

Offshore Zone	Well Class	Well Type
	New	Development

Drilling Fluid Type	Max. Density	Plastic Viscosity
	lb/gal	cP

Service Line	Job Type
Cementing	9 5/8" Surface

Max. Allowed Tub. Press	Max. Allowed Ann. Press	WH Connection
2500 psi	psi	9 5/8" Cement Head

Service Instructions

Cement 9 5/8" Surface Csaing with 334sks 12.5ppg lead and 149sks 15.8ppg tail. Displace 114bbls water.

Casing/Liner

Depth, ft	Size, in	Weight, lb/ft	Grade	Thread
1528.0	9.6	36.0	J55	8RD
0.0	0.0	0.0		

Tubing/Drill Pipe

T/D	Depth, ft	Size, in	Weight, lb/ft	Grade	Thread

Perforations/Open Hole

Top, ft	Bottom, ft	shot/ft	No. of Shots	Total Interval
ft	ft			ft
ft	ft			Diameter
ft	ft			in

Treat Down	Displacement	Packer Type	Packer Depth
Casing	114.7 bbl		ft

Tubing Vol.	Casing Vol.	Annular Vol.	Openhole Vol.
bbl	118.1 bbl	88.0 bbl	210.0 bbl

Casing/Tubing Secured	1 Hole Vol. Circulated prior to Cement
X	X

Lift Pressure	756 psi

Pipe Rotated	Pipe Reciprocated
☐	☐

No. Centralizers	Top Plugs	Bottom Plugs
	1	

Cement Head Type	Single

Job Scheduled For	Arrived on Location	Leave Location
Jan/28/2011	Jan/28/2011	Jan/28/2011

Casing Tools		Squeeze Job	
Shoe Type	Guide	Squeeze Type	
Shoe Depth	1528.0 ft	Tool Type	
Stage Tool Type		Tool Depth	ft
Stage Tool Depth	ft	Tail Pipe Size	in
Collar Type	Float	Tail Pipe Depth	ft
Collar Depth	1484.0 ft	Sqz. Total Vol.	bbl

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
01/28/2011	21:10:25	-2	0.0	8.38	0.0	Started Acquisition
01/28/2011	21:10:26	-2	0.0	8.38	0.0	Start Job
01/28/2011	21:10:28	-2	0.0	8.38	0.0	Pressure Test Lines
01/28/2011	21:10:29	-1	0.0	8.38	0.0	Low pressure test to 500psi.
01/28/2011	21:10:30	-2	0.0	8.38	0.0	Good test.
01/28/2011	21:10:34	-2	0.0	8.38	0.0	Start Pumping Spacer
01/28/2011	21:10:37	-2	0.0	8.38	0.0	Pumping 30bbl fresh water spacer.
01/28/2011	21:10:55	-2	0.0	8.38	0.0	
01/28/2011	21:11:25	-1	0.0	8.38	0.0	
01/28/2011	21:11:55	-1	0.0	8.38	0.0	
01/28/2011	21:12:25	-1	0.0	8.38	0.0	
01/28/2011	21:12:55	-1	0.0	8.38	0.0	
01/28/2011	21:13:25	66	2.3	8.30	0.9	
01/28/2011	21:13:55	32	0.8	8.37	2.0	
01/28/2011	21:14:25	890	0.0	8.38	2.1	
01/28/2011	21:14:55	829	0.0	8.38	2.1	
01/28/2011	21:15:25	836	0.0	8.38	2.1	
01/28/2011	21:15:55	2330	0.0	8.38	2.1	
01/28/2011	21:16:25	2281	0.0	8.38	2.1	
01/28/2011	21:16:55	11	0.0	8.38	2.1	
01/28/2011	21:17:25	46	2.6	7.41	2.2	

Well	Field	Job Start	Customer	Job Number
Benjamin Fed 28-14B2 Benjamin Fed 28-14B2	Mamm Creek	Jan/28/2011	ENCANA	BAD4-00269

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
01/28/2011	21:18:25	71	2.5	8.38	4.5	
01/28/2011	21:18:55	109	3.5	8.38	6.1	
01/28/2011	21:19:25	180	5.0	8.38	8.3	
01/28/2011	21:19:55	180	5.0	8.36	10.8	
01/28/2011	21:20:25	181	5.0	8.36	13.3	
01/28/2011	21:20:55	183	5.0	8.37	15.8	
01/28/2011	21:21:25	183	5.0	8.38	18.3	
01/28/2011	21:21:55	181	5.0	8.38	20.8	
01/28/2011	21:22:25	183	5.0	8.38	23.2	
01/28/2011	21:22:55	189	5.0	8.38	25.7	
01/28/2011	21:23:25	193	5.0	8.37	28.2	
01/28/2011	21:23:55	193	5.0	8.38	30.7	
01/28/2011	21:23:59	194	5.0	8.50	31.0	End Spacer
01/28/2011	21:24:01	191	5.2	9.29	31.2	Start Cement Slurry
01/28/2011	21:24:25	271	5.1	12.47	33.2	
01/28/2011	21:24:46	261	5.1	12.50	35.0	End Scavenger Slurry
01/28/2011	21:24:47	262	5.1	12.51	35.1	Start Mixing Lead Slurry
01/28/2011	21:24:48	262	5.1	12.51	35.2	Mixing and pumping 12.5ppg lead slurry.
01/28/2011	21:24:55	389	6.1	12.53	35.8	
01/28/2011	21:25:25	368	6.5	12.53	39.1	
01/28/2011	21:25:55	366	6.5	12.57	42.3	
01/28/2011	21:26:25	481	7.8	12.59	45.7	
01/28/2011	21:26:55	478	8.0	12.59	49.6	
01/28/2011	21:27:25	486	8.0	12.59	53.6	
01/28/2011	21:27:55	477	8.0	12.60	57.6	
01/28/2011	21:28:25	457	8.0	12.57	61.6	
01/28/2011	21:28:55	452	8.0	12.55	65.6	
01/28/2011	21:29:25	458	8.0	12.55	69.6	
01/28/2011	21:29:55	443	8.0	12.53	73.6	
01/28/2011	21:30:25	443	8.0	12.53	77.6	
01/28/2011	21:30:55	439	8.0	12.52	81.6	
01/28/2011	21:31:25	430	8.0	12.49	85.6	
01/28/2011	21:31:55	445	8.0	12.48	89.6	
01/28/2011	21:32:25	434	8.0	12.51	93.6	
01/28/2011	21:32:55	444	8.0	12.51	97.6	
01/28/2011	21:33:25	445	8.0	12.50	101.6	
01/28/2011	21:33:55	435	8.0	12.51	105.6	
01/28/2011	21:34:25	435	8.0	12.52	109.6	
01/28/2011	21:34:55	435	8.0	12.53	113.6	
01/28/2011	21:35:25	436	8.0	12.54	117.5	
01/28/2011	21:35:55	433	8.0	12.54	121.5	
01/28/2011	21:36:25	434	8.0	12.58	125.5	
01/28/2011	21:36:55	442	8.0	12.57	129.5	
01/28/2011	21:37:25	431	8.0	12.56	133.5	
01/28/2011	21:37:55	439	8.0	12.59	137.5	
01/28/2011	21:38:25	435	8.0	12.64	141.5	
01/28/2011	21:38:49	318	3.1	17.40	144.6	End Lead Slurry
01/28/2011	21:38:52	334	0.3	13.36	144.7	Pumped 334sks/126bbls of 12.5ppg lead slurry.
01/28/2011	21:38:53	328	4.1	12.67	144.7	Good returns.
01/28/2011	21:38:55	396	6.4	12.42	144.9	
01/28/2011	21:39:25	215	5.3	12.61	148.7	
01/28/2011	21:39:55	207	5.1	12.66	151.3	
01/28/2011	21:40:25	106	3.6	12.67	153.1	
01/28/2011	21:40:55	49	0.0	15.44	154.0	

Well	Field	Job Start	Customer	Job Number
Benjamin Fed 28-14B2 Benjamin Fed 28-14B2	Mamm Creek	Jan/28/2011	ENCANA	BAD4-00269

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
01/28/2011	21:41:10	84	2.1	15.66	154.1	Mixing and pumping 15.8ppg tail slurry.
01/28/2011	21:41:25	89	2.1	16.19	154.6	
01/28/2011	21:41:55	201	3.6	15.81	155.9	
01/28/2011	21:42:25	203	3.6	15.91	157.7	
01/28/2011	21:42:55	198	3.6	15.77	159.5	
01/28/2011	21:43:25	187	3.6	15.76	161.3	
01/28/2011	21:43:55	191	3.6	15.85	163.1	
01/28/2011	21:44:25	191	3.6	15.81	164.9	
01/28/2011	21:44:40	203	3.5	15.75	165.8	End Tail Slurry
01/28/2011	21:44:41	189	3.5	15.74	165.8	End Cement Slurry
01/28/2011	21:44:43	170	3.5	15.73	166.0	Pumped 149sks/31bbls of 15.8ppg tail slurry.
01/28/2011	21:44:46	180	3.5	15.68	166.1	Drop Top Plug
01/28/2011	21:44:47	180	3.5	15.63	166.2	Start Displacement
01/28/2011	21:44:48	181	3.5	15.59	166.3	Drop plug on the fly.
01/28/2011	21:44:49	173	3.5	15.59	166.3	Good returns.
01/28/2011	21:44:55	182	3.6	15.43	166.7	
01/28/2011	21:45:25	185	3.6	15.71	168.5	
01/28/2011	21:45:55	179	3.6	15.64	170.3	
01/28/2011	21:46:25	160	3.6	15.70	172.1	
01/28/2011	21:46:55	162	3.6	15.51	173.8	
01/28/2011	21:47:25	178	3.6	15.90	175.6	
01/28/2011	21:47:55	173	3.6	15.80	177.4	
01/28/2011	21:48:25	181	3.6	15.82	179.2	
01/28/2011	21:48:55	182	3.6	15.70	181.0	
01/28/2011	21:49:25	94	2.6	15.21	182.4	
01/28/2011	21:49:55	76	2.6	13.14	183.7	
01/28/2011	21:50:25	71	2.9	12.31	185.1	
01/28/2011	21:50:55	60	2.9	10.31	186.5	
01/28/2011	21:51:25	124	4.5	9.96	188.1	
01/28/2011	21:52:25	266	7.9	9.24	194.5	
01/28/2011	21:52:55	253	7.9	8.92	198.5	
01/28/2011	21:53:25	261	8.0	8.91	202.5	
01/28/2011	21:53:55	243	7.9	8.70	206.4	
01/28/2011	21:54:25	253	7.9	8.53	210.4	
01/28/2011	21:54:55	255	7.9	8.54	214.3	
01/28/2011	21:55:25	251	7.9	8.43	218.2	
01/28/2011	21:55:55	252	7.8	8.40	222.1	
01/28/2011	21:56:25	251	7.8	8.39	226.0	
01/28/2011	21:56:55	249	7.8	8.34	229.9	
01/28/2011	21:57:25	275	7.8	8.35	233.9	
01/28/2011	21:57:55	303	7.8	8.36	237.8	
01/28/2011	21:58:25	330	7.8	8.38	241.7	
01/28/2011	21:58:55	352	7.8	8.37	245.6	
01/28/2011	21:59:25	382	7.7	8.37	249.4	
01/28/2011	21:59:55	404	7.8	8.30	253.3	
01/28/2011	22:00:25	415	7.8	8.32	257.2	
01/28/2011	22:00:55	422	7.7	8.37	261.1	
01/28/2011	22:01:25	427	7.7	8.37	265.0	
01/28/2011	22:01:55	452	7.7	8.37	268.8	
01/28/2011	22:02:25	473	7.7	8.37	272.7	
01/28/2011	22:02:55	482	7.7	8.38	276.6	
01/28/2011	22:03:25	518	7.7	8.37	280.4	
01/28/2011	22:03:55	548	7.7	8.38	284.3	
01/28/2011	22:04:25	588	7.7	8.38	288.1	

Well	Field	Job Start	Customer	Job Number
Benjamin Fed 28-14B2 Benjamin Fed 28-14B2	Mamm Creek	Jan/28/2011	ENCANA	BAD4-00269

Date	Time 24-hr clock	Treating Pressure PSI	Flow Rate B/M	Density LB/G	Volume BBL	Message
01/28/2011	22:05:25	433	3.4	8.37	294.4	
01/28/2011	22:05:55	447	3.4	8.37	296.2	
01/28/2011	22:06:25	426	3.5	8.37	297.9	
01/28/2011	22:06:55	429	3.5	8.37	299.6	
01/28/2011	22:07:25	455	3.4	8.37	301.3	
01/28/2011	22:07:55	481	3.4	8.37	303.0	
01/28/2011	22:08:24	1192	0.0	8.38	304.1	Bump Top Plug
01/28/2011	22:08:25	1192	0.0	8.38	304.1	End Displacement
01/28/2011	22:08:26	1193	0.0	8.38	304.1	Bumped plug to 1190psi.
01/28/2011	22:08:27	1195	0.0	8.38	304.1	Final displacement was107bbls.
01/28/2011	22:08:28	1195	0.0	8.38	304.1	Total cement to surface was 45bbls.
01/28/2011	22:08:55	1192	0.0	8.38	304.1	
01/28/2011	22:09:25	1192	0.0	8.38	304.1	
01/28/2011	22:09:55	1192	0.0	8.38	304.1	
01/28/2011	22:10:25	1193	0.0	8.38	304.1	
01/28/2011	22:10:55	-4	0.0	8.38	304.1	

Post Job Summary

Average Pump Rates, bbl/min				Volume of Fluid Injected, bbl			
Slurry	N2	Mud	Maximum Rate	Total Slurry	Mud	Spacer	N2
5.7			8.1	304.1	0.0	31.0	

Treating Pressure Summary, psi					Breakdown Fluid		
Maximum	Final	Average	Bump Plug to	Breakdown	Type	Volume	Density
2372	-2	391	1200			bbl	lb/gal

Avg. N2 Percent	Designed Slurry Volume	Displacement	Mix Water Temp		
%	0.0 bbl	138.0 bbl	75 degF	Cement Circulated to Surface? [X]	Volume 45.0 bbl
				Washed Thru Perfs [ ]	To ft

Customer or Authorized Representative	Schlumberger Supervisor	Circulation Lost	Job Completed
TIM PHILLIPS	Jeff Patterson	- [ ]	[X] -